



Elina Karioja

## **SUSTAINABILITY IN LIBRARIES**

A comparative study of ecological sustainability in IFLA WLIC 2012

# **SUSTAINABILITY IN LIBRARIES**

A comparative study of ecological sustainability in IFLA WLIC 2012

Elina Karioja  
Bachelor's thesis  
Spring 2013  
Degree Programme in Library and  
Information Services  
Oulu University of Applied Sciences

## ABSTRACT

Oulu University of Applied Sciences  
Degree Programme in Library and Information Services

---

Author: Elina Karioja

Title of Bachelor's thesis: Sustainability in libraries : A comparative study of ecological sustainability in IFLA WLIC 2012

Supervisor: Jorma Niemitalo

Term and year of completion: Spring 2013

Number of pages: 41 + 42 appendices

---

This thesis originated from an idea to study how libraries have taken sustainability into account and how to improve libraries' sustainability. The thesis was commissioned by Central Library of Public Libraries and it was an international part of the Finnish national project Sustainable Development in Libraries that has investigated sustainability in Finnish public libraries.

The aim of this study was to answer the questions what are the differences and similarities between the Finnish and the foreign libraries according to the analysis made by the survey and which of the areas: environmental management, environmental economy, reduction of environmental burden, increase of environmental awareness or environmental communication, do arise to be the best or the worst handled in libraries?

This quantitative study used a descriptive survey method supported by a questionnaire. The survey was conducted in IFLA World Library and Information Congress in Helsinki in August 2012 by a web-based questionnaire. After the congress the link to the questionnaire was shared also by e-mail. As the theoretical background of the thesis was used Finnish and foreign sources concerning sustainability in libraries and environmental management.

The results showed that there are still a lot of things to consider in order to improve sustainability in libraries. Major differences were not noticed between the Finnish and the foreign libraries even if the results can be seen only tentative because of the low number of respondents in the international survey. Reduction of environmental burden seemed to be the best handled area and environmental communication the worst.

As a conclusion can be stated that in order to improve sustainability in libraries an own auditing system and an environmental label for libraries would be needed. Libraries should have their own environmental indicators in order to measure the state of sustainability. The commitment to sustainability should be demanded from staff that librarians could act as green educators. IFLA World Library and Information Congress could be a green event in itself. In future more research on the field of economic and social sustainability in libraries would be needed as well as research of ecological sustainability because of the low number of publications at the moment.

---

Keywords: sustainability, libraries, sustainable development, ecological sustainability, environmental awareness, environmental management

## TIIVISTELMÄ

Oulun seudun ammattikorkeakoulu  
Kirjasto- ja tietopalvelun koulutusohjelma

---

Tekijä: Elina Karioja

Opinnäytetyön nimi: Sustainability in libraries : A comparative study of ecological sustainability in IFLA WLIC 2012

Työn ohjaaja: Jorma Niemitalo

Työn valmistumislukukausi ja -vuosi: Kevät 2013

Sivumäärä: 41 + 42 liitesivua

---

Tämä opinnäytetyö sai alkunsa ajatuksesta tutkia, kuinka kirjastot ovat ottaneet huomioon kestäväen kehityksen ja miten sitä voisi parantaa. Opinnäytetyö toteutettiin osana kansallista hanketta Kestävä kehitys kirjastoissa ja sen toimeksiantajana toimi Yleisten kirjastojen keskuskirjasto. Hanke oli jo aiemmin tutkinut suomalaisten yleisten kirjastojen kestävää kehitystä.

Opinnäytetyön tavoitteena oli saada vastaus kahteen tutkimusongelmaan: Mitä yhtäläisyyksiä ja eroja suomalaisilla ja ulkomailla kirjastoilla on kyselyistä tehtyjen analyysien mukaan ja mikä osa-alueista — ympäristöjohtaminen, ympäristötalous, ympäristökuormituksen vähentäminen, ympäristötietoisuuden lisääminen vai ympäristöviestintä, on kirjastoissa parhaiten tai huonoiten hoidettu?

Tutkimusmenetelmänä käytettiin kvantitatiivista survey-metodia, jota tuki nettipohjainen kyselylomake. Kysely toteutettiin IFLA World Library and Information –konferenssissa Helsingissä elokuussa 2012. Konferenssin jälkeen linkki kyselylomakkeeseen jaettiin myös sähköpostin kautta. Opinnäytetyön teoriapohjana käytettiin niin suomalaisia kuin ulkomaisiakin lähteitä kirjastojen kestävästä kehityksestä ja ympäristöjohtamisesta.

Tulokset osoittivat, että kirjastojen kestävässä kehityksessä on vielä paljon parantamisen varaa. Merkittäviä eroja suomalaisten ja ulkomaisten kirjastojen välillä ei tutkimuksen mukaan ilmennyt. Tosin kansainvälisen kyselyn vähäisen vastaajamäärän takia tuloksia voidaan pitää vain suuntaa-antavina. Ympäristökuormituksen vähentäminen vaikutti olevan parhaiten hoidettu osa-alue ja ympäristöviestintä huonoin.

Tutkimuksen johtopäätöksenä voidaan todeta, että kirjastot tarvitsisivat oman auditointijärjestelmän ja ympäristömerkin parantaakseen kestävää kehitystään. Kirjastoille tulisi luoda myös omat ympäristöindikaattorit, jotta niiden kestäväen kehityksen tilaa voitaisiin mitata. Kirjastojen henkilökunnalta tulisi vaatia sitoutumista kestäväen kehitykseen, jotta he voisivat toimia vihreiden arvojen puolestapuhujina. IFLA-konferenssia voisi myös kehittää aiempaa enemmän vihreäksi tapahtumaksi. Tulevaisuudessa tutkimusta voitaisiin ulottaa myös kirjastojen sosiaaliseen ja taloudelliseen kestäväen kehitykseen. Joka tapauksessa tutkimusten määrä tältä alalta on vielä hyvin pieni.

---

Asiasanat: kestävä kehitys, kirjastot, ekologinen kestävyys, ympäristötietoisuus, ympäristöhallinto, ympäristöjohtaminen

## CONTENTS

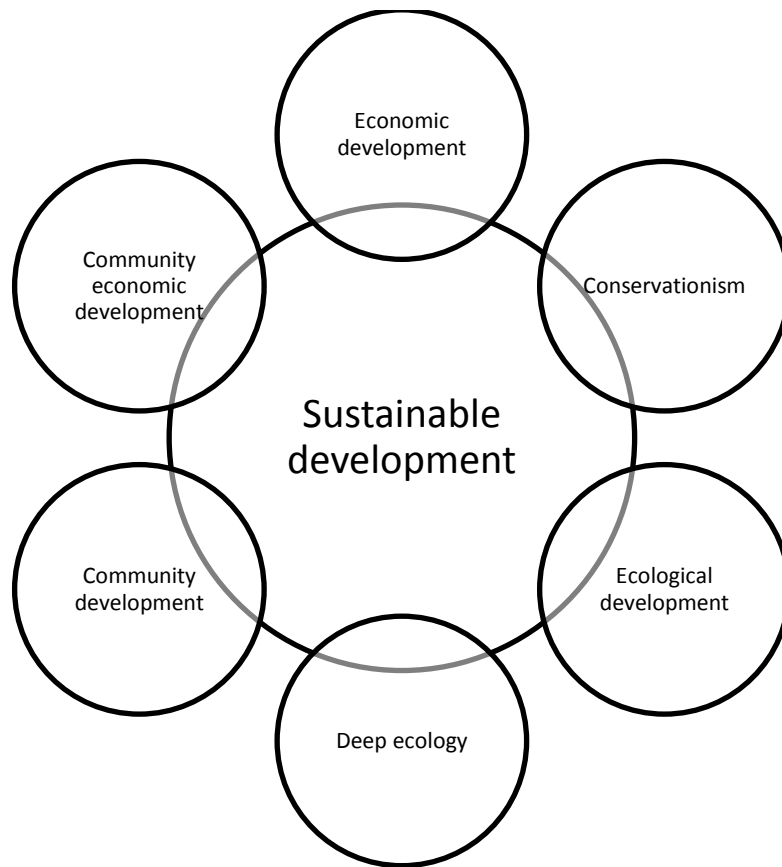
1	INTRODUCTION	6
1.1	Main definitions	8
1.2	Environmental management	9
1.3	Environmental labels	10
2	BACKGROUND	13
2.1	Central Library of Public Libraries	13
2.2	IFLA	14
2.2.1	The World Library and Information Congress	15
2.2.2	Sustainability in IFLA	15
3	LITERATURE REVIEW	18
3.1	United States	18
3.2	Finland	19
4	RESEARCH PROBLEMS AND METHODOLOGY	21
5	RESULTS	24
5.1	Background questions	24
5.2	Environmental management	25
5.3	Environmental economy	26
5.4	Reduction of environmental burden	27
5.5	Increase of environmental awareness	28
5.6	Environmental communication	29
6	CONCLUSIONS	32
7	DISCUSSION	34
	REFERENCES	36
	APPENDIX 1: QUESTIONNAIRE FOR FINNISH PUBLIC LIBRARIES	42
	APPENDIX 2: INTERNATIONAL QUESTIONNAIRE	47
	APPENDIX 3: RESULTS FROM THE FINNISH SURVEY	50
	APPENDIX 4: RESULTS FROM THE INTERNATIONAL SURVEY	60
	APPENDIX 5: ARTICLE IN THE GREEN LIBRARY BOOK	72

# 1 INTRODUCTION

This thesis originated from an idea to study how libraries have taken sustainability into account and how to improve libraries' sustainability. The subject 'sustainability' is very fashionable at the moment and has gained publicity in news and media. Also libraries have started to perceive green values and develop their actions considering sustainability. From this need originated the Finnish Central Library of Public Libraries' national project *Sustainable Development in Libraries*; this thesis is an international part of that project and commissioned by Central Library of Public Libraries, also known as Helsinki City Library. Even if there has not been published much material about this subject in Finnish, I decided to write the whole thesis in English. My study has already received international attention which reveals that the study area is fresh and new internationally as well.

In this study is used a descriptive survey method to investigate the sustainability in libraries. The survey was conducted in IFLA World Library and Information Congress in Helsinki in August 2012. This study used the same questionnaire as in Finnish project but it was shortened and translated into English. The questionnaire was available as a web-based questionnaire. The questionnaire was divided into five areas: environmental management, environmental economy, reduction of environmental burden, increase of environmental awareness and environmental communication. The aim of this thesis is to answer the questions what are the differences and similarities between the Finnish and the foreign libraries according to the analysis made by the survey and which of the areas do arise to be the best or the worst handled in libraries?

It is noteworthy that this thesis concentrates only on ecological sustainability even if the term sustainability contains social and economic aspects. Ecological sustainability will be discussed closely in this thesis but here are the definitions for the other aspects. The aim of social (or cultural) sustainability is to guarantee welfare from generation to generation. Population growth, poverty, health care, sexual equality and organizing education are global challenges of social sustainability and they have impacts on both ecological and economic sustainability. Economic sustainability means balanced growth that is not based on incurring of debts or losing of funds. Strong economy is a prerequisite for central functions in society and a base for social sustainability. (Ympäristöministeriö 2012, date of retrieval 1.2.2013.) Figure 1 below shows sustainable development in a wider perspective with its basic elements.



*FIGURE 1. The interactions between ecological, economic and social (community) development (Modified by author from Bell & Morse 2003, 4).*

As figure 1 shows, sustainable development consists of many parts. When ecological development means carrying capacity and resource conservation, in economic development it is a question of economic growth and private profit, while basic human needs, equity and participation are a part of community development (ibid.). In addition to above-mentioned aspects, sustainable development contains two dimensions: the notion of development, to make things better and sustainability, to maintain. Often the terms sustainability and sustainable development are used synonymously. (Bell & Morse 2003, 3.)

## 1.1 Main definitions

Here are the most essential definitions in this survey:

**being green:** constantly evaluating the impacts of your actions and making choices that factor in the impact on the environment, and therefore your continued ability to rely upon it to provide for your needs and assimilate your waste. The less negative an impact on the environment the total sum of your choices creates, the greener you are. (McBane Mulford & Himmel 2010, 3.)

**ecological sustainability:** 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 (Green@library 2012, 4).

**environmental communication:** communication of offices and agencies relating to environmental aspects and communication spreading and distributing environmental awareness (Green@library 2012, 8).

**environmental economy:** usage and usage impact of natural resources in financial decision-making (Green@library 2012, 6).

**environmental management:** the management of resources, property, and all associated programs with an emphasis on environmental conservation and enhancement (Environmental Dictionary Endic 2013, date of retrieval 18.1.2013), 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 (Green@library 2012, 6).

**increase of environmental awareness:** awareness of environmental aspects and individual choices, one of the requirements for environmentally friendly solutions (Green@library 2012, 8).

**LEED:** the acronym for the Leadership in Energy and Environmental Design (LEED) Green Building Rating System, an organization that encourages and accelerates global adoption of sustainable green building and development practices through the creation and implementation of universally understood and accepted tools and performance criteria (McBane Mulford & Himmel 2010, 11).



**librarian:** a person, typically with a degree in library science, who administers or assists in a library (Oxford Dictionaries 2013, date of retrieval 4.3.2013).

**library:** a building or room containing collections of books, periodicals, and sometimes films and recorded music for use or borrowing by the public or the members of an institution (Oxford Dictionaries 2013, date of retrieval 1.3.2013).

**reduction of environmental burden:** the practical goals of the library in its own operations to reduce environmental impact (Green@library 2012, 6).

**sustainability:** development that meets the needs of the present without compromising the needs of future generations (European Environment Agency 2013, date of retrieval 16.2.2013).

**sustainable development:** development that provides economic, social, and environmental benefits in the long term, having regard to the needs of living and future generations (Environmental Dictionary Endic 2013, date of retrieval 18.1.2013).

## 1.2 Environmental management

Environmental management is an important part of sustainability in companies. One of the instruments in measuring environmental management is auditing. It means measures of estimating company's environmental actions, obeying laws and systems of environmental responsibility. Inspections are followed regularly - once a year or less frequently. Usually the inspector is outside the firm. The benefits of auditing are improving efficiency in environmental issues and confidence of harmlessness of operations. In addition, staff's knowledge of environmental issues increases. Regular auditing enables that environmental management in a company works. (Linnanen, Boström & Miettinen 1994, 127–128.)

Tarja Ketola has studied environmental management a lot. She has published the first Finnish study of environmental management: *Ympäristöjohtaminen – esimerkkinä Neste-konserni* (Environmental Management – As an Example Neste Group) in 1991. Ketola describes in her study the change in organization when taking care of environmental issues changes to conscious environmental management. She has developed the static instrument with the help of Waterman,

Peters and Phillips' (1980, 18) 7S in order to study the state of organization's environmental management. (Lehtola 1996, 7–8.) Figure 2 that was modified from Satu Lehtola's Bachelor's Thesis is shown below.

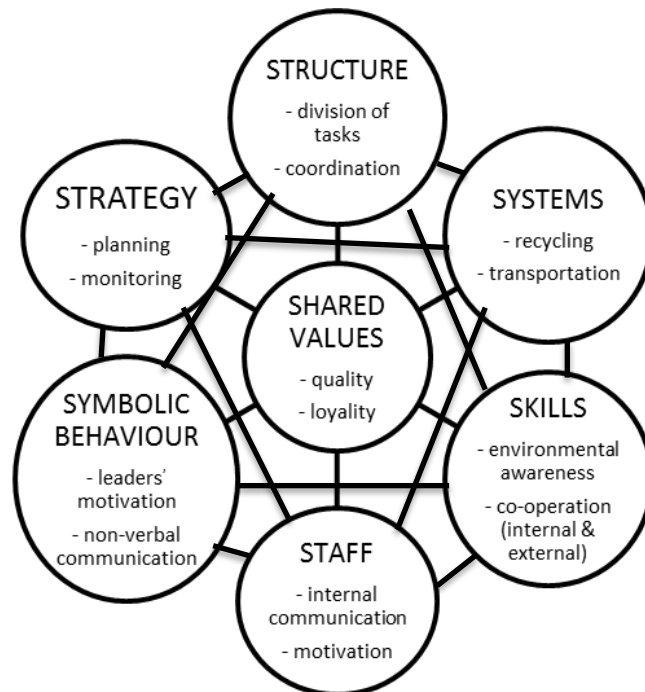


FIGURE 2. Static instrument of environmental management. (Modified by author from Lehtola 1996, 8.)

As we can see from figure 2, all the elements are needed and in touch with each other. As Ketola (2004, 65) states even the finest environmental strategies do not benefit the organization if other areas are not involved in the process. An efficient change is a result of workable relations of all the areas in the company. Leaders must ensure that all seven S's can be combined.

### 1.3 Environmental labels

It is possible for libraries to seek environmental labels like other companies and institutions do. Vallila library in Helsinki received the EcoCompass spring 2011 as the first public institution. (Vallila library 2012, date of retrieval 30.1.2013.) EcoCompass is meant for small and medium-sized enterprises in the metropolitan area in Finland and a certification is valid for three years (Ekokompassi 2013, date of retrieval 30.1.2013). Vallila library is one of the Helsinki City libraries and also a part of Helsinki Metropolitan Area Libraries which consist of public libraries from

Helsinki, Espoo, Vantaa and Kauniainen. There are 63 HelMet libraries and six bookmobiles in this area and they serve annually more than a million customers. (HelMet.fi 2013, date of retrieval 2.4.2013.)

Vallila library defines itself as a green, environmentally friendly library that has created four steps program in order to improve sustainability. The first step is to inform customers about library's commitment to environmental issues. Second, customers need to have an easy access to environmental information. In Vallila, they have gathered all eco-related books into one shelf and at the same place can be found brochures made by the environmental center. The library also cooperates with the private organization Kuinoma (Like Your Own), which enables a new kind of loaning, including possessions like skis, cameras and tools. The third step is to organize events relating to environment and fourthly, set a good example to other libraries that many more libraries could consider themselves as green and affect to the opinions of customers and policymakers. (Vallila library 2012, date of retrieval 30.1.2013.)

Other example of the environmental labels is Green Office of WWF that is actually an environmental management system for offices (WWF Finland 2013, date of retrieval 30.1.2013). Oulu University of Applied Sciences Library is a part of the Green Office network. The library aims to reduce energy consumption and production of waste and encourage sorting of wastes and the environmental awareness of the personnel. (Oulu University of Applied Sciences Library 2013, date of retrieval 30.1.2013.) As Oulu University of Applied Sciences (Oulu UAS) states in its website, the principles of sustainable development are considered in all operations which means teaching, research, development work and everyday actions. Tools such as Green Office and ISO14001 -environmental standard are used for continuous evaluation and improvement of operations. Oulu UAS wants to take into account all aspects of sustainability in its sustainable development objectives: reducing the carbon footprint, improving eco-efficiency, encouraging work and study wellbeing and enhancing multiculturalism. (Oulu University of Applied Sciences 2012, date of retrieval 4.4.2013.) All the students in School of Business and Information Management have a course called Green Thinking in their compulsory studies (Kamula 13.3.2013, e-mail message).

LEED certification was developed by the United States Green Building Council (USGBC) in 2000 and it is a program for green design and facilities. The certification is possible to achieve for new construction and major renovation but also for existing buildings operations and maintenance.

There is a rating system that consists of six credit categories: sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental air quality, innovation in design and regional priority. One example of the LEED-certified libraries is West Valley Branch Library in San Jose, California. (McBane Mulford & Himmel 2010, 72—73, 97.)

## 2 BACKGROUND

This chapter tells about Helsinki City Library as Central Library of Public Libraries and its national project *Sustainable Development in Libraries*. The other part of the chapter tells about IFLA (the International Federation of Library Associations and Institutions).

### 2.1 Central Library of Public Libraries

This thesis is commissioned by Helsinki City Library that is also known as a Central Library of Public Libraries since 1981. It also receives a separate state grant for this function. The main functions of central library are interlibrary loan services, national online services like Kirjastot.fi and a multilingual library. (Kirjastot.fi 2013, date of retrieval 18.2.2013.) As Helsinki City Library states in its website, it defines itself as a green library which recycles, saves environment, shows examples of green values and sustainability, has been designed ecologically sustainable and offers public space that is free of charge for everyone (Helsinki City Library 2013, date of retrieval 18.2.2013).

One of the central library's main duties is to develop useful common working practices and aids in library and information services (Kirjastoasetus 1078/1998.1 §). The library's national project *Sustainable Development in Libraries* fulfilled this need when it investigated sustainability in Finnish public libraries.

The project compiled a survey (see appendix 1) for public libraries in February 2012 on the current state of ecological sustainability in Finnish public libraries. The project was financed by the Finnish Ministry of Education and Culture. The aim of the whole project that started already in 2011 was to develop and improve sustainability of the public libraries in Finland. This was realized by investigating the present situation, by creating equal models, by showing development plans and by developing models of environmental communication. The project tried to benefit from specialists and partners as a common information source and participate with interest groups to the planning and goals of the sustainability. There was a goal that with international connections was enabled a wider balanced sustainability. (Kestävä kehitys kirjastossa 2011, date of retrieval 25.1.2013.)

Partners in cooperation consisted of library personnel from Southern Finland to Lapland and an invitation to the survey was emailed to 768 e-mail addresses in Finnish public libraries. The sample included the whole Finland. There were 141 responses, which is only a fifth of the total target group but still a noteworthy amount of material. The response percentage was 18%, which can be considered as an average result of response activity. (Green@library 2012, 5.)

The project ended in December 2012 and published sustainability manuals to libraries, customers and policymakers (Kestävä kehitys kirjastoissa 2012, date of retrieval 26.1.2013). Earlier that year the project also published Green@library – ecological sustainability of libraries publication online that consisted of articles written by the project team (Green@library 2012, date of retrieval 26.1.2013).

## **2.2 IFLA**

IFLA (The International Federation of Library Associations and Institutions) represents the interests of library and information services and their users internationally. It is said to be “the global voice of the library and information profession”. IFLA was established in Edinburgh, Scotland, in 1927 and has over 1500 members in approximately 150 countries around the world. IFLA was registered in the Netherlands in 1971. The Royal Library, the national library of the Netherlands, in The Hague, is the place of the headquarters. (IFLA 2012a, date of retrieval 2.2.2013.)

IFLA is an independent, international, non-governmental, not-for-profit organization. The aims of the organization are to promote high standards of provision and delivery of library and information services, encourage widespread understanding of the value of good library & information services and represent the interests of members throughout the world. (ibid.)

IFLA Publications like IFLA Journal, IFLA Publications Series, IFLA Series on Bibliographic Control and IFLA Professional Reports are an important part of the co-operation. With the help of IFLA Publications series libraries, information centres and information professionals worldwide can formulate their goals, utilize their influence as a group, protect their interests and find solutions to global problems. Volumes are available both in print and electronic format. (IFLA 2013a, date of retrieval 9.2.2013.) In August 2013 there will be published a book about

sustainability in libraries in IFLA Publications Series (IFLA 2013b, date of retrieval 8.4.2013). A summary of this thesis (see appendix 5) will be one of the articles in the book. The Green Library will be the first book in IFLA Publication Series concerning this subject. (Hauke 18.2.2013, e-mail message; Karioja & Niemitalo 2013.)

### **2.2.1 The World Library and Information Congress**

The IFLA World Library and Information Congress is the annual international event for librarians all around the world. It usually has over 3,500 participants from more than 120 countries. It is a place where the international agenda for the profession is set and opportunities for networking and professional development are offered to all delegates. (IFLA 2012b, date of retrieval 9.2.2013.)

The congress is an opportunity for the host country to introduce libraries and information science in their country and region as well as to offer their professionals experience in international librarianship and international relations. There is also an international trade exhibition with over 80 exhibitors in the conference. (ibid.)

IFLA WLIC (World Library and Information Congress) was held in Helsinki, Finland, 11-17 August 2012. Approximately 4100 people from 114 countries joined the conference. The number included 1378 first timers and 271 volunteers. This was 78th IFLA General Conference and Assembly. (IFLA 2012c, date of retrieval 2.2.2013.) The theme of the conference was "Libraries now - inspiring, surprising and empowering" which was told to be the main challenge for librarians when developing new services for new generations of library users. The congress was strongly supported by all the Finnish library associations, Helsinki City Council, the Finnish Ministry of Education and Culture and all libraries in Finland. (IFLA 2012d, date of retrieval 9.2.2013.)

### **2.2.2 Sustainability in IFLA**

There is a special group in IFLA for librarians who are interested in sustainability in libraries. The group is called Environmental Sustainability and Libraries Special Interest Group. The focus of the group is on effects of climate change on libraries, environment-friendly practices in libraries, environmental recommendations to the profession, increasing and promoting documentary

resources and library services connected to sustainability and increasing awareness of librarians themselves about environmental concerns. (IFLA 2012e, date of retrieval 2.2.2013.) Sponsoring body for the group is Preservation and Conservation Section that is committed to the preservation of documentary heritage. It offers an international forum for all types of libraries to exchange, develop and spread knowledge and experience dealing with theories, policies and practices for the preservation of all recorded knowledge. (IFLA 2012f, date of retrieval 9.2.2013.)

Environmental Sustainability and Libraries SIG Workshop had several meetings in IFLA WLIC Helsinki: a workshop consisting of presentation “Climate Reality” and debate on deriving challenges and projects and Sustainable evening in Vallila library, a business meeting of the group and a conference session called *Libraries inspiring and facilitating change towards sustainability* (IFLA 2012g, date of retrieval 4.2.2013). In the conference session speakers told their own experiences about sustainability in libraries. Leila Sonkkanen from the Helsinki City Library presented the results (see appendix 3) and conclusions from the Finnish project *Sustainable Development in Libraries* in her presentation Sustainability hides in libraries. Sonkkanen also brought out an idea that libraries could be actors as well as a general promoter of environmental awareness. Strengthening and maximizing the benefits should be easier when the level of knowledge is growing. (Sonkkanen 2012, date of retrieval 4.2.2013.)

In the same session guests from Iran presented their study of the location of public libraries concentrating on centrality, compatibility and sustainability. There were also proposed some appropriate locations for new libraries to be established. As a result was observed that most libraries are not built in green areas and they are not sustainable but they fulfill the criteria of centrality and compatibility. (Abazari, Babalhaveaji & Jahangirifard 2012, date of retrieval 4.2.2013.)

Already two years earlier, in 2010 in Gothenburg IFLA conference, the theme of the whole conference was “Open access to knowledge: promoting sustainable progress”. The official invitation stated that libraries are necessary for promoting sustainable progress in society and in global world. (IFLA 2010a, date of retrieval 13.2.2013.)

In IFLA Gothenburg Preservation and Conservation section had a session about preservation and sustainability, where Jeanne Drewes from Library of Congress was talking about increasing energy efficiency and reducing environmental impact (IFLA 2010b, date of retrieval 12.2.2013).



There was also a session organized by Environmental Sustainability and Libraries SIG itself, called *Greening the library in a sustainable way*. Rodney Al and Sara House presented their study of going green in North American public libraries. The conclusions of the presentation were that public libraries are putting into practice actions concerning sustainability at the service and programming levels, but not yet developing official 'green' policies. On the other hand, library associations are generally abdicating their responsibilities for environmental responsibility in their policies. (Al & House 2010, date of retrieval 12.2.2013.)

### **3 LITERATURE REVIEW**

There have not been published much material about sustainability in libraries. These examples are from United States and Finland.

#### **3.1 United States**

Green Library Movement started in the United States in the early 1990s. The term means that librarians, libraries, cities, towns, college and university campuses have committed to greening libraries and reducing their environmental impact. This innovation is realised by building green library buildings, by greening existing library facilities, providing green library services and embracing environmentally supportive and sustainable practices within the library. (Antonelli 2008, date of retrieval 1.2.2013.)

In the 21st century libraries have become more and more aware of green values and have started to develop their actions considering sustainability. As Kathryn Miller states in her book *Public Libraries Going Green* (2010, VII) "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 notice that going green is not just obeying recycle rules but also increasing the environmental awareness and educating customers to live in a more environmentally friendly way (ibid., 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.

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 notice that libraries have a natural recycling role when they borrow books, journals, audiovisual material and other information so that many people can use the same material. Library can also offer a meeting place for

communities and be a part of sustainability projects. (Rowley 2006, 273-274.) The article also discusses the impact of digitization on environmental issues and the need of the library buildings, when people can access the library via internet (ibid., 276—277).

How green is my library? 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.)

There are also some articles about energy savings in libraries. It is essential to notice that they are not only computers that could be switched off in the end of the work day. Also air conditioning affects energy usage a lot. However, it is important to maintain the quality of the preservation environment if mechanical systems are switched off during unoccupied hours. (Linden, Reilly & Herzog 2012, 384.)

### **3.2 Finland**

The amount of material published about this subject in Finland is low; the first reports are from the 21<sup>st</sup> century. Helsinki City Library has published an environmental report of the city library year 2002, which tells about sustainability in Helsinki City Library as a part of Helsinki City’s environmental policy. According to the report, the central attention in the library has been directed to recycling, energy conservation, increasing of environmental awareness, acquisitions, traffic and waste management. In the end of the report is mentioned that Helsinki City Library wants to take a wider responsibility for environmental issues in society. (Helsingin kaupunginkirjasto 2002, date of retrieval 2.2.2013.)

In 2011 was published a book called Kirjastoaineiston ekologinen jalanjälki (Ecological Footprint of Library Material) which tells about weeding and storing library material taking sustainability into account in Pirkanmaa libraries. As Huttunen states, there has not been an environmental study concerning libraries’ actions in Finland before the year 2010. (Huttunen 2011, 9, 16.) The book clarifies environmental effects of weeding and storing library material and recommends measures for libraries concerning this subject: Weeding process should be regular including selling and donating weeded material. Bookbinding is so expensive and time-consuming that it should be totally forgotten and focus on weeding process. Sorting of waste should be carried out to as many

categories as possible. Decreasing of putting plastic on books that are not read so often should be done. A number and size of storage should be considered because they use a lot of electricity and heat. Decreasing amount of material in storages also increases circulation. (Huttunen 2011, 110–113.)

According to the book, environmentally friendly daily routines in libraries could be sorting all the waste, turning out the lights, room temperature less than 21 degrees, avoiding standby state of the computers during the night, printing only when needed, preferring double-sided printing and two pages at the same sheet, preferring washable towels instead of tissues and putting tissues into organic waste trashcan when it is possible (Huttunen 2011, 114–115).

The national project *Sustainable Development in Libraries* has also published sustainability manuals to libraries, customers and policymakers (Kestävä kehitys kirjastoissa 2012, date of retrieval 26.1.2013). Ekologisen kestävyuden opas kirjastoille (Sustainable Guide for Libraries) has seven chapters: environmental management, purchases, sustainability in libraries, environmental awareness and responsibility, buildings, traffic and environmentally friendly instructions for event organizers (Ekologisen kestävyuden opas kirjastoille 2012, date of retrieval 1.3.2013). A guide for policymakers Kirjasto edistää kestäväää kehitystä (Library Promotes Sustainability) focuses on attempting to gain attention that sustainability needs commitments from policymakers and librarians, as well as customers (Kirjasto edistää kestäväää kehitystä 2012, date of retrieval 1.3.2013).

The national project *Sustainable Development in Libraries* has also published Green@library – Ecological Sustainability of Libraries publication online that consists of articles written by the project team. The publication even gives recommendations how to proceed towards a sustainable library: At first information must be distributed and established and an individual employee must be supported in applying sustainability. Indicators and monitoring methods should be developed as well as cooperation between different operators. Customer communication should receive more attention and the natural role of the library in sustainable development should be emphasized more. (Green@library 2012, 12.)

## 4 RESEARCH PROBLEMS AND METHODOLOGY

The aim of this study is to find the answers to these research problems:

- 1) What are the differences and similarities between the Finnish and the foreign libraries 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 – do arise to be the best or the worst handled in libraries?

In this study was used a descriptive survey method to investigate the sustainability in libraries. Survey method means collecting of data in a standardized form from a group of people. Other typical characteristics are sampling and a use of a questionnaire or a structured interview. The purpose of this method is to describe, compare and explain phenomena. (Hirsjärvi, Remes & Sajavaara 2009, 134.) This method was chosen that as many librarians as possible could join the survey in the IFLA World Library and Information Congress. Only Finnish librarians were tried to exclude because sustainability in Finnish public libraries had been investigated earlier that year.

This study is also quantitative. Central characteristics for the quantitative study are conclusions from the previous studies, previous theories, hypotheses, defining of main definitions, plans of collection of data, choosing of respondents, tables and making conclusions based on statistical analysis (Hirsjärvi et al. 2009, 140). To be able to plan a questionnaire, you need to have information of existing theories. The phenomenon needs to be clear and well understood as well as the variables and the correlations between them. It is important to be able to see how existing theories and models work in practice and what kind of quantitative results can be gathered from the material. (Kananen 2011, 72.)

In the questionnaire is used various kinds of questions in order to collect numerical data concerning the phenomenon. It is recommended that the questionnaire should be tested before use. In order to get reliable and accurate results, you have to follow strict rules in all stages. In quantitative research it is not possible to go back in process if you make mistakes. And if you do,

the whole process needs to be started from the beginning, which can be really expensive. (Kananen 2011, 72–73.)

This survey was conducted in IFLA World Library and Information Congress in Helsinki in August 2012 as a part of a Finnish national project *Sustainable Development in Libraries*. The survey was conducted by a web-based questionnaire that was a shortened and translated version (see appendix 2) of the Finnish national questionnaire which had been used in the Finnish project. The questionnaire was divided into five areas: environmental management, environmental economy, reduction of environmental burden, increase of environmental awareness and environmental communication. There were 3–8 questions per every area and one open ended question in the end of the questionnaire. In addition, there were six background information questions about the home country, library's type, if the person was in charge of environmental issues or not, job position and amount of the regular staff at the library.

The survey focuses on investigating only ecological sustainability even if 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 reviewed at this survey and project. (Green@library 2012, 11.)

Conference guests were able to answer the questionnaire at the exhibition area of Helsinki City Library in IFLA World Library and Information Congress. Anyone joining the conference could answer the questionnaire but Finnish library staff were tried to exclude. There were collected only 14 answers so the link to the questionnaire was shared also by e-mail to the Environmental sustainability and Libraries Special Interest Group of IFLA. That gave also 14 answers. In total, the amount of answers was 28.

In quantitative research you should have at least one hundred observations. If the number is less than 50, they can be examined but it is not reasonable to perform sampling at all. Research problems can also have an influence on how much data can be regarded as sufficient. Cross tabulation needs a certain number of respondents and in case of a small population frequency distributions can be used. (Kananen 2011, 100.)

Due to low number of respondents, the material could not be analyzed with statistical analysis. As Table 3 shows, the distribution of different respondents was quite uniform. Therefore groups of

answers cannot be used separate, only as a one group of answers. There were only nine respondents from public libraries in the international survey so they could not be compared to all 141 Finnish respondents. Comparison by the continent could not be done either.

## 5 RESULTS

This chapter discusses the results of the international survey carried out at the IFLA World Library and Information Congress and also compares the results with the Finnish national survey. More exact version of the international survey and its results can be seen in appendix 4 (in Finnish).

### 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?

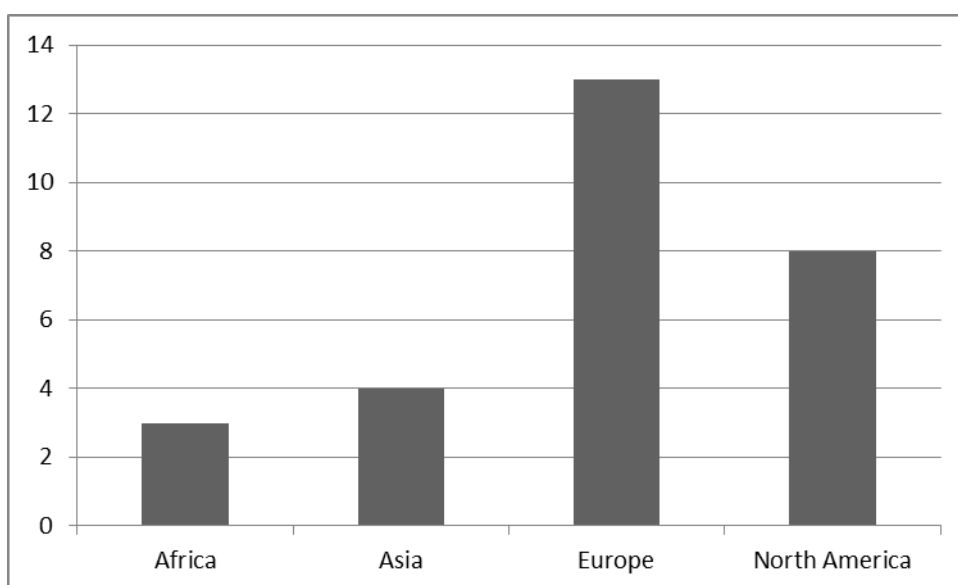


FIGURE 3. In which continent is your home library? (n=28)

The largest number of respondents came from Europe, 13. This number included respondents from Italy, Malta, Great Britain, 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 three and four 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 1. 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
more than 75	3	5	2

Table 1 shows that most respondents in the international survey came from a research library with more than 75 staff. None of the respondents worked in a public library with less than five staff. It is quite surprising that distribution is so uniform when the number of the respondents was only 28<sup>1</sup>.

One question asked was if the respondent was in charge of environmental issues in the library. Only seven 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 foreign and Finnish libraries have handled environmental management. Figure 4 shows the percentages of both surveys in total.

<sup>1</sup> The Finnish questionnaire used almost the same background questions but the results of the distribution are not available.

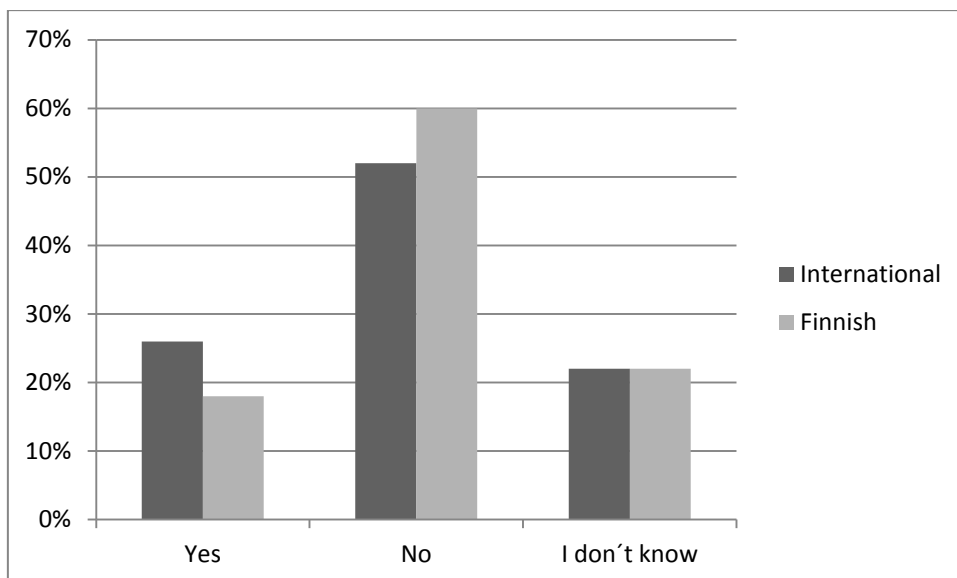
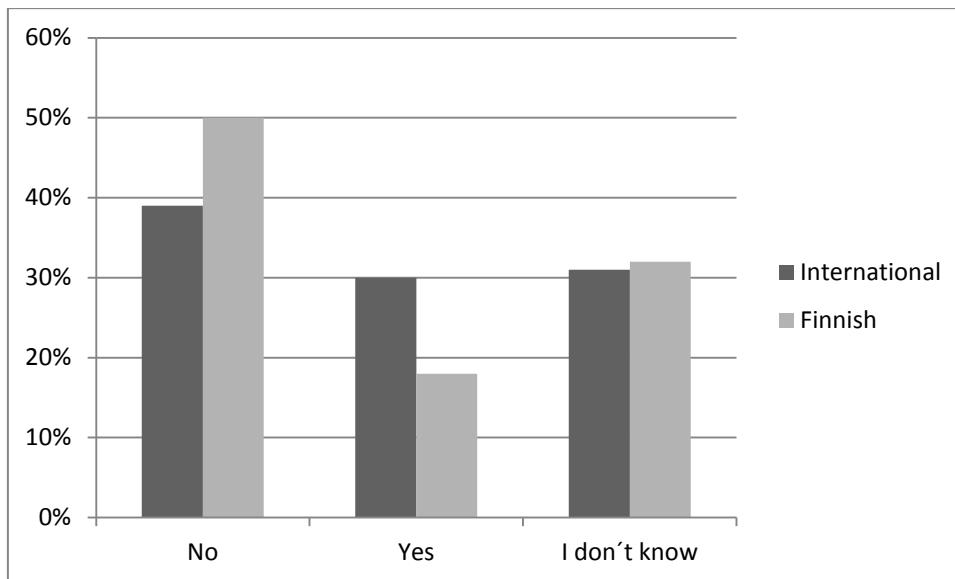


FIGURE 4. Is there environmental management in your library? (International n=28, Finnish n=141. The figure consists of the sum of all the answers in this section)

Figure 4 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 calls for offers with environmental factors in mind and justifying investments on environmental grounds. Figure 5 shows the results of questions relating to environmental economy in foreign and Finnish libraries.



*FIGURE 5. Are environmental economy practices carried out at your library? (International n=28, Finnish n=141. The figure consists of the sum of all the answers in this section)*

Figure 5 indicates that there seems to be a will to take environmental issues better into account in libraries' economy but goals and targets have not been formulated yet. In the Finnish survey there were as many as seven questions of which 50 % were "no" answers. It could possibly be concluded that environmental and economy aspects are considered more important in libraries outside Finland.

#### **5.4 Reduction of environmental burden**

Reduction of environmental burden is for many the most essential part of sustainability or at least the most well-known. The goal of this survey was to clarify which practices are already being observed by libraries. Figure 4 shows the distribution between foreign and Finnish libraries.

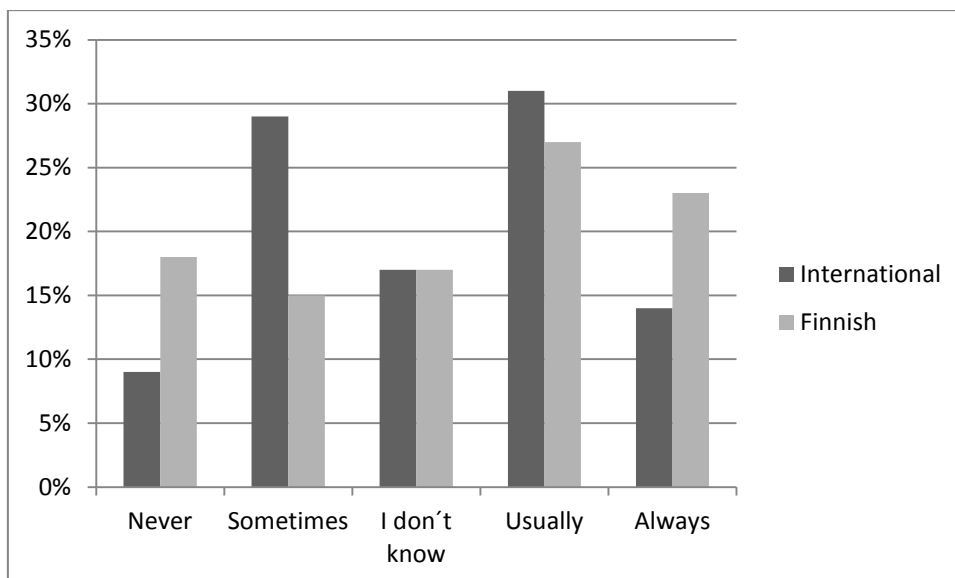


FIGURE 6. Does your library observe practices in order to impact on reduction of environmental burden? (International n=28, Finnish n=141. The figure consists of the sum of all the answers in this section)

The most popular answer alternatives 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 almost 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 e-mail 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 a bit 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.

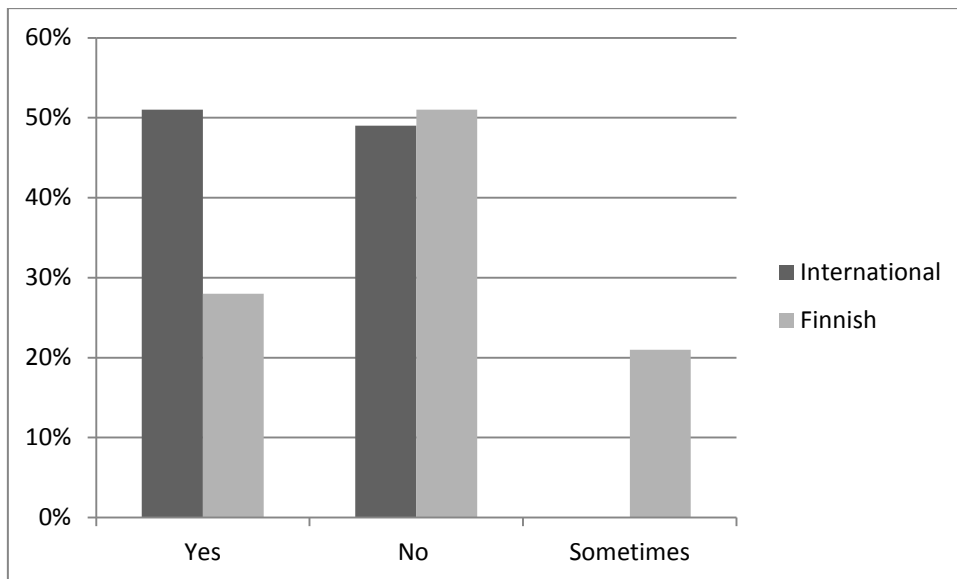
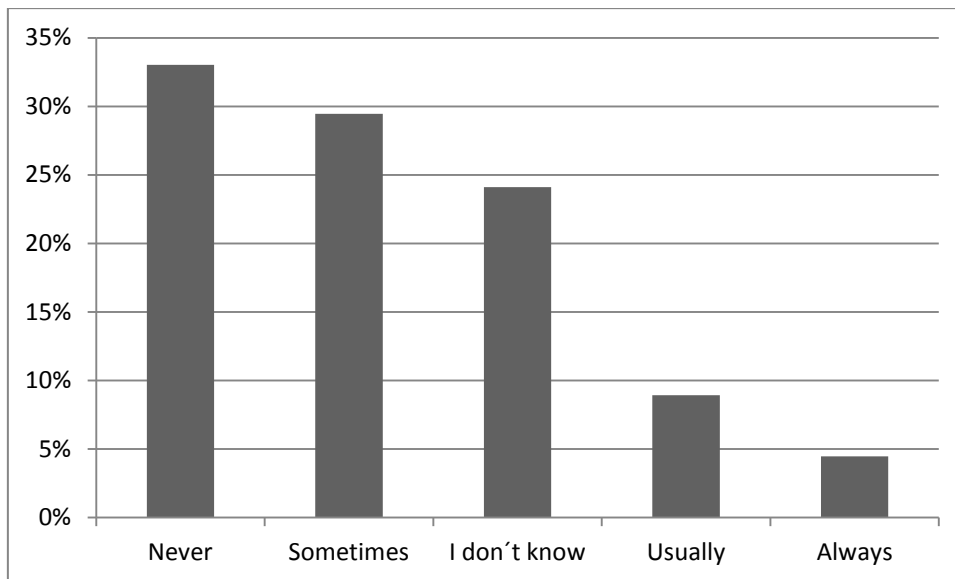


FIGURE 7. Does your library increase environmental awareness? (International n=28, Finnish n=141. The figure consists of the sum of all the answers in this section)

As figure 7 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 51% “no”, 28% “yes” and 21% “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 6 shows, there are more “never” answers in this section than in the others.



*FIGURE 8. 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 8 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 analyzing open ended-questions. Briefly, this area seems to need improvement in Finland as well as internationally.

The respondents had a possibility 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 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 at 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 CONCLUSIONS

The aim of this study was to answer the questions what are the differences and similarities between the Finnish and the foreign libraries according to the analysis made by the survey and which of the areas: environmental management, environmental economy, reduction of environmental burden, increase of environmental awareness or environmental communication, do arise to be the best or the worst handled in libraries? This study used a descriptive survey method supported by a questionnaire and was also a quantitative study. The results showed that there are still a lot of things to consider in order to improve sustainability in libraries. Major differences were not noticed between the Finnish and the foreign libraries even if the results can be seen only tentative because of the low number of respondents in the international survey. Reduction of environmental burden seemed to be the best handled area and environmental communication the worst.

Even if the best handled sustainable area in libraries was reduction of environmental burden, the complete satisfaction cannot be accomplished until the percentage of “always” answers is 100. It is a question of basic routines like recycling and sorting waste, not something you learn at your workplace. If libraries want to increase environmental awareness and environmental communication, attitudinal change among staff would be needed. Otherwise libraries cannot work as green educators. Sustainable development is something you need to believe in. The low number of respondents can also imply this same thing. If town or municipality shared money according to the state of sustainability, devotion to the environmental issues would surely be different. This would need, once again, co-operation with superior policymakers and other partners. As Finnish project’s Guide for Policymakers states: “Sustainability is a thing we all are committed to” (Kirjasto edistää kestäväää kehitystä - kuntapäättäjille 2012, date of retrieval 1.3.2013).

Despite the fact that research material has been available at least 10–20 years, all the sources repeat the same conclusions: we need more strategies and co-operation and concrete actions regarding sustainability in libraries in case we want to improve the situation. As easy as it would be for me to share the same conclusions with other researchers, I also would like to take an idea further and state that we also need our own indicators to the libraries in order to measure the state of sustainability. An own environmental label and auditing system for libraries could be a



part of that. This label could be used worldwide which also could increase the environmental awareness in libraries as for librarians, customers and policymakers.

Another point of view is the aspect of environmental management (see figure 2). All seven S's are important in case of a sustainable library. As well as structure, systems, strategy, shared values, symbolic behavior, staff and skills should be considered. As we can see from the results, environmental management is not well-known in libraries when less than 30 % of respondents say it surely exists. **Shared values** as well as **symbolic behavior** in case of a sustainable library could be just educating a new employee about the recycling rules to which all are committed to or switching off a computer in the end of a workday. **Systems** like recycling are an essential part of reduction of environmental burden and based on the results already noted quite well in libraries.

In case libraries really want to increase environmental awareness, they should take into consideration several S's: **symbolic behavior** when libraries work as green educators, **staff** that is committed to sustainability, **skills** that can mean co-operation with other partners and **shared values** like already before has been explained. In addition to these, environmental communication also needs **structure and strategy** like coordination and planning in order to work properly.

Even if the theme already in IFLA WLIC 2010 has been sustainable development (or sustainable progress as it has been misspelt) concrete changes cannot be found. In case the whole event was changed to operate under green values, it could make librarians think sustainability and widen their views on environmental issues. If changing the whole congress is not possible, at least importance of Environmental Sustainability and Libraries Special Interest Group should be emphasized and make it more visible.

## 7 DISCUSSION

This might not be an all-embracing thesis about sustainability in libraries but can be seen as a pioneering study in its field. Even if my results of the survey can be seen only tentative, I am happy with my choice of topic. I hope that in future we will receive more research from economic and social sustainability as well, even if research in ecological sustainability would be appreciated also. At the same time I hope that researchers from different countries would publish their studies about sustainability in libraries in English or some other official IFLA language that as many as interested as possible could read their conclusions.

This research project has taught me a lot of working in a project where all the pieces are collected in different places. As easy as it would have been to do everything (including the questionnaire) from the beginning, I hope this process is going to be a big help in my future career when more and more tasks are carried out in a part of different projects. This journey has worked in cycles with an explosive start, slumbering phase in the middle and finally the phase when pieces started to find their places in my head and in paper also.

In the beginning of this process I already thought myself as an environmentally consciousness person. This thesis has made me to consider environmental issues even more and I have an aim to live more environmentally friendly. Some of the general sources I have not used as references but read during this process, have caused me actual distress. In my future career as a librarian I am hoping to be in a position where I can affect people's attitudes of environmental issues and share my knowledge.

The most difficult drawback while I was doing this thesis was the low number of respondents in the international survey. My original plan was to compare the results between different continents which, of course, was not possible. I also had some troubles finding enough source material because amount of publications about this subject in library world is so few. Despite these facts, it was a big surprise for me that I was kindly asked to present my results in IFLA Publications Series, in the book *The Green Library*. As a student, an article in the international publication means something I surely was not even imaging when I started to work with this thesis. Networking with right people has been, and always will be, very important in a library world. I am also pleased with my deliberate choice to write this thesis in English albeit it might have not been

the easiest way. However, I have been able to share my thoughts also outside Finland and prove my language competence.

Albeit this is the end of this thesis, sustainable development in libraries is only beginning and I hope this tiny research has opened doors to many researchers to come who are interested in green values and libraries combined. I also would like to thank all the people who have been a great help in this process: the commissioner, my supervisor, language specialists and all my student colleagues who have inspired me and listened to my troubles. Without you this thesis would have never been ready. Sustainability is such an inspiring and fascinating area that I predict it follows me after my graduation. At the moment, I have nothing against it. I am ready for constant development – sustainable development.

## REFERENCES

Abazari, Z., Babalhaveaji, F. & Jahangirifard, B. 2012. GIS - based Evaluation of Public Libraries Locations for More Sustainable Building Site Selection (An Iranian Experience). Date of retrieval 4.2.2013. <http://conference.ifla.org/past/ifla78/184-abazari-en.pdf>.

Al, R. & House S. 2010. Going Green in North American Public Libraries: A Critical Snapshot of Policy and Practice. Date of retrieval 12.2.2013. <http://conference.ifla.org/past/ifla76/135-al-en.pdf>.

Antonelli, M. 2008. The Green Library Movement: An Overview and Beyond. *Electronic Green Journal*. Dec2008. Issue 27. Date of retrieval 1.2.2013.

Bell, S. & Morse, S. 2003. *Measuring Sustainability: Learning by Doing*. London: Earthscan.

Ekokompassi. 2013. (Translation: EcoCompass.) Date of retrieval 30.1.2013. <http://www.ekokompassi.fi/>.

Ekologisen kestävyuden opas kirjastoille. 2012. (Translation: Sustainable Guide for Libraries.)  
Sonkkanen, L., Asikainen, M., Häivälä, H., Hämäläinen, T., Hänninen, S., Jussila, M., Kulpakko, I., Leskinen, S. & Niemeläinen, R. (ed.) Date of retrieval 1.3.2013.  
<http://www.kirjastot.fi/File/ae409dc1-047c-4072-83aa-6f7189fbc280/kestavakehitysopaskirjastoille.pdf>.

Environmental Dictionary EnDic. 2013. Date of retrieval 18.1.2013.  
<http://mot.kielikone.fi/mot/indic/netmot.exe?UI=ened>

Ephraim, P.E. 2003. The Greening of Libraries. *Library Management* 24 (3), 160-163.

European Environment Agency. 2013. Environmental Terminology and Discovery Service (ETDS). Date of retrieval 16.2.2013.  
[http://glossary.eea.europa.eu/terminology/concept\\_html?term=principle of sustainability](http://glossary.eea.europa.eu/terminology/concept_html?term=principle%20of%20sustainability).

Green@library – Ecological Sustainability of Libraries. 2012. Sonkkanen, L., Asikainen, M. & Sahavirta, H. (ed.) Date of retrieval 15.1.2013. <http://sustainability.libraries.fi/>.

Hauke, P., PhD, Humboldt-Universität zu Berlin. Re: FW: Sustainability book. E-mail message to Elina Karioja, Karen Latimer, Jorma Niemitalo & Klaus Werner 18.2.2013.

HelMet. 2013. What is HelMet? Date of retrieval 2.4.2013. [http://www.helmet.fi/en-US/Info/What\\_is\\_HelMet](http://www.helmet.fi/en-US/Info/What_is_HelMet).

Helsingin kaupunginkirjasto. 2002. Kaupunginkirjaston ympäristöraportti 2001. (Translation: Helsinki City Library. Environmental Report of Helsinki City Library 2001.) R. Pesonen, S. Lehikoinen & T. Larva (ed.). Date of retrieval 2.2.2013. [http://pandora.lib.hel.fi/ajankohtaista/uutiset\\_ja\\_tiedotteet/y\\_rap.11.10.pdf](http://pandora.lib.hel.fi/ajankohtaista/uutiset_ja_tiedotteet/y_rap.11.10.pdf).

Helsinki City Library. 2013. Vihreä kirjasto. (Translation: Green Library.) Date of retrieval 18.2.2013. <http://www.hel.fi/wps/portal/Kirjasto?urile=wcm%3Apath%3A/Kirjasto/fi/Tietoa+meista/Kestava+kehitys&current=true>.

Hirsjärvi, S., Remes, P. & Sajavaara, P. 2009. Tutki ja kirjoita. (Translation: Research and Write.) 15th edition. Helsinki: Tammi.

Huttunen, T. 2011. Kirjastoaineiston ekologinen jalanjälki. (Translation: Ecological Footprint of Library Material.) Helsinki: BTJ Finland Oy.

IFLA. 2010a. IFLA Gothenburg 2010. Official invitation. Date of retrieval 13.2.2013. <http://conference.ifla.org/conference/past/ifla76/message3-1.htm>.

IFLA. 2010b. Daily Programme. Thursday 12 August. Date of retrieval 12.2.2013. <http://conference.ifla.org/past/ifla76/2010-08-12.htm>.

IFLA. 2012a. More about IFLA. Date of retrieval 2.2.2013. <http://www.ifla.org/about/more>.

IFLA. 2012b. IFLA World Library and Information Congress. Date of retrieval 9.2.2013.  
<http://conference.ifla.org/about>.

IFLA. 2012c. IFLA Helsinki World Library and Information Congress. 78th IFLA General Conference and Assembly. Date of retrieval 2.2.2013.  
<http://conference.ifla.org/past/ifla78/ifla78.htm>.

IFLA. 2012d. IFLA Helsinki. Official invitation. Date of retrieval 9.2.2013.  
<http://conference.ifla.org/past/ifla78/official-invitation.htm>.

IFLA. 2012e. Environmental Sustainability and Libraries. About the Environmental Sustainability and Libraries Special Interest Group. Date of retrieval 2.2.2013. <http://www.ifla.org/about-environmental-sustainability-and-libraries>.

IFLA. 2012f. Preservation and Conservation Section. Date of retrieval 9.2.2013.  
<http://www.ifla.org/preservation-and-conservation>.

IFLA. 2012g. IFLA World Library and Information Congress. Programme and Proceedings. Date of retrieval 4.2.2013. <http://conference.ifla.org/past/ifla78/programme-and-proceedings.htm>.

IFLA. 2013a. IFLA Publications. Date of retrieval 9.2.2013. <http://www.ifla.org/ifla-publications>.

IFLA. 2013b. IFLA Publications Series. Date of retrieval 8.4.2013.  
<http://www.ifla.org/publications/new>.

Kamula, M., senior lecturer, Oulu University of Applied Sciences. RE: Virtuaalikirjasto-kurssista. E-mail message to Elina Karioja 13.3.2013.

Kananen, J. 2011. Rafting Through the Thesis Process. Step by Step Guide to Thesis Research. Translated by M. Gates. Publications of JAMK University of Applied Sciences 2011:114.

Karioja, E. & Niemitalo, J. 2013. Sustainable libraries. A pilot survey of international delegates attending the IFLA World Library Conference 2012 and comparison with the Finnish national survey. Published in *The Green Library (In printing)*, reviewed and completed with editorial

amendments by P. Hauke, K. Latimer & K. Werner. IFLA Publications Series 2013:161. Berlin/Munich: De Gruyter Saur, 137—150.

Kestävä kehitys kirjastossa. 2011. (Translation: Sustainability in library.) Date of retrieval 25.1.2013. <http://hankkeet.kirjastot.fi/hanke/kest%C3%A4v%C3%A4-kehitys-kirjastossa>.

Kestävä kehitys kirjastoissa. 2012. (Translation: Sustainability in libraries.) Date of retrieval 26.1.2013. <http://www.kirjastot.fi/fi-FI/kestavakehitys/>.

Ketola, T. 2004. Strategiset päämäärät. Published in T. Ketola (ed.) Yritysten ympäristöjohtaminen. Päämäärät, käytännöt ja arviointi. (Translation: Strategic Goals. Published in Companies' Environmental Management. Goals, Practices and Evaluation.) Turku: Turku School of Economics and Business Administration. Series B-2:2004, 53—71.

Kirjastoasetus 18.12.1998/1078. (Translation: Library Decree.)

Kirjasto edistää kestävästä kehitystä - kuntapäätäjille. 2012. (Translation: Library Promotes Sustainability – a Guide for Policymakers.) Date of retrieval 1.3.2013. <http://www.kirjastot.fi/File/3e862287-fe60-4430-bceb-d0a3b04e0ecf/kestavakehitysopaspaattajille.pdf>.

Kirjastot.fi. 2013. Keskuskirjastotoiminta. (Translation: Libraries.fi. Central Public Library Actions.) Date of retrieval 18.2.2013. <http://www.kirjastot.fi/fi-FI/kirjastoala/keskuskirjasto/>.

Lehtola, S. 1996. Ympäristöjohtamisen menetelmiä ja työvälineitä. Oulun ammattikorkeakoulu. Talouden ja hallinnon koulutusohjelma. Opinnäytetyö. (Translation: Methods and Instruments of Environmental Management. Oulu University of Applied Sciences. Degree Programme in Business Economics. Bachelor's Thesis.)

Linden, J., Reilly, J. & Herzog, P. 2012. Research on Energy Savings Opportunities in University Libraries. *Library Hi Tech*. 30(3), 384 – 396. Date of retrieval 10.1.2013. Available online at: <http://dx.doi.org/10.1108/07378831211266537>.

Linnanen, L., Boström, T. & Miettinen, P. 1994. Ympäristöjohtaminen. Elinkaariajattelu yrityksen toiminnassa. (Translation: Environmental Management. Life Cycle Thinking in Company's Operations.) Porvoo/Helsinki: Weilin+Göös.

McBane Mulford, S. & Himmel, N.A. 2010. How Green Is My Library?. Santa Barbara: Libraries Unlimited.

Miller, K. 2010. Public Libraries Going Green. Chicago: American Library Association.

Oxford Dictionaries. 2013. British & World English. Date of retrieval 1.3.2013.  
<http://oxforddictionaries.com/definition/english/library?q=library>.

Oulu University of Applied Sciences. 2012. Sustainable development at Oulu UAS. Date of retrieval 4.4.2013. [http://oamk.fi/tietoa\\_oamkista/kestava\\_kehitys/sustainable\\_development/](http://oamk.fi/tietoa_oamkista/kestava_kehitys/sustainable_development/).

Oulu University of Applied Sciences Library. 2013. Vihreä kirjasto. (Translation: Green Library.) Date of retrieval 30.1.2013. [http://www.oamk.fi/kirjasto/tietoa\\_kirjastosta/vihrea\\_kirjasto/](http://www.oamk.fi/kirjasto/tietoa_kirjastosta/vihrea_kirjasto/).

Rowley, J. 2006. Libraries and environmental management. *Library Management* 27(4), 269 – 279.

Sonkkanen, L. 2012. Sustainability Hides in Libraries. Date of retrieval 4.2.2013.  
<http://conference.ifla.org/past/ifla78/184-sonkkanen-en.pdf>.

Vallila library. 2012. Vallila Library - Green Library. Date of retrieval 30.1.2013.  
[http://www.helmet.fi/en-US/Libraries\\_and\\_services/Vallila\\_Library/Whats\\_going\\_on/Vallila\\_Library\\_\\_Green\\_Library\(1983\)](http://www.helmet.fi/en-US/Libraries_and_services/Vallila_Library/Whats_going_on/Vallila_Library__Green_Library(1983))).

Waterman, R. H., Peters, T. J. & Phillips, J. R. 1980. Structure Is Not Organization. *Business Horizons* (June 1980), 14–26. Date of retrieval 27.3.2013. Available online at:  
[http://www.tompeters.com/docs/Structure\\_Is\\_Not\\_Organization.pdf](http://www.tompeters.com/docs/Structure_Is_Not_Organization.pdf).



WWF Finland. 2013. What is Green Office?. Date of retrieval 30.1.2013. <http://wwf.fi/en/our-earth/green-office/>.

Ympäristöministeriö. 2012. Kestävä kehitys. (Translation: Ministry of the Environment. Sustainable Development.) Date of retrieval 1.2.2013. <http://www.ymparisto.fi/default.asp?contentid=280280>.

## APPENDIX 1: QUESTIONNAIRE FOR FINNISH PUBLIC LIBRARIES



Kestävä kehitys kirjastoissa on valtakunnallinen yleisille kirjastoille suunnattu kestävän kehityksen hanke. Hankkeessa kartoitetaan kirjastojen tämänhetkistä ekologisen kestävyys tilannetta ja haetaan yhteisiä ratkaisuja kehityksen eteenpäin viemiseen. Hankkeen toteuttamisaika on 1.5.2011-31.12.2012.

**Ekologinen kestävyys** on yksi kestävän kehityksen näkökulmista. Sillä tarkoitetaan luonnon monimuotoisuuden ja ekosysteemien toiminnan varmistamista sekä ihmisten toiminnan sopeuttamista siihen niin, että luonnon kestävyys ei ylitä ja luonnonvarojen hupeneminen pysäytetään.

### Taustatiedot

Rasti ruutuun yhden vaihtoehdon kohdalle

#### **Kirjaston tiedot**

- Maakuntakirjasto \_\_\_\_\_
- Toimipiste \_\_\_\_\_

#### **Asemasi työyksikössä**

- esimies
- työntekijä
- ympäristövastuuhenkilö
- muu

#### **Vastaatko yksikkösi ympäristöasioista?**

- kyllä
- en

#### **Vakituinen henkilökunta (htv) kirjastolaitoksessa**

- 1-4 henkilöä
- 5-25
- 25-75
- yli 75

## 1. Ympäristöjohtaminen

Ympäristöjohtaminen tarkoittaa organisaation ympäristöasioiden johtamista ja hallintaa siten, että yrityksen toiminnan aiheuttamat ympäristövaikutukset huomioidaan yrityksen päätöksenteossa.

**Onko seuraavat ympäristöjohtamisen osa-alueet otettu huomioon kirjastossasi?**

1. kyllä, 2. ei, 3. en osaa sanoa

YMPÄRISTÖJOHTAMINEN	1	2	3
Kaupungille/kunnalle on laadittu ympäristöohjelma tai toimintasuunnitelma			
Kirjasto raportoi ympäristöasioista virasto/kaupunki/kuntatasolle			
Kirjastolla on ohjaavia periaatteita energiatehokkuuden lisäämiseksi			
Kirjastolle on laadittu päästövähennyssuunnitelma			
Kirjastolla on oma toimintasuunnitelma ympäristöasioiden edistämiseksi			
Virasto/työyhteisö on saanut ympäristösertifikaatin tai muu ulkoisen ympäristötunnuksen			
Kirjastolla on ympäristövastuuhenkilö			
Työyksiköllä on ympäristövastuuhenkilö			
Ympäristövastuuhenkilö osallistuu kirjaston ympäristöohjelman tai toimintasuunnitelman laatimiseen			
Kirjaston ympäristötoiminnasta vastaavat henkilöt kokoontuvat säännöllisesti			
Kirjasto on osallistunut ekologista kestävyttä edistäviin projekteihin (esim. Ekotuki-toiminta, EU-hankkeet)			
Työnantaja on järjestänyt ekologiseen kestävyteen liittyvää koulutusta			
Ympäristöasiat on kytketty henkilöstön palkitsemisjärjestelmiin			
Kirjasto on saanut taloudellista tukea ekologisen kestävyden ratkaisuihin			

## 2. Ympäristötalous

**Onko kirjastossa otettu huomioon luonnonvarojen käyttö ja käytön ympäristövaikutukset taloudellisessa päätöksenteossa? Rastita parhaiten kuvaava vaihtoehto:**

1. kyllä, 2. ei, 3. en osaa sanoa

<b>YMPÄRISTÖTALOUS</b>	1	2	3
Kirjastossa on käytössä ympäristöbudjetointi			
Kustannuksia seurataan per palvelusuorite, esim. laina tai aukiolotunti			
Kirjaston ympäristövastuuhenkilön työpanos on laskettu ympäristöbudjettiin			
Etätyöpäivien osuus on laskettu ympäristöbudjettiin			
Kirjaston talousarviossa on sitovia ympäristöön liittyviä tavoitteita			
Tarjouspyyntöjä laadittaessa otetaan huomioon ekologinen kestävyys			
Investointeja ja hankkeita on perusteltu ympäristöllisin näkökohdin			

### 3. Ympäristökuormituksen vähentäminen

Minkälaisia käytännön tavoitteita kirjasto on asettanut omalle toiminnalleen ympäristökuormituksen vähentämiseksi? Rastita parhaiten kuvaava vaihtoehto:

1=ei ollenkaan, 2=vähän, joskus, 3=en osaa sanoa  
4=jonkin verran, yleensä, 5=aina

<b>KÄYTÄNNÖT</b>	1	2	3	4	5
Eri jätelajit lajitellaan (esim. biojäte,paperi, kartonki, metalli, lasi)					
Poistettu aineisto lajitellaan eri jätelajeihin					
Jättemääristä- ja kustannuksista kerrotaan henkilökunnalle					
Muovitusmuovina suositaan ympäristöystävällistä kalvoa					
Kirjastossa on tehty energiansäästötoimenpiteitä kuten energiakatselmukset ja -korjaukset					
Työyksikössä seurataan energian, veden, jätteiden tai paperin kulutusta					
Tiloista sammutetaan valot poistuttaessa yli 10 minuutiksi					
Tiloissa hyödynnetään luonnonvaloa					
Hankitaan energiatehokkaita tietokoneita ja muita laitteita (esim. kylmälaitteet)					
Tietokonehankinnoissa suositaan kannettavia koneita					
Tietokoneet ja muut laitteet sammutetaan työpäivän päätteeksi ja viikonlopuksi					
Laitteissa on käytössä virransäästöautomaatiikka					
Tulostimissa on oletusasetuksena kaksipuolinen tulostus					
Turhat/ylimääräiset esitteet ja mainokset perutaan					

Viestinnässä suositaan sähköistä viestintää					
Hankinnoissa suositaan ympäristömerkittyjä tuotteita					
Ilmastointilaitteet huolletaan ja ilmastointikanavat puhdistetaan säännöllisesti					
Huonelämpötila on maksimissaan 21–22°C					
Työmatkaliikumisessa suositaan julkista liikennettä					
Työmatkaliikumisessa suositaan kävelyä, polkupyörää tai kimpakyytiä					
Kilometrikorvaukset maksetaan myös toisen kunnan kirjastoihmisesta, joka on ollut kydyssä					
Kirjastoauton reitit ja kirjastojen sisäiset kuljetukset on suunniteltu taloudellisesti					
Kirjastoautoa käytetään hyväksi ekologisen kestävyden edistämässä haja-asutusalueilla esim. ongelmajätteiden keräyspisteinä tai kierrätyksessä					

#### 4. Ympäristötietoisuuden lisääminen

**Ympäristötietoisuus – ympäristönäkökohtien ja omien valintojen vaikutusten tiedostaminen – on yksi edellytys ympäristöystävällisille ratkaisuille.**

**Onko kirjastonne omissa asiakkuus/sidosryhmätoiminnassaan toteuttanut alla lueteltuja toimenpiteitä?**

**1. kyllä, 2. ei, 3. joskus**

<b>YMPÄRISTÖTIETOISUUDEN LISÄÄMINEN</b>	<b>1</b>	<b>2</b>	<b>3</b>
Kirjasto järjestää ympäristöön liittyviä teemaviikkoja			
Kirjasto järjestää ympäristöön liittyviä tapahtumia			
Ympäristöaiheinen kirjallisuus on koottu esille omaan hyllyyn			
Ympäristöaiheisen aineiston lainausta seurataan			
Kirjasto on hyödyntänyt toiminnassaan lasten- ja nuorten ympäristökasvatusmenetelmiä			
Asiakastiloissa on jätteiden lajittelumahdollisuus			
Asiakastiloissa on kierrätyspiste kirjoille/lehdille/levyille			
Asiakastiloissa on kierrätyspiste esim. käytetyille pattereille			
Kirjastosta voi lainata materiaalia esim. energiankulutusmittarit			
Kirjasto tarjoaa sähköisiä palveluita asiakkaille esim. tekstiviesti- ja sähköpostipalvelut			

**Mitä muita tapoja kirjastollanne on edistää ympäristötietoisuutta?**

## 5. Ympäristöviestintä

**Ympäristöviestinnällä tarkoitetaan viraston toiminnan ympäristönäkökohtiin liittyvää viestintää sekä ympäristötietouden levittämiseen ja jakamiseen liittyvää viestintää.**

**Merkitse rasti ympäristöviestintäänne parhaiten kuvaavaan ruutuun  
1=ei ollenkaan, 2=vähän, joskus, 3=en osaa sanoa  
4=jonkin verran, yleensä, 5=aina**

<b>YMPÄRISTÖVIESTINTÄ</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Ympäristöasiat on liitetty toimintakertomukseen					
Ympäristöasioita käsitellään viikkopalavereissa/kokouksissa					
Ympäristöasioista kerrotaan kirjaston internet-sivuilla					
Ympäristöasioista kerrotaan kunnan/kirjaston intranet-sivuilla					
Kirjaston mediaviestinnässä tuodaan esille ympäristöasioita					
Kirjasto tekee ympäristöasioihin liittyvää yhteistyötä kunnan/kaupungin muiden virastojen kanssa					
Kirjasto tekee ympäristöasioihin liittyvää yhteistyötä järjestöjen kanssa					
Kirjasto tekee ympäristöasioihin liittyvää yhteistyötä yritysten kanssa					

**Kaipaatteko enemmän tukea kaupungin/kunnan ylemmiltä tahoilta ekologisen arjen kehittämiseksi? Jos kyllä, minkälaista?**

**Mitkä seikat koette kirjastollenne suurimmiksi haasteiksi ekologisen kestävyys toteuttamisessa?**

**Sana on vapaa – mitä muuta haluaisit kertoa liittyen kirjastosi ekologiseen kestävyys?**

## APPENDIX 2: INTERNATIONAL QUESTIONNAIRE

### Background information

Please write or tick the correct answer

#### Continent of your home library

- Africa
- Asia
- Australia/Oceania
- Europe
- North America
- South America

Country of residence \_\_\_\_\_

#### Library you work at, is:

- Public library
- Research library
- Other

#### I am in charge of environmental issues at my library unit

- yes
- no

#### My position at my unit of work

- manager
- employee
- other

#### Regular staff at my home library

- 1-4
- 5-25
- 25-75
- more than 75

## 1. ENVIRONMENTAL MANAGEMENT

- means organizational management with processes and practices that enable an organization to reduce its environmental impacts

**1. yes                      2. no                      3. I don't know**

<b>ENVIRONMENTAL MANAGEMENT</b>	1	2	3
The library reports on environmental issues to the office/town/municipality			
The library has a strategy of improving environmental issues			
The library has a person in charge of environmental issues			
The employer has organized training concerning sustainability			
The library has got financial support to sustainability solutions			

## 2. ENVIRONMENTAL FINANCES

- the use of natural resources and the impacts of their use is considered in relation to a library's economic decisions

**2. yes                      2. no                      3. I don't know**

<b>ENVIRONMENTAL FINANCES</b>	1	2	3
There are binding goals/targets concerning the environment in the library's budget			
When calls for offer are formulated, sustainability is considered			
The library's investments and projects have been justified by environmental aspects			

## 3. DECREASING THE ENVIRONMENTAL LOAD

- libraries' daily based actions to reduce the environmental load

**1=never    2=sometimes    3=I don't know    4=usually    5=always**

<b>PRACTISES</b>	1	2	3	4	5
Different types of waste are sorted (for example biowaste, paper, carton, metal, glass)					
Weeded material is sorted into different waste types					
Measures concerning energy conservation have been made at the library					



Consumption of energy, water, waste or paper is observed at the library unit					
Computers and other equipments will be switched off at the end of the work day and for the weekend					
There is duplex printing as a default setting in printers					
Electronic communication is encouraged					
Products with ecolabels are favored in purchases					

#### 4. PROMOTE ENVIRONMENTAL AWARENESS

- recognizing the impacts of one's selections, i.e. environmental awareness, is a requirement for eco-friendly decisions

2. yes

2. no

<b>PROMOTE ENVIRONMENTAL AWARENESS</b>	1	2
Library organizes theme weeks or events relating to environment		
Environmental literature has its own shelf at the library		
It is possible to sort waste in public spaces		
There is a recycling point for books, magazines and CD's in public spaces		
Library offers electronic services to customers, such as text message or e-mail services		

#### 5. COMMUNICATION OF ENVIRONMENTAL ISSUES

- organizational communication about environmental issues, promoting environmental awareness and sharing knowledge.

1=never 2=sometimes 3=I don't know 4=usually 5=always

<b>COMMUNICATION OF ENVIRONMENTAL ISSUES</b>	1	2	3	4	5
Environmental issues are part of the annual report					
Environmental issues are discussed in meetings					
The library's web site concerns environmental issues					
The library collaborates with other offices of the municipality or town regarding environmental issues					

**Do you have anything else to add or share concerning environmental issues at your library?**

## APPENDIX 3: RESULTS FROM THE FINNISH SURVEY

Analysis made by Gaia Consulting Oy. 2012.

### Kestävä kehitys kirjastoissa - kysely

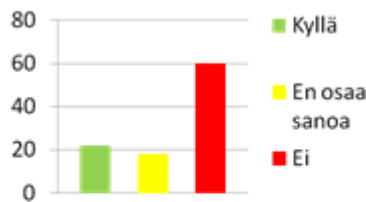
- N=141
- Kysely oli vastattavissa 1.-12.2.2012
- Kyselyyn vastanneet maakuntakirjastot
  - Espoo (5)
  - Helsinki (16)
  - Hämeenlinna (5)
  - Joensuu (1)
  - Jyväskylä (10)
  - Kajaani (2)
  - Kokkola (1)
  - Kouvola (2)
  - Kuopio (5)
  - Lahti (5)
  - Lappeenranta (3)
  - Mikkeli (4)
  - Oulu (17)
  - Pori (6)
  - Porvoo (7)
  - Rovaniemi (7)
  - Seinäjoki (7)
  - Tampere (15)
  - Turku (14)
  - Vaasa (2)
  - Ei tietoa (6)

2

### Ympäristöjohtamisen osa-alueiden huomioiminen

Yksittäiset vastaukset, joissa Kyllä +  
En osaa sanoa > 50%

- Kaupungille/kunnalle on laadittu ympäristöohjelma tai toimintasuunnitelma
- Kirjastolla on ohjaavia periaatteita energiatehokkuuden lisäämiseksi
- Uudet työntekijät ja sijaiset perehdytetään ympäristöasioihin



#### Ei-vastauksia 60 %

- Ympäristöjohtamisen osa-alueissa runsaasti kehitettävää

3

# Miten virastonne on palkinnut henkilökuntaa ympäristötoiminnasta?

n=19

- Ei mitenkään –vastauksia enemmistö (14/19)
  - Ei ole palkitsemisjärjestelmää.
  - Ei mitenkään. Ainakaan vielä. Kestävän kehityksen ohjelma on vasta lanseerattu sivistystoimessa. Käytännön tasolla tietenkin asioita on toteutettu pitempään.
  - Ei ole mitenkään. Kaupungin ympäristöpalvelut on lähettänyt meille pieniä lahjoja kiitokseksi ympäristöviikon järjestämisestä ja luontoaktiivisuudesta.
- Käytössä olevia palkitsemiskeinoja:
  - Mahdollisuus voittaa uusijääkaappi ruokailutiloihin, jos vanha on energiasyöppö.
  - Kiitoksilla ja muutamalla julkisella tunnustuksella
  - Työntekijämme ovat tietoisia asian tärkeydestä ja siitä koostuu hyvä mieli!

4

## Luonnonvarojen käytön ympäristövaikutuksien huomioiminen taloudellisessa päätöksenteossa

Yksittäiset vastaukset, joissa Kyllä + En osaa sanoa > 50%

- Kustannuksia seurataan per palvelusuorite, esim. laina tai aukiolotunti
- Tarjouspyyntöjä laadittaessa otetaan huomioon ekologinen kestävyys
- Investointeja ja hankkeita on perusteltu ympäristöllisin näkökohdin
- Ekologinen kestävyys huomioidaan kiinteistöjen remonteissa



Ei-vastauksia 50 %

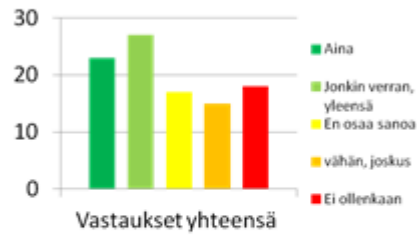
- ympäristövaikutuksien huomioimisessa taloudellisessa päätöksenteossa on kehitettävää

1

## Kirjaston toiminnalleen asettamat käytännön tavoitteet ympäristökuormituksen vähentämiseksi

Yksittäiset vastaukset, joissa Aina + jonkin verran > 50%

- Eri jätelajit lajitellaan
- Tiloista sammutetaan valot poistuttaessa yli 10 minuutiksi ja hyödynnetään luonnonvaloa
- Tietokoneet ja muut laitteet sammutetaan työpäivän päätteeksi ja viikonlopuksi
- Laitteissa on käytössä virransäästöautomatiikka
- Sähköistä viestintää suositaan
- Huonelämpötila on maksimissaan 21–22° C



**Kehitettävää** (yksittäisiä Ei ollenkaan + Vähän vastauksia > 50 %)

- Kannettavia tietokoneita suositaan hankinnoissa
- Kaksipuolinen tulostus on oletusasetuksena
- Kirjastoautoa käytetään hyväksi ekologisen kestävyuden edistämiseksi haja-asutusalueilla

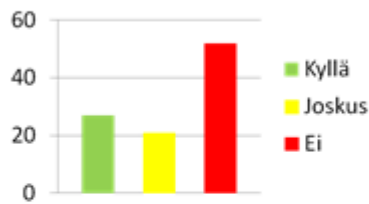
## Miten seuraavat osa-alueet on mielestäsi tällä hetkellä otettu huomioon kirjaston toiminnassa

	hyvin	melko hyvin	melko vähän	vähän	ei ollenkaan	Yhteensä
Energianäköistä						100 %
Jätteiden lajittelu						100 %
Kestävät hankinnat						100 %
Kestävä liikkuminen						100 %
Paperin kulutus						100 %
<b>Yhteensä</b>	14 %	45 %	26 %	11 %	3 %	

## Kirjaston omissa asiakkuus- / sidosryhmätoiminnassa toteutetut toimenpiteet

Yksittäiset vastaukset, joissa Kyllä +  
Joskus > 50%

- Kirjasto järjestää ympäristöön liittyviä teemaviikkoja ja tapahtumia
- Kirjasto tarjoaa sähköisiä palveluita asiakkaille esim. tekstiviesti- ja sähköpostipalvelut
- Kirjastosta voi lainata materiaalia esim. energiankulutusmittarit (50 % /50 %)



Mahdollisia kehityskohteita (Ei- vastauksia > 50 %)

- Ympäristöaiheisen aineiston lainausta seurataan
- Asiakastiloissa on jätteiden lajittelumahdollisuus
- Asiakastiloissa on kierrätyspiste esim. käytetyille pattereille sekä kirjoille/lehdille/levyille
- Kirjasto on hyödyntänyt toiminnassaan lasten- ja nuorten ympäristökasvatusmenetelmiä

## Muita käytössä olevia tapoja ympäristötietoisuuden edistämiseksi

1/2

- Kierrätysmateriaaleista talkootyöllä valmistetut lainattavat kirjastokassit.
  - Hyödyt: resurssitehokkuus, sosiaalinen vastuu, viestintä
- Suositellaan alan kirjallisuutta
  - Hyödyt: viestintä, tietoisuuden lisääntyminen
- Poistettavan aineiston jakaminen ilmaiseksi jottei päädy jätteeksi
  - Hyödyt: resurssitehokkuus, viestintä, taloudellisuus
- Koulun näyttely: Kestävä kehitys. Töitä mm. kierrätysmateriaalista.
  - Hyödyt: sosiaalinen vastuu, ympäristökasvatus, resurssitehokkuus
- Sähköiset lehtipalvelut kirjaston asiakastyöasemalta, verkkopalvelut ja kirjastokorttitunnuksella etäkäyttömahdollisuus.
  - Hyödyt: sähköiset palvelut
- Vuokraamme polkupyöriä kesäisin kuntaan tutustumista varten. Myös liikuntavälineitä ja energiamittareita on lainattavana.
  - Hyödyt: kestävä liikkuminen, resurssitehokkuus

## Muita käytössä olevia tapoja ympäristötietoisuuden edistämiseksi

2/2

- Kierrätyshyllly asiakkaiden tuomille tavaroille
  - Hyödyt: viestintä, resurssitehokkuus
- Tyky-päivien luontoretket
  - Hyödyt: henkilöstön sitouttaminen, viestintä
- Kirjastossa toimii Ekotiimi, johon kuuluu henkilökuntaa kirjaston eri sektoreilta ja joka tiedottaa henkilökunnalle ympäristöasioista.
  - Hyödyt: organisaation sitouttaminen, viestintä, tietoisuuden lisääntyminen
- Ympäristön kunnioitus -aiheinen kirjaston kehittämisprojekti
  - Hyödyt: kehittäminen
- Aineistoa korjataan ja puhdistetaan, jotta käyttöikä pitenee.
  - Hyödyt: resurssitehokkuus, taloudellisuus
- Pienet teot (esim. postituspakkaukset käytetään moneen kertaan. Käytössä lainattavia kangaskasseja. Monisteiden ym. papereiden tyhjät puolet käytetään muistilappuina)
  - Hyödyt: viestintä, resurssitehokkuus, taloudellisuus

10

## Oletteko saaneet palautetta liittyen ympäristöviestintään tai ympäristötapahtumiin?

Vastaus	Lukumäärä	Prosentti	20%	40%	60%	80%	100%
1. kyllä	13	10%					
2. ei	115	90%					
<b>Yhteensä</b>	<b>128</b>	<b>100%</b>					

11

## Kaipaatteko enemmän tukea kaupungin/kunnan ylemmiltä tahoilta ekologisen arjen kehittämiseksi? Jos kyllä, minkälaista? 1/2

- **Ekologisen kestävyuden sisällyttäminen kaupungin/kunnan strategiaan**
  - Kunnassamme ei panosteta lainkaan ympäristöasioihin, eikä niitä ole kirjattu mihinkään strategioihin tms.
  - Yhteinen ohjeistus hallintokunnille olisi hyvä.
- **Ympäristöohjelman luominen**
  - Ympäristöohjelma, jossa olisi ohjeita ja käytäntöjä.
  - Neuvontaa, miten voisimme parantaa tilojemme ja toimintamme ekologisuutta.
- **Mittareiden luominen, säännöllinen seuranta ja ohjeistus**
  - Selkeitä mittareita ja työaika. Tästä kyselystä tulee hyviä - ennen kaikkea konkreettisia - ideoita toimenpiteiksi. Jos näitä asioita raportoitaisiin virallisesti ja säännöllisesti, ne olisivat aina mielessä.
  - Perustiedot esim. energian kulutuksesta toimipisteissä tulisi saada ja ehdotukset ja suositukset vähentämisestä.
  - Yhteisiä ohjeita ja menettelytapoja sekä neuvoja

12

## Kaipaatteko enemmän tukea kaupungin/kunnan ylemmiltä tahoilta ekologisen arjen kehittämiseksi? Jos kyllä, minkälaista? 2/2

- **Rakennusten ekotehokkuuden parantaminen**
  - Kirjastorakennus on huonokuntoinen ja talotekniikka vanhentunutta. Henkilökunnalla olisi halukkuutta ekologisempaan arkeen, mutta uselsiin arjen asioihin ei voi vaikuttaa.
- **Hankintojen kestäväyttäminen kunnan tasolla**
  - Hankinnat on keskitetty esim. toimistotarvikkeiden osalta, mutta toimittaja vaihtuu alvariinsa eikä kaikilla ole valikoimissaan ympäristöystävällisiä tuotteita.
- **Kunnan jätehuollon kehittäminen**
  - Työpaikassamme ei ole minkäänlaista jätteenkierrätystä (paitsi pahvi, lehdet), ja ylipäättään kunnan jätteenkeräys on järjestetty todella huonosti. Asiaan ei tunnu olevan kiinnostusta.
  - Pienessä kirjastossa ei pysty esim. lajittelemaan jätteitä riittävästi, koska keräilyä ei ole järjestetty.
- **Ekologisuuden näkyväksi tekeminen**
  - Tarvittaisiin koko kunnan tempauksia ym. ympäristöteemalla.
  - Konkreettista muistuttamista ympäristöasioiden, kierrätyksen ja energiansäästön tärkeydestä jokaisessa toimipisteessä

13

## Mitkä seikat koette kirjastollenne suurimmiksi haasteiksi ekologisen kestävyuden toteuttamisessa? 1/3

- Resurssiniukkuus: aika ja raha
  - Remontteihin ei ole rahaa.
  - Oma aktiivisuus vaatii aikaa. Järkevän yhteisen suunnitelman laatimiseksi tarvitaan työaikaa, jota ei juuri tällä hetkellä ole.
  - Koneita ja laitteita ei useinkaan voi hankkia ympäristövaikutusten / energiankäytön mukaan. Ekologisen kirjamuovin kalleus.
- Keskittyminen epäolennaiseen
  - Suurin haaste on se, että keskitytään marginaaliseen nysväämiseen ja korostetaan asioita, jotka ovat suuressa mittakaavassa melkoisen merkityksettömiä.
- Käytännön esteet
  - Etätyöpäiviä ei voi pitää, työmatkat vaikeat ilman omaa autoa
  - Yksinkertaiset asiat ovat vaikeita. Esim. viedäksemme kartongit roskiin meidän on saatava avaimet koulun isännältä, jota ei aina tavoita.

14

## Mitkä seikat koette kirjastollenne suurimmiksi haasteiksi ekologisen kestävyuden toteuttamisessa? 2/3

- Asenteet, tietoisuuden ja koulutuksen puute
  - Kierrätystä ja ekologista ajattelua pidetään kunnassa "viherpiipertämisenä"
  - Henkilökunnan asenteiden muuttaminen ympäristöystävällisemmiksi
  - Ihmisten tietoisuus ympäristöasioista ei ole riittävällä tasolla
  - Monikulttuurisessa työympäristössä kaikki eivät kerta kaikkiaan välitä ekologisista asioista yhtään mitään.
  - Tiedon ja tilastojen puutteen.
- Vaikutusmahdollisuuksien puute
  - Vaikutusmahdollisuuksien ja informaation puute
  - Taloudellisen vallan ja itsemääräämisoikeuden puutteen.
  - Vuokrakiinteistö: Ei voi vaikuttaa kiinteistön energian kulutukseen
- Yhteistyö sidosryhmien kanssa
  - Yhteistyö kaupungin tilapalvelun kanssa: mm. energiankulutuksen seuranta ja huomioiminen huollossa, remonteissa ym.
  - Samassa kiinteistössä toimivien lajittelukäytännöt

15



## Mitkä seikat koette kirjastollenne suurimmiksi haasteiksi ekologisen kestävyuden toteuttamisessa? 3/3

- Rakennuksen energiatehottomuus
  - Kirjastomme on rakennuksessa, joka on todellinen energiasyöppö. Lämmönkulutukseen emme juurikaan pysty vaikuttamaan.
  - Suuret ikkunat jotka nostavat lämmityskustannuksia sekä huono tilojen ylläpito.
  - Tila ei täytä nykyisiä vaatimuksia ympäristönäkökulmasta.
- Jätteiden määrä
  - Av-aineiston poistot ja kirjamuovit. Esim. cd-levyjen koteloita päätyy kaatopaikalle kirjastoista tonneittain
  - Paperijätteen vähentäminen
  - Lajittelun parantaminen. Jätteiden asianmukainen kierrätys ei toimi.
- Säädot ja ohjeistus
  - Sähkön kulutuksen ohjeistus, huonetilojen lämmön ja kosteuden säätely
  - Valaistusta ei voi vähentää.
  - Tietokoneiden sammuttaminen pitäisi saada mahdolliseksi, nyt koneilta pelkästään kirjaudutaan ulos ja sammutetaan näytöt.

16

## Mitä muuta haluaisit kertoa liittyen kirjastosi ekologiseen kestävyteen? 1/4

*”Koska kirjasto on vain yksi osa kunnan tai kaupungin toiminnasta ja palveluista, on ekoasiat otettava huomioon yhtenä isona kokonaisuutena. En usko että kirjasto on missään paikkakunnalla se ongelmallinen yksikkö, kun koko toiminta perustuu lainaukseen ja se jos mikä on ekologista.*

*Energiankulutukseen ei kirjasto yksin voi juurikaan vaikuttaa, vaan se asia on teknisen toimen työn tulosta ja ratkaisut tehdään siis muualla kuin kirjastossa.*

*En pidä järkevänä myöskään sitä, että kirjasto alkaisi tarjota jätteenkeräyspalvelua tiloissaan. On loogista että jätteitä kerätään siellä missä sitä myös syntyy, eli kauppajen läheisyydessä. Tietysti myös erilliset jätteenkeräysasemat ovat tärkeitä.”*

17

## Mitä muuta haluaisit kertoa liittyen kirjastosi ekologiseen kestävyYTEEN? 2/4

*”Pienessä maalaiskunnassa eivät ympäristöasiat yleensä ole kauheasti esillä. Jätteiden lajittelua häiritsee se, että keruupisteitä ei kauheasti ole ja ne mitä on, sijaitsevat sen verran kaukana kirjastosta, ettei siivoaja niitä ryhdy sinne asti kuljettamaan.*

*Työmatkaa taas ei voi taittaa millään muulla kuin omalla autolla. Julkista liikennettä ei ole (ainakaan sellaista, mikä olisi millään tavalla sovitettavissa vaihteleviin työaikoihin; koululaiskuljetuksia toki on), lisäksi matka on liian pitkä pyörällä päivittäin kuljettavaksi.*

*Osallistumme vuosittain ympäristöviikkoon aineistonäyttelyin ja joskus jonkin pienen tapahtuman järjestämällä, mutta tapahtumat vetävät väkeä vähänlaisesti.*

*Taloudelliset syyt estävät huomioimasta ympäristöasioita toiminnassa - ainakin silloin kun niihin pitäisi kuluttaa rahaa, jota ei muutenkaan ole kauheasti käytettävissä. Ympäristöasiat eivät ole kovin korkealla tärkeysjärjestyksessä kunnan päättäjien keskuudessa.”*

18

## Mitä muuta haluaisit kertoa liittyen kirjastosi ekologiseen kestävyYTEEN? 3/4

*”Henkilökunta tekee kaiken mitä voi esimerkiksi lajitteluun liittyen. Turhia tulosteita vältetään, tulostuksessa valitaan kaksipuolisuus aina kun mahdollista (kaikissa tulostimissa tätä mahdollisuutta ei ole!) Talonmiesten kanssa käymme jatkuvaa keskustelua vanhan talon energiasta, sähköistä, lämpötolpista jne. Tilojen saneeraus ja laajentaminen on suunnitteilla!”*

*”Kirjaston henkilökunta mielellään tuo kotona rekvisiittaa kirjaston kirjanäyttelyihin jolloin niitä ei tarvitse ostaa. Tietyissä hankinnoissa (esim. astiat, pöytäliinat tms.) käytämme paljon paikallista kirpputoria. Kirjaston asiainnissa (esim. Posti, Matkahuolto) henkilökunta mielellään kävelee, vaikka se vie kauemmin aikaa kuin autolla käyminen.”*

19

## Mitä muuta haluaisit kertoa liittyen kirjastosi ekologiseen kestävyys? 4/4

*”Kirjastonkäytön logistiikan järjestämisessä on otettu huomioon kestävä kehitys: päivittäinen kuorma eri toimipisteiden välillä mahdollistaa aineiston palauttamisen ja saamisen asiakasta lähinnä olevaan kirjaston toimipisteeseen.*

*Kirjasto myy poistettua kirjastoaineistoa vuosittain. Kirjastosta poistetut kirjat, joita ei laiteta poistomyyntiin (huono kunto) tai jotka eivät poistomyynnissä mene kaupaksi, toimitetaan Kestävän kehityksen talolle. Kirjoista valmistetaan talojen lämpöeristettä. Kirjaston järjestämissä tilaisuuksissa suositaan reilun kaupan tuotteita sekä ympäristöystävällisiä materiaaleja.”*

20

## Huomioita

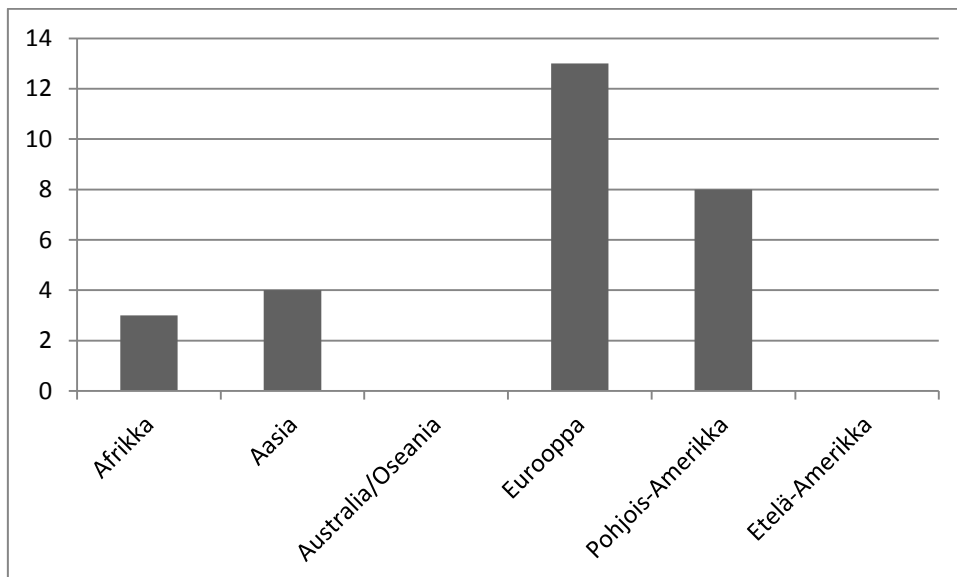
- Kaupungin strategian merkitys
  - Kirjaston vaikutusmahdollisuudet rajalliset, jollei ekologisuutta pidetä kaupungin tasolla strategisena
  - Pienissä kirjastoissa maakuntakirjastoalue/koko kunnan tasoisten strategioiden ja ohjeistusten merkitys korostuu
- Rajalliset resurssit
  - Ympäristöohjelman ja ohjeistusten laatiminen keskitetysti
  - Keskittyminen oleelliseen; oman toiminnan ympäristövaikutusten merkittävyyden ja omien vaikutusmahdollisuuksien arviointi -> toimenpiteiden valinta näiden mukaan
- Kirjastojen vaikutusmahdollisuudet
  - Viestintä, esimerkillisyys ja ympäristökasvatus

21

## APPENDIX 4: RESULTS FROM THE INTERNATIONAL SURVEY

### Taustakysymykset

Ensimmäisenä kyselyssä tiedusteltiin vastaajan maanosaa tai lähinnä mihin maanosaan vastaajan kotikirjasto sijoittuu. Kuten alla olevasta kuviosta selviää, eurooppalaisia vastaajia oli eniten, 13 kpl. Pohjois-Amerikka oli heti toisena kahdeksalla vastaajalla. Ikävä kyllä yhtään vastausta ei tullut Australiasta eikä Etelä-Amerikasta.

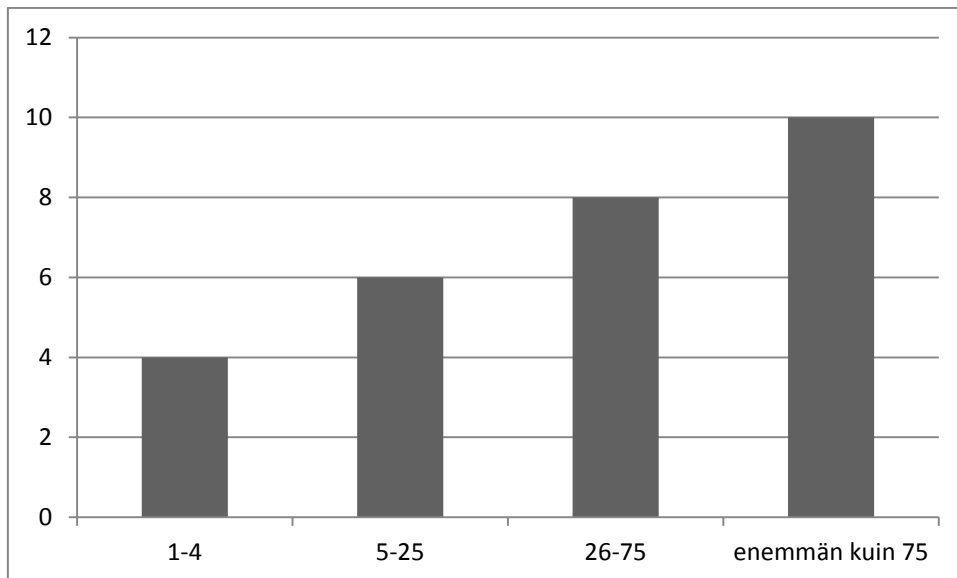


KUVIO 1. Mikä on vastaajan maanosa? (n=28)

Suurin vastaajaryhmä Eurooppa piti sisällään edustajia Italiasta, Maltalta, Iso-Britanniasta, Liettua, Ranskasta, Puolasta, Espanjasta, Irlannista ja Belgiasta. Espanjasta oli jopa kolme vastaajaa ja Italiasta kaksi. Lisäksi yksi kotimaakseen Venäjän merkinnyt oli vastannut maanosaksi Eurooppa. Hän on siis mukana eurooppalaisten vastauksissa.

Muita taustatietokysymyksiä olivat, oliko kyseessä yleinen, tieteellinen vai joku muu kirjasto, oliko vastaaja ympäristövastuuhenkilö ja mikä oli hänen asemansa työ-yhteisössä. Lisäksi kysyttiin

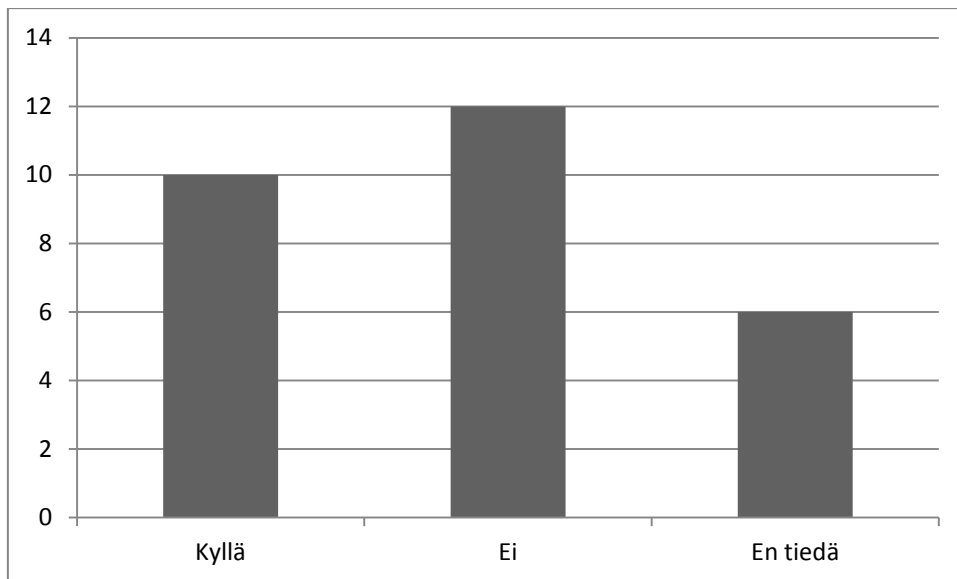
kirjaston henkilökunnan määrää. Ainoastaan seitsemän vastaajaa ilmoitti olevansa kirjastoyksikkönsä ympäristövastaavia. Muissa taustakysymyksissä vastaukset jakautuivat aika tasaisesti kaikkiin vaihtoehtoihin, alla henkilökuntamäärän jakautuminen.



KUVIO 2. Mikä on vakituisen henkilökunnan määrä kirjastossa? (n=28)

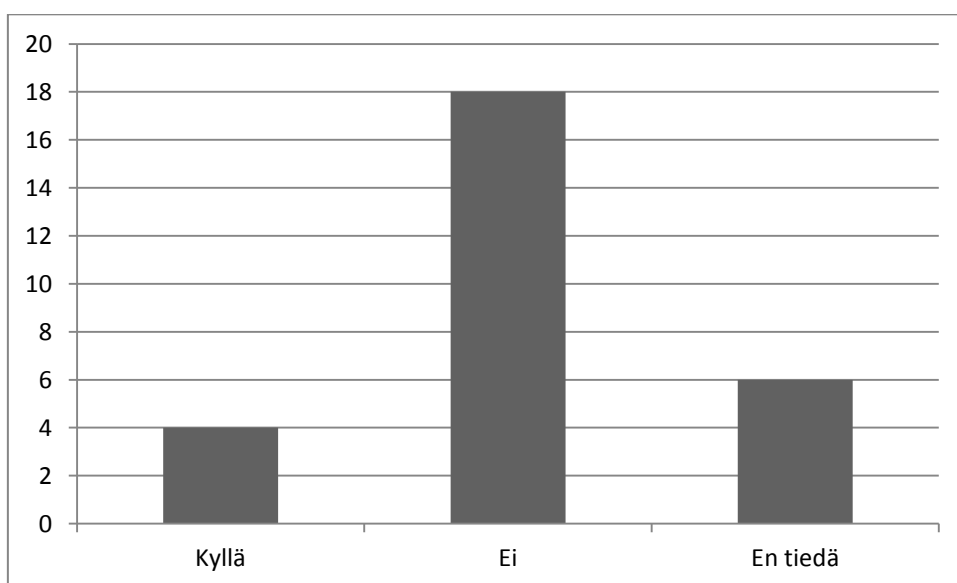
### Ympäristöjohtaminen

Ympäristöjohtamisen osa-alueelta kysyttiin viisi kysymystä. Vain seitsemän vastaajaa ilmoitti kirjastonsa raportoivan ympäristöasioista virasto-, kaupunki- tai kuntatasolle, seitsemän myös vastasi, ettei tiedä. Alla olevasta kuviota selviää, kuinka moni vastaaja ilmoitti kirjastollansa olevan erityisen ympäristöstrategian.



KUVIO 3. Onko kirjastolla oma toimintasuunnitelma ympäristöasioiden edistämiseksi? (n=28)

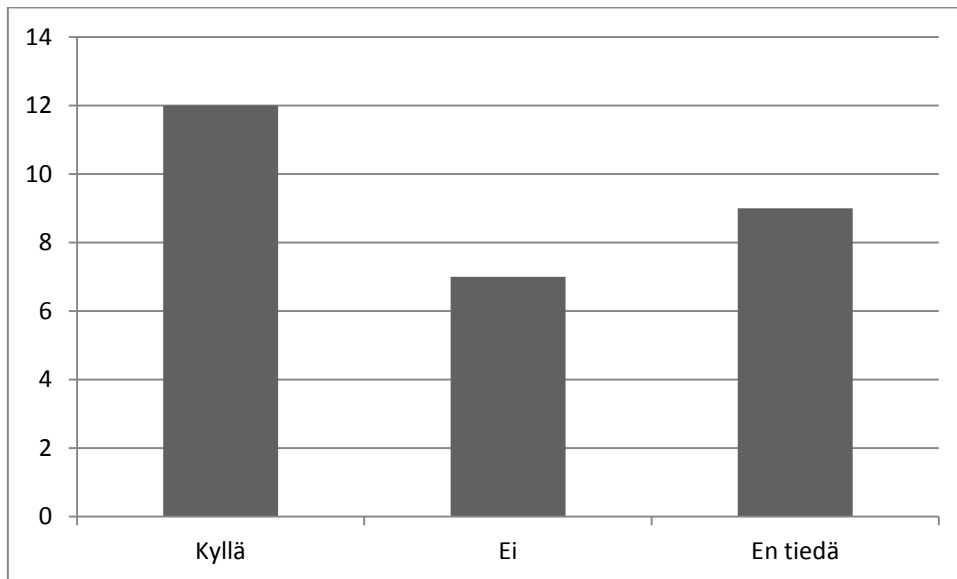
Seitsemän vastaajaa kertoi kirjastollaan olevan ympäristövastaavan. Ilmeisesti nämä samat seitsemän henkilöä olivat jo taustakysymyksissä vastanneet olevansa kirjastonsa ympäristövastuuhenkilöitä. Kahdeksan vastaajaa ilmoitti työnantajansa järjestäneen kestävän kehitykseen liittyvää koulutusta, kuusi ei tiennyt asiasta. Huomattavaa on jo tässä vaiheessa kyselyn tuloksia, että moni on vastannut kysymyksiin ”en tiedä”. Kysyttäessä taloudellisesta tuesta ekologisen kestävyuden ratkaisuihin vain neljä vastaajaa ilmoitti kirjastonsa saaneen sitä. Tässäkin tapauksessa suurin osa vastasi joko ”ei” tai ”en tiedä”.



KUVIO 4. Onko kirjasto saanut taloudellista tukea ekologisen kestävyuden ratkaisuihin? (n=28)

## Ympäristötalous

Toinen kyselyn osa-alue oli ympäristötalous, jossa kysyttiin mm. talousarviosta. Vain neljä vastaajaa ilmoitti kirjaston talousarviossa olevan sitovia ympäristöön liittyviä tavoitteita, mutta jopa 12 myönsi kestävän kehityksen otettavan huomioon tarjouspyyntöjä laadittaessa.

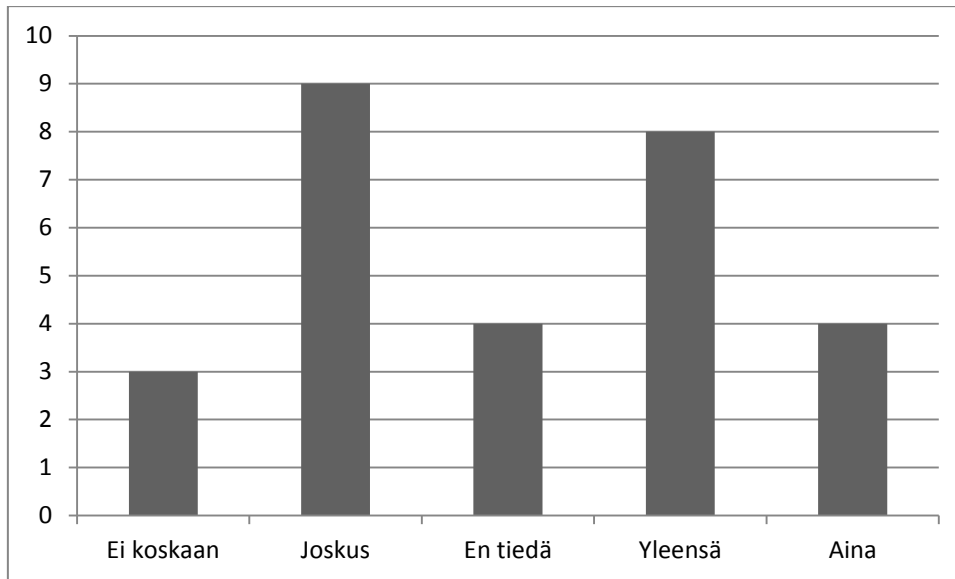


KUVIO 5. Otetaanko tarjouspyyntöjä laadittaessa huomioon ekologinen kestävyys? (n=28)

Investointeja ja hankkeita on perusteltu ympäristöllisin näkökohdin yhdeksässä vastaajakirjastossa. Tästä voisi varovasti päätellä, että halua ympäristöllisten näkökohtien huomioimiseen kirjastojen taloudessa on, mutta tavoitteita ei ole vielä päätetty eikä muotoiltu tarkasti.

## Ympäristökuormituksen vähentäminen

Kolmannessa osa-alueessa oli kyse ympäristökuormituksen vähentämisestä eli haluttiin selvittää, mitä käytännön toimia kirjastoissa on tehty asian eteen.

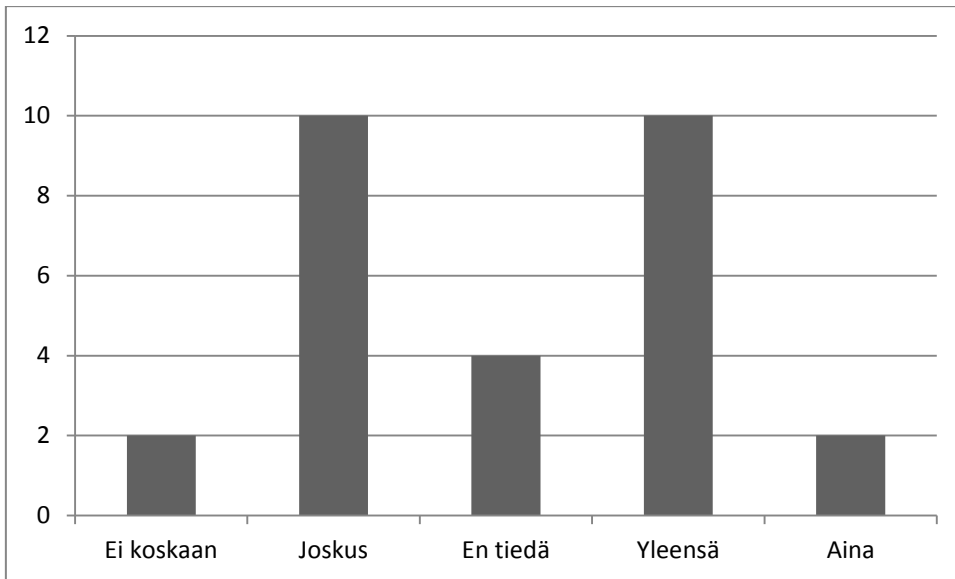


KUVIO 6. Lajitellaanko eri jätelajit (esim. biojäte, paperi, kartonki, metalli, lasi)? (n=28)

Yllä olevasta kuviosta ilmenee jätteen lajittelun yleisyys, joka näyttäisi toimivan suhteellisen hyvin vain kolmen vastatessa ”ei koskaan”. Huolestuttavaa lienee, että moni on täysin tietämätön asiasta, kun kyseessä on kuitenkin perustoimintatapa ympäristön kannalta. Kysyttäessä kirjastosta poistetun materiaalin lajittelusta eri jätelajeihin, yleisin vastaus oli, että se tapahtuu ”yleensä”. Näistä vastauksia kertyi yhteensä kahdeksan kappaletta. Myös ”joskus” ja ”en tiedä” saavuttivat miltei saman vastausmäärän (seitsemän kappaletta).

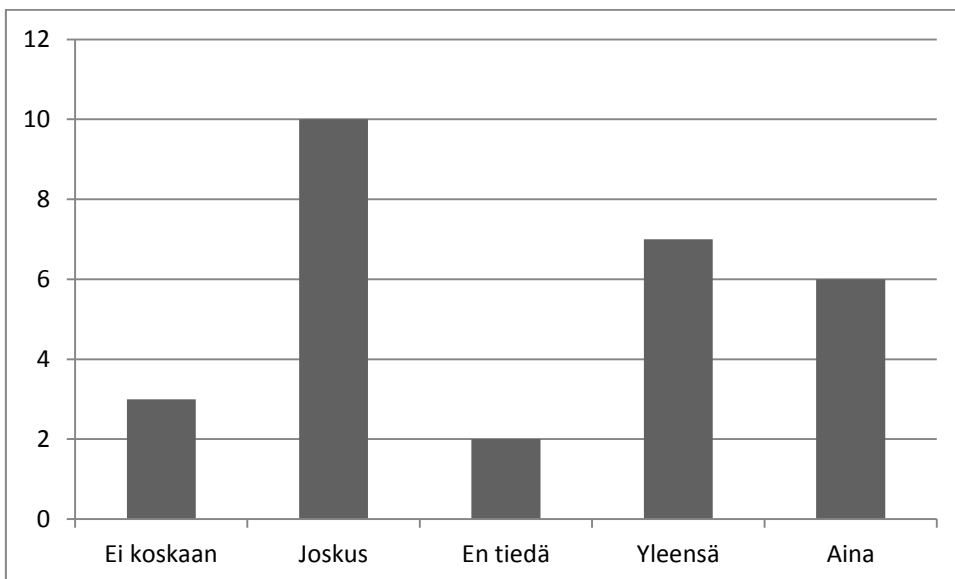
Energiansäästötoimenpiteiden suhteen hajonta oli myös suurta. Yleisimmät vastaukset olivat, että niitä tehdään ”joskus” tai ”yleensä”. Kun ”en tiedä” keräsi neljä vastausta, voi sanoa toimintaperiaatteiden olevan aika vaihtelevia.





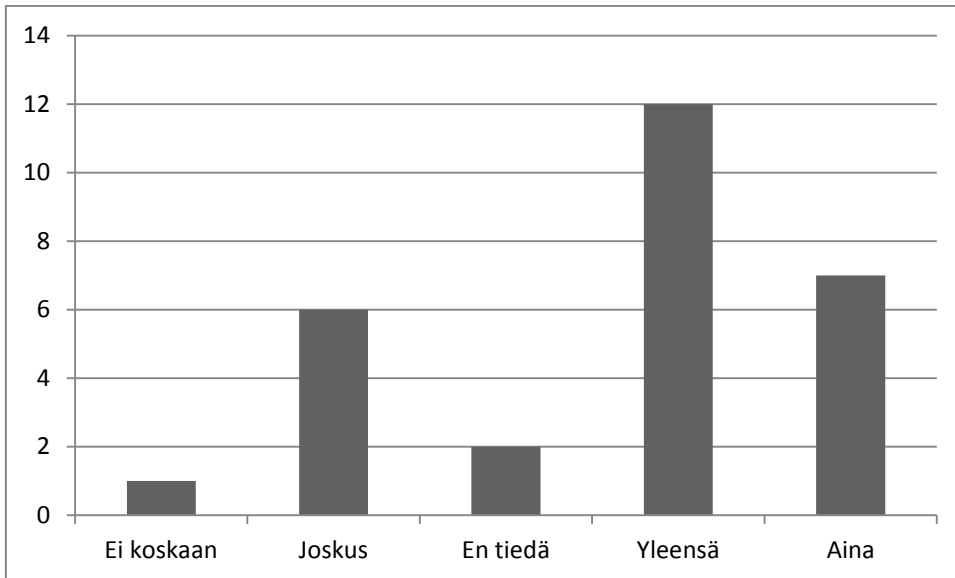
KUVIO 7. Onko kirjastossa on tehty energiansäästötoimenpiteitä? (n=28)

Kysyttäessä eri aineiden ja materiaalien kulutusseurannasta, vastaukset jakoutuivat alla olevan kuvion mukaisesti. Ilahduttavaa on, että vain kolme vastausta tuli kategoriaan "ei koskaan". Osasy lienee myös se, että yleismaailmallisen kiristyneen talouden takia, kirjastot ovat joutuneet kiristämään talouttaan ja tarkkailemaan aiempaa tarkemmin, minne varat menevät.



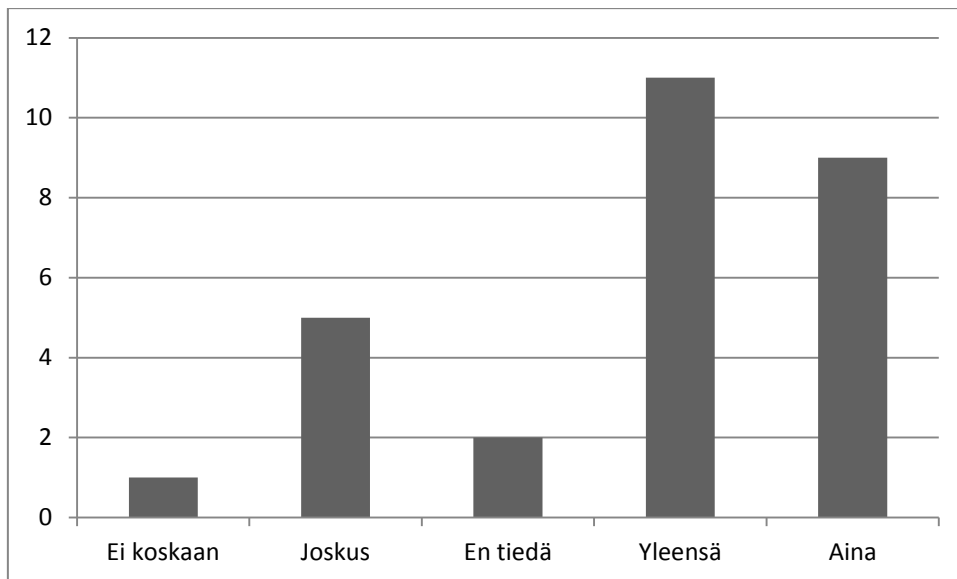
KUVIO 8. Seurataanko työyksikössä energian, veden, jätteiden tai paperin kulutusta? (n=28)

Hajonta oli joka kysymyksessä suurta kaikkien vaihtoehtojen välillä. Parhaiten järjestetyin vaikutti olevan tietokoneiden sammuttaminen työpäivän päätteeksi sekä sähköisen viestinnän suosiminen, joka onkin onneksi tyypillistä sähköpostiaikana.



*KUVIO 9. Sammutetaanko tietokoneet ja muut laitteet työpäivän päätteeksi ja viikonlopuksi? (n=28)*

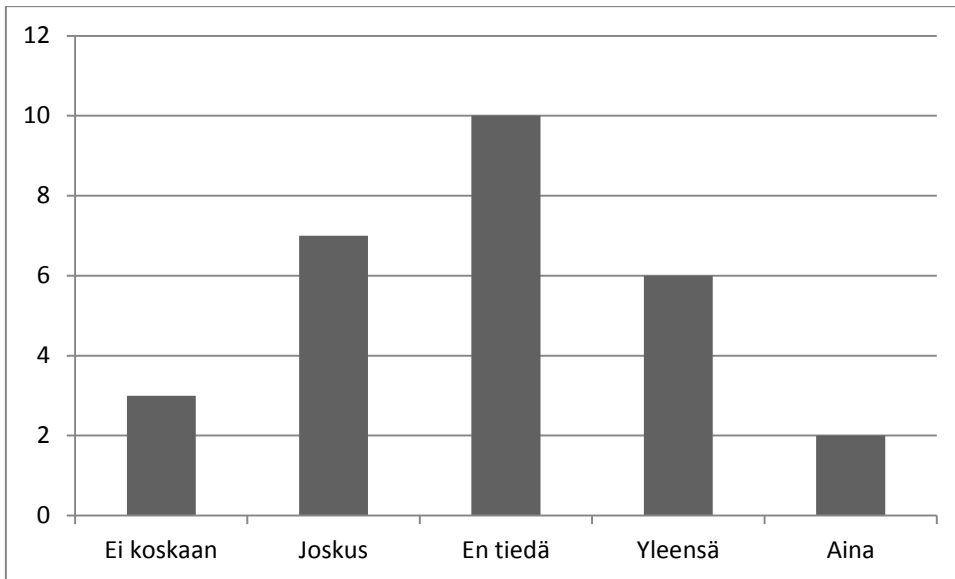
Kuten yllä olevasta kuviosta voidaan nähdä, 19 vastaajaa on vastannut kysymykseen laitteiden sammuttamisesta joko "aina" tai "yleensä". Tämä on 68 % kaikista vastauksista. Tämä on jo hyvä tulos erityisesti siitä syystä, että vain yksi vastaaja on vastannut "ei koskaan".



KUVIO 10. Suositaan viestinnässä sähköistä viestintää? (n=28)

Sähköisen viestinnän suosiminen on myös suosittua vastausten perusteella. 20 vastaajaa eli 71 % on vastannut kysymykseen ”aina” tai ”yleensä”. Tämä tulos ei sinänsä yllätä, sillä elämehän sähköpostin ja internetin valtakaudella.

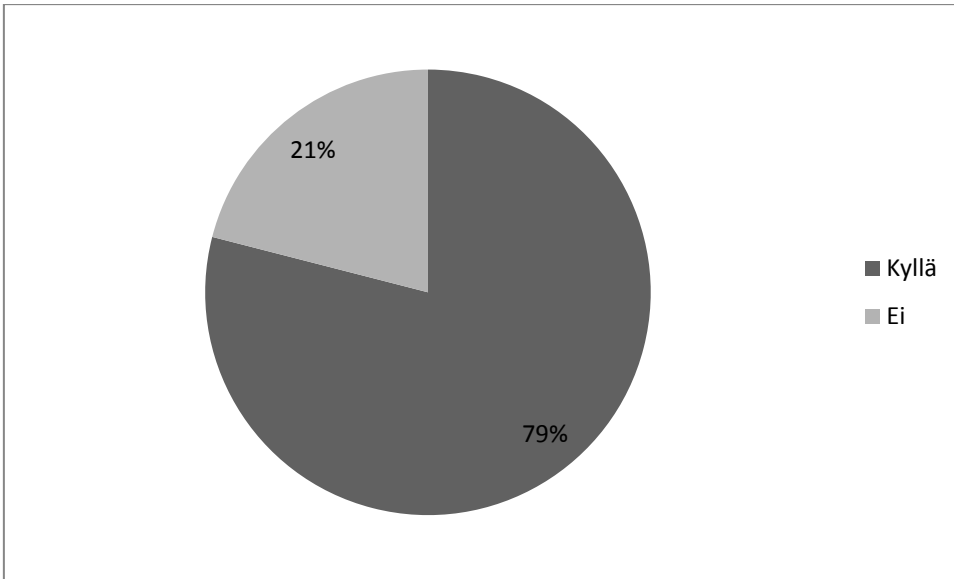
Kysyttäessä ympäristömerkittyjen tuotteiden hankinnasta suurin vastaajajoukko muodostui vaihtoehdon ”en tiedä” alle. Tämä on ymmärrettävää, jos vastaaja on henkilö, joka ei tee hankintoja, jolloin välttämättä asiasta ei ole sen enempää tietoa. ”Yleensä” ja ”aina” –vastauksia tuli yhteensä kahdeksan, ”ei koskaan” ja ”joskus” yhteensä 10 kappaletta. Ympäristöystävällisesti tehtävissä hankinnoissa olisi siis vielä paljon kehittämisen varaa.



KUVIO 11. Suositaanko hankinnoissa ympäristömerkittyjä tuotteita? (n=28)

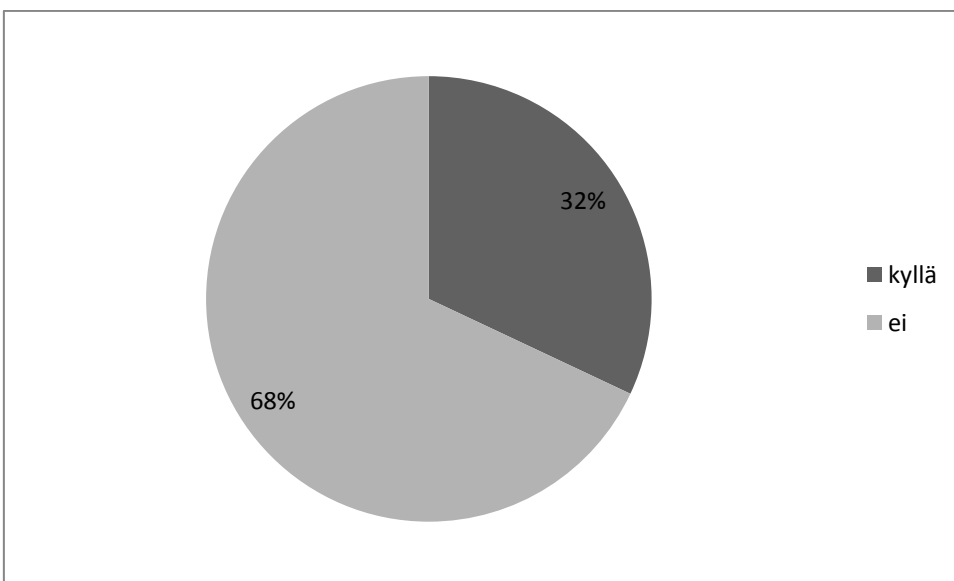
### Ympäristötietoisuuden lisääminen

Kyselyn neljännessä osiossa selvitettiin, ovatko kirjastot yrittäneet lisätä yleistä ympäristötietoisuutta. Aihealueen kysymyksissä oli mahdollista vastata ainoastaan ”kyllä” tai ”ei”. Jälleen hyvinhoidetuksi alueeksi nousivat asiakkaille tarjottavat sähköiset palvelut kuten tekstiviesti- ja sähköpostiviestintä. 22 vastaajaa vastasi ”kyllä” kysyttäessä niiden tarjoamisesta ja ainoastaan kuusi ”ei”. Herää kysymys, miten on mahdollista, että joissakin kirjastoissa asiakkaille ei tarjota minkäänlaisia sähköisiä palveluita? Ne kuitenkin ovat hyvin perustavanlaatuisen osa 2000-luvun kirjastoa. Alla olevassa kuviossa näkyvillä vastausten prosenttijakauma.



KUVIO 12. Tarjoaako kirjasto asiakkailleen sähköisiä palveluita? (n=28)

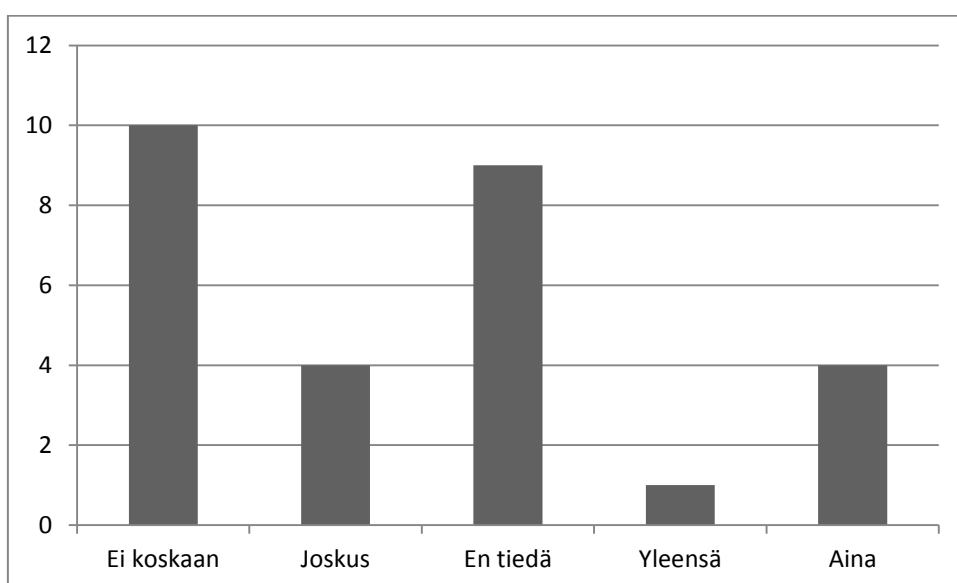
Ympäristöaiheisten tapahtumien järjestäminen ei taas ollut kovin suosittua, vain kahdeksan vastattua siihen myöntävästi. Ympäristöaiheinen kirjallisuus oli omassa hyllyssään 15 vastaajan mukaan ja jätteiden lajittelu asiakastiloissa mahdollista 18 vastaajan mukaan. Kirjojen, lehtien ja cd-levyjen kierrätyspiste asiakastiloissa oli olemassa yhdeksän vastaajan kotikirjastossa. Alla näkyvässä vastausten jakautuminen prosentteina kyseisessä kysymyksessä.



KUVIO 13. Onko asiakastiloissa kirjojen, lehtien ja cd-levyjen kierrätyspiste? (n=28)

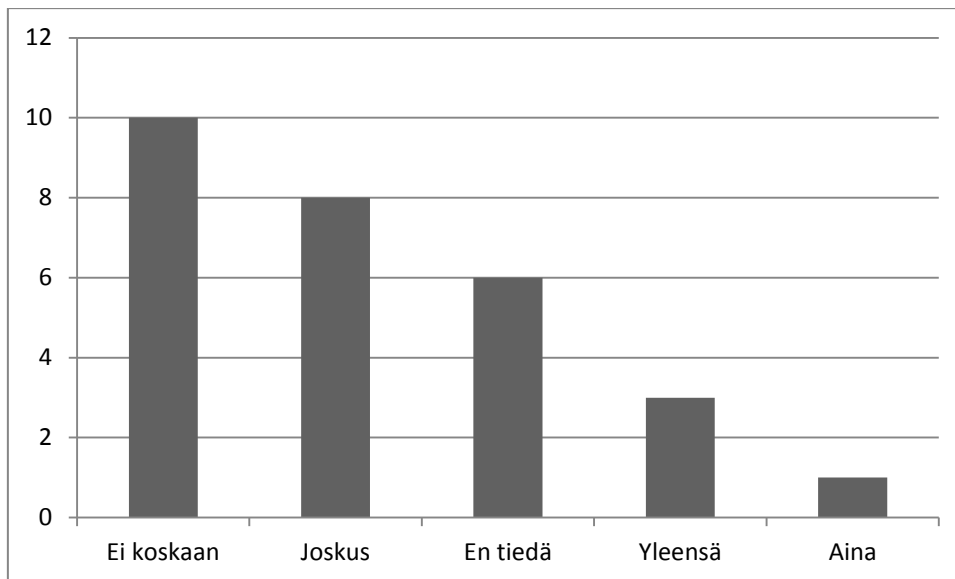
## Ympäristöviestintä

Viimeinen eli viides osa-alue oli ympäristöviestintä, jolla tarkoitetaan viraston toiminnan ympäristönäkökohtiin liittyvää viestintää sekä ympäristötietouden levittämiseen ja jakamiseen liittyvää viestintää. Ensimmäisenä kysyttiin, onko ympäristöasiat liitetty (vuosittaiseen) toimintakertomukseen. Kuten alla olevasta kuviosta käy ilmi, vastaukset hajautuivat kaikkiin vaihtoehtoihin. Tulos kertoo kuitenkin, että ympäristöasioiden liittäminen toimintakertomukseen on harvinaisempaa kuin sen poisjättäminen.



KUVIO 14. Onko ympäristöasiat liitetty toimintakertomukseen? (n=28)

Toisena kysyttiin, käsitelläänkö ympäristöasioita kokouksissa. Kukaan ei vastannut kysymykseen aina ja suurimman vastausmäärän sai vaihtoehto ”joskus”, 11 kappaletta. Yhteensä 21 vastaajaa myönsi, että kirjaston nettisivut sisältävät ympäristöön liittyvää materiaalia vain ”joskus” tai ”ei koskaan”, kukaan ei vastannut ”aina”. Kun kyseessä on näinkin helppo keino promotoida ympäristöasioita, luulisi sitä käytettävän enemmän. Yhteistyö muiden kunnan tai kaupungin virastojen kanssa ei myöskään näytä kovin tavalliselta toimintatavalta, kun suurimmat vastaajamäärät keräsivät vaihtoehdot ”ei koskaan” ja ”joskus”.



KUVIO 15. Tekeekö kirjasto ympäristöasioihin liittyvää yhteistyötä kunnan tai kaupungin muiden virastojen kanssa? (n=28)

Ylipäätään ”ei koskaan” –vastauksia tuli ympäristöviestinnän aihealueessa suhteessa eniten, joten voisi päätellä, että tässä aihealueessa on eniten parannettavaa.

Lopuksi annettiin vastaajille mahdollisuus kertoa lisäinformaatiota mistä tahansa kirjaston kestävään kehitykseen liittyen. Eräs vastaaja kertoi ympäristöasioiden olleen kirjaston toimintasuunnitelmassa vain viimeisten kolmen vuoden ajan, joten toiminta oli vielä aika alkutekijöissä ja kirjaston ”ympäristöpolitiikkaa” oltiin vasta luomassa. Toinen vastaaja kertoi olleensa ennen vastuussa kirjastosta, mutta on nyt vastuussa kestävästä kehityksestä koko instituutin ja yliopiston osalta. Lisäksi kerrottiin, että erään vastaajan yliopistokampuksella on ympäristökomitea, johon kirjaston edustajia myös valitaan. Nämä vastaukset selventävät yhä enemmän, että ympäristöasioihin huomioimiseen kirjastojen toiminnassa on herätty, mutta toimintaperiaatteita tulee vielä parantaa ja kehittää.

## APPENDIX 5: ARTICLE IN THE GREEN LIBRARY BOOK

Elina Karioja & Jorma Niemitalo

### **Sustainable libraries**

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

Elina Karioja & Jorma Niemitalo  
Oulu University of Applied Sciences  
School of Business and Information Management, Finland

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.

*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. 141 Antworten gingen von finnischen Bibliotheken ein, aber enttäuschenderweise*



*beantworteten 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.*

## **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*:

*“Libraries are challenged with the new role of connecting the public with environmental awareness and education. Public libraries are challenged to go green.” (ibid.: VII)*

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 (ibid.: 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 (ibid.: 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>2</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, p. 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)

– *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?

---

<sup>2</sup> [http://glossary.eea.europa.eu/terminology/concept\\_html?term=sustainable%20development](http://glossary.eea.europa.eu/terminology/concept_html?term=sustainable%20development) (2013/2/18).

## 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 Sonkkänen 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 six 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?

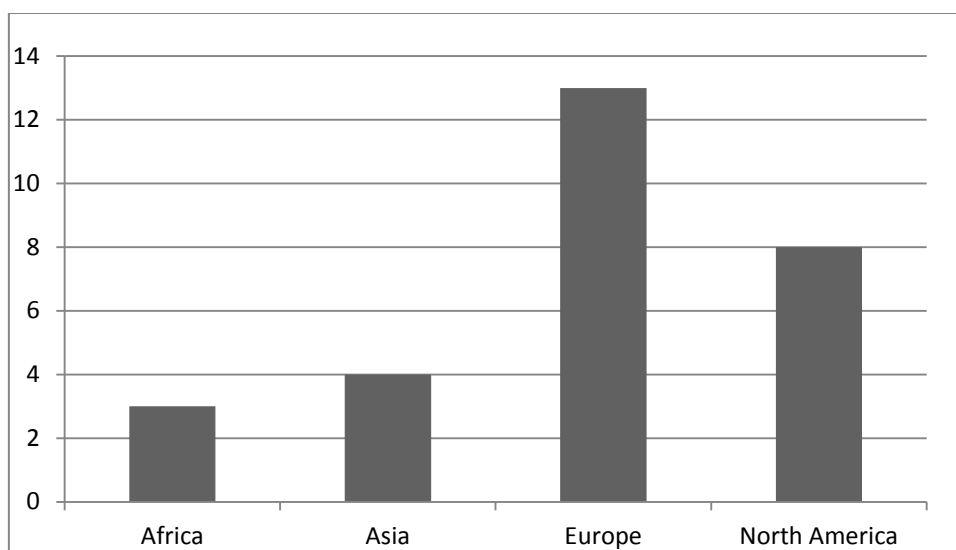


Figure 1: What is the continent of your home library? N=28.

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 1: 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
more than 75	3	5	2

Table 1 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>3</sup> One question asked was if the respondent was irresponsible 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.

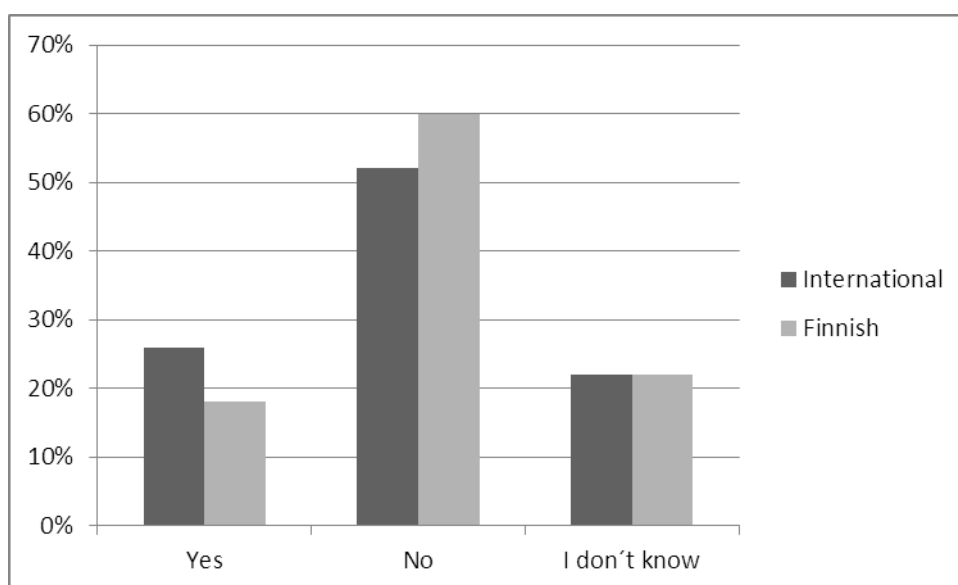


Figure 2: Is there environmental management in your library? International N= 28, Finnish N=141. (The figure consists of the sum of all the answers in this section.)

<sup>3</sup> The Finnish questionnaire used almost the same background questions but the results of the distribution are not available.

Figure 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 3 shows the results of questions relating to environmental economy in Finnish and other libraries.

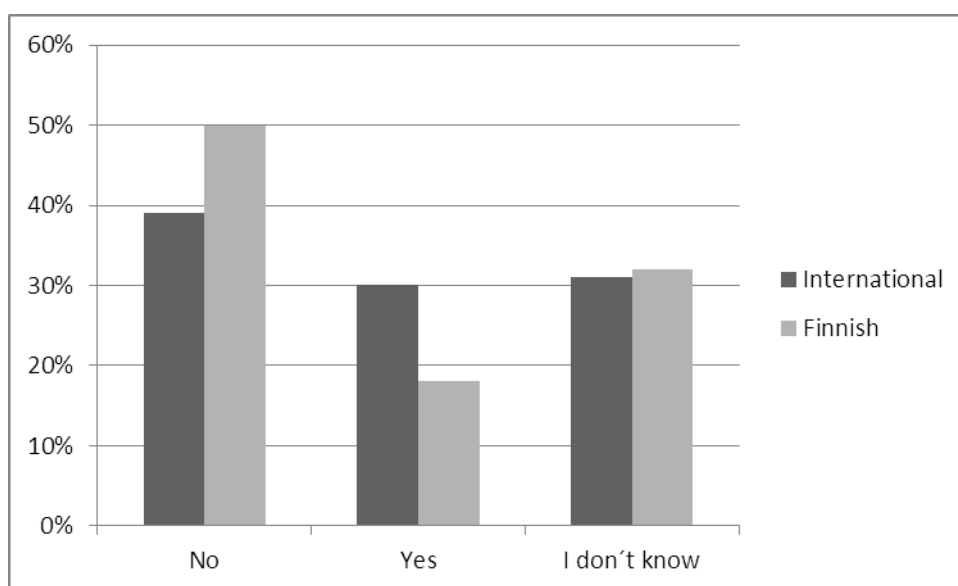


Figure 3: Are environmental economy practices carried out at your library? International N=28, Finnish N=141. (The figure combines the sum of all the answers in this section.)

Figure 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 4 shows the distribution between Finnish and other libraries.

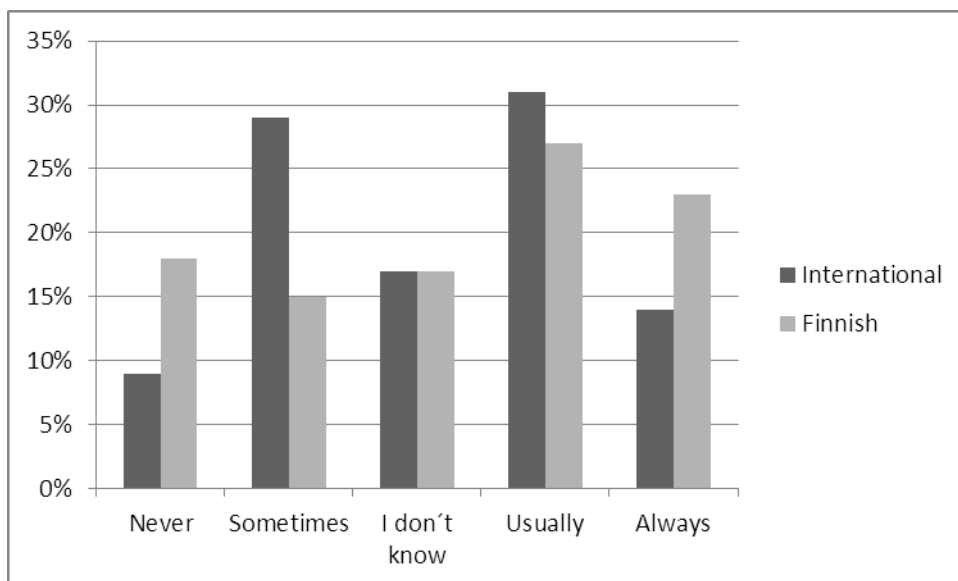


Figure 4: Does your library observe practices in order to impact on reduction of environmental burden? International N=28, Finnish N= 141. (The figure consists of the sum of all the answers in this section.)

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.

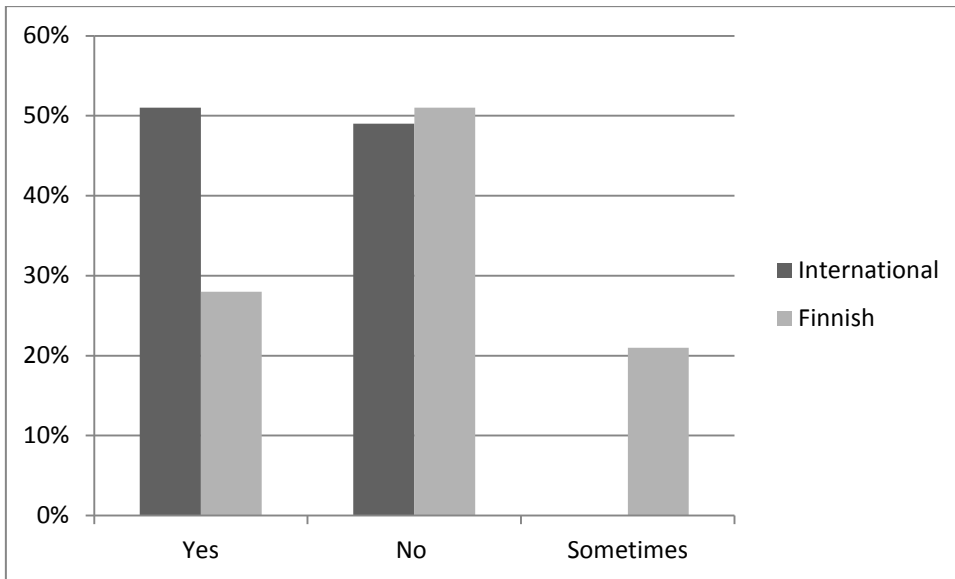


Figure 5: Does your library increase environmental awareness? International N=28, Finnish N=141. (The figure consists of the sum of all the answers in this section.)

As figure 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 6 shows, there are more “never” answers in this section than in the others.

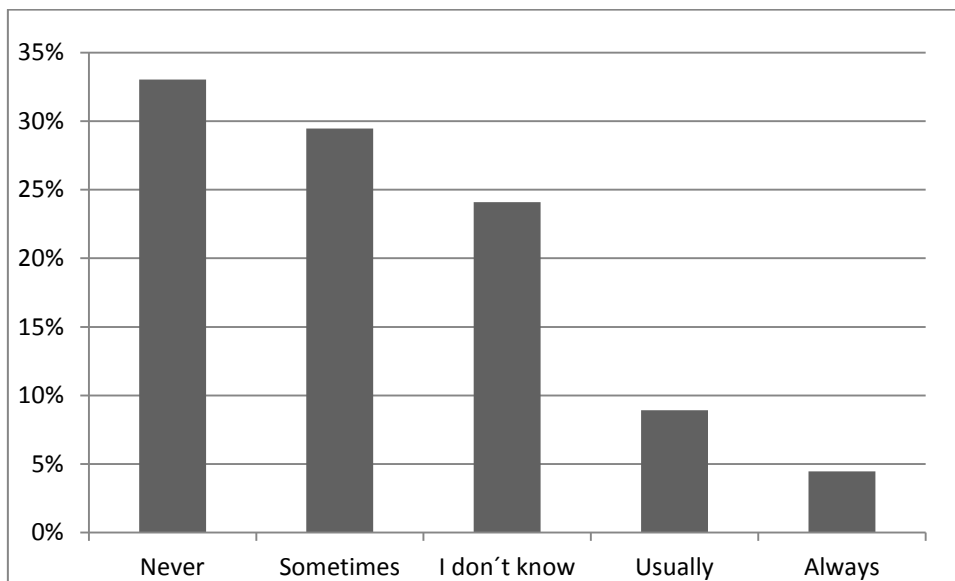


Figure 6: Does your library have environmental communication practices? N=28. (The figure consists of the sum of all the answers of the international survey in this section.)



The results shown in figure 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 analyzing 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 realise 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 continent 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 investigated 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.

## 7 References

Cooper, A. R. (1996). *Cooper’s Comprehensive Environmental Desk Reference*. New York, NY [et al.]: VanNostrand Reinhold.

Ephraim, P. E. (2003). The greening of libraries. *Library Management* 24 (3), 160–163.

IFLA (2012). IFLA World Library and Information Congress. 78th IFLA General Conference and Assembly. Daily Programme.

<http://conference.ifla.org/past/ifla78/2012-08-13.htm>,

<http://conference.ifla.org/past/ifla78/2012-08-15.htm> (2013/2/7).

McBane Mulford, S., & Himmel, N. A. (2010). *How Green is My Library?* Santa Barbara, CA: Libraries Unlimited.

Miller, K. (2010). *Public Libraries Going Green*. Chicago: American Library Association.

Rowley, J. (2006). Libraries and environmental management. *Library Management* 27 (4), 269–279.

Sonkkanen, L., Asikainen, M., & Sahavirta, H. (eds.) [2012]. *Green@library Ecological Sustainability of Libraries*. <http://sustainability.libraries.fi/G@Len.pdf> (2012/12/12).