

• I . C • L • E • I

The International Council for  
Local Environmental Initiatives

International Survey on National Green Procurement Practices

# THE WORLD BUYS GREEN

RELIEF

Environmental relief potential of urban  
action on avoidance and detoxification  
of waste streams through green procurement.



Funded under the 5<sup>th</sup> Framework  
Programme, Key action »City of  
tomorrow and Cultural Heritage«,  
European Commission,  
Directorate General for Research.

## Imprint

### The World Buys Green - International Survey on National Green Procurement Practices

#### Publisher

International Council for Local Environmental Initiatives (ICLEI)  
Konrad Otto-Zimmermann (responsible)

#### Editors

Christoph Erdmenger, Vivien Führ  
ICLEI's European Eco-Procurement Programme and Eco-Efficient Economy (ICLEI EPP)

#### Authors

Christoph Erdmenger, ICLEI European Eco-Procurement Programme, Freiburg  
Dr. Vilma Eri, Centre for Environmental Studies, Budapest  
Vivien Führ, ICLEI European Eco-Procurement Programme, Freiburg  
Bettina Lackner, ProcurementService Austria, IFZ, Graz  
Anders Schmid, dk-technik Energy Environment, Søborg  
Nicolien van der Grijp, Institute for Environmental Studies, Amsterdam

#### Layout and print

Papyrus Medientechnik GmbH, Freiburg  
Böhm & Co. Offsetdruck GmbH, Freiburg

#### Copyright

© ICLEI European Secretariat GmbH, Freiburg, Germany, 2001  
All rights reserved. No part of this book may be reproduced or copied in any form or by any means without written permission of the ICLEI European Secretariat GmbH (Eschholzstr. 86, D-79115 Freiburg/Germany, e-mail: [iclei-europe@iclei-europe.org](mailto:iclei-europe@iclei-europe.org)).  
Printed in Germany

#### Obtainable from

ICLEI European Secretariat, Eschholzstr. 86,  
D-79115 Freiburg, Germany  
Fax: +49-761-36892-19  
E-mail: [iclei-europe@iclei-europe.org](mailto:iclei-europe@iclei-europe.org)  
Online from ICLEI's web store at [www.iclei.org](http://www.iclei.org)

#### Acknowledgements

This publication is produced within the RELIEF project (Environmental relief potential of urban action on avoidance and detoxification of waste streams through green procurement). The project is funded under the 5th Framework Programme, Key action "City of tomorrow and Cultural Heritage", European Commission, Directorate General for Research.

# Contents

<b>Executive Summary</b>	<b>5</b>
<b>Introduction</b>	<b>9</b>
<b>Local Government Procurement</b>	<b>13</b>
<b>Austria</b>	<b>19</b>
Short History	19
Implementation at...	20
Impact on environment and market	23
Recent and ongoing research	24
Co-operations between different stakeholders and public authorities	24
Political outlook	25
Appendix	26
<b>Denmark</b>	<b>29</b>
Short History	29
Implementation at the national, regional and local level	31
Co-operation between public authorities and between different stakeholders	33
Impacts on Environment and Market	34
Recent and Ongoing Research	35
Political Outlook	35
Literature	36
<b>Hungary</b>	<b>37</b>
Background	37
Green Purchasing in Practice	37
On-going research	39
Political Outlook	40
References	41
<b>Japan</b>	<b>43</b>
Short History	43
Implementation	43
Co-operation between public authorities and between different stakeholders	45
Impact on environment and market	46
Recent and ongoing research	46

Political Outlook	47
Literature	48
<b>Netherlands</b>	<b>49</b>
Introduction	49
Background	49
Implementation at local, regional and national level	51
Impact on environment and market	53
Co-operation between public authorities and between different stakeholders	53
Political Outlook	54
Recent and ongoing research	54
References	55
<b>North America</b>	<b>57</b>
Short History	57
Implementation	58
Co-operation between public authorities and between different stakeholders	58
Impact on environment and market	59
Recent and ongoing research	60
Political Outlook	60
Literature	62
<b>Sweden</b>	<b>63</b>
Short history	63
Implementation at the national, regional and local level	64
Impact on environment and market	68
Co-operation between public authorities and between different stakeholders	68
Political outlook	69
Recent and on-going research	69
<b>Conclusions</b>	<b>71</b>
<b>Annex</b>	<b>77</b>
List of scientific and local partners within the project and contact address	77
List of BIG-Net participants sorted by countries as of October 2001	78

## Executive Summary

Public purchasing is one of the environmentally most significant fields which comes under the direct responsibility of governments. Applying green criteria offers a huge, albeit unknown, environmental relief potential. Although public authorities have been developing "green" procurement practices for more than 20 years, no common strategy has yet been established and little is known about green purchasing practices in other countries. In order to assess the experiences in countries that are known for their green purchasing activities, scientific institutions have taken stock of green purchasing activities in the European forerunners Austria, Denmark, Netherlands, and Sweden. In the light of the European Union enlargement process, a survey was also undertaken in Hungary. The picture is complemented by a feature on the leading international example Japan and the activities going on in the world's second largest internal market in North America.

### **Austria**

First activities and projects for green procurement had started already back in the eighties in several cities and municipalities of Austria, some of the more recent initiatives having been launched in the mid-nineties. In 1998, the Austrian Council of Ministers (Ministerrat), approved basic guidelines for green procurement. In 1999/2000, the State of Vorarlberg published "Eco-guides for green purchasing" for offices and the building sector. Another important element of this initiative is the establishment of joint purchasing among municipalities in Vorarlberg. The Austrian Ministry of Environment and Procurement Service Austria has been in charge of the EU-Life funded project "Check it!", which was a joint action of nine scientific and consulting institutions in Austria developing a criteria catalogue for main procurement domains. In a next step, purchasers will be supported in implementing the results of this project in their procurement procedures.

### **Denmark**

Denmark is one of the leading countries in the field of green public procurement. Since 1995, all governmental institutions have been legally obliged to set up a green purchase policy. Furthermore, both counties and municipalities must have implemented a green purchasing policy before the end of 2001. The main tool used for green purchasing are the about 50 sets of purchasing guidelines for different product groups, large central purchasers and some municipalities having also developed their own tools and procedures. As a recent initiative, the Danish Environmental Protection Agency has established product panels via which stakeholder groups attempt to produce, market and purchase environmentally friendly products, e.g. in the field of textiles and washing detergents. The full potential for green public purchasing has not been reached yet, and both suppliers and purchasers expect green purchasing initiatives to increase in the coming years, where especially e-trade is seen as a good possibility

### **Hungary**

Green purchasing in Hungary is a rather rare phenomenon. The main criteria for selecting a tenderer are low cost and risk related to the bidding company. This is mainly due to market conditions, namely the budgetary constraints of local governments, the relatively high prices

of and insufficient information about green products. Institutional framework of green public procurement, as it was formulated in the mid-1990s, includes the eco-labelling scheme, the law on product charges that offers a discount of fees payable for labelled environmentally friendly products and the law on public procurement. The latter requires that, with all other aspects being equal, preference be given to environmentally friendly products and services.

### **Japan**

No country in the world can present such a wealth of green purchasing activities as Japan does. At national level, activities are mainly conducted by the Green Purchasing network, which also provides tools to support purchasers. On 1 April 2001, the Japanese Government declared green purchasing to be obligatory for all national departments. This obligation is enforced by a positive list of green products, the obligation to set up a policy for each department and to report on achievements made. The practical and political commitment to green purchasing are demonstrated by numerous cities, among them Shiga Prefecture and Sendai City. In Japan, green purchasing of public authorities very often is seen as a first step to change general consumer behaviour and mainly concentrates on office materials and electronics. Approaches like green canteens or green cleaning are largely unknown.

### **The Netherlands**

Until the establishment of the Sustainable Procurement Programme by the central Government in 1999, the lack of commitment and practical product information had been hindering a broad scale implementation of green procurement in the Netherlands, which now is to be achieved through a Web site that provides product information to procurement officers and outlines targeted activities to strengthen commitment. Launched in the same year was a plan to increase efficiency and transparency of public procurement focusing on innovative, electronic and European tendering.

### **North America**

In Canada and the US, many activities have already been conducted at the municipal, state and federal level, with a few networking activities going on, but without effective coordination between them. Green purchasing also is far from exploiting its full potential. Among the multipliers, especially the US Environmental Protection Agency has produced valuable Internet resources, for example a database of existing criteria, mainly from eco-labels, which can be searched by product. EPA's Energy Star Programme shows proof of the globally most impressive example of successfully greening the market place by public purchasing: US federal departments declared their demand of one million computers annually thus considerably pushing the market of Energy Star certified computers. Environment Canada, too, produced a number of valuable materials and the federal government is undertaking a promising approach to systemise green purchasing in Canadian federal departments.

### **Sweden**

In Sweden, green public procurement has been a well-known issue since 1990, when municipalities and counties started first efforts in this field. The main tool, "Västernorrlandspärmen", provides green

purchasing guidelines for about 25 product groups. It has more than 1200 users in public and private institutions and companies. Another tool, TCO 99, is internationally recognised in the areas of IT equipment and office furniture. The green purchasing initiatives have been co-ordinated by the ECU Delegation that recommends that future development in the area should strongly focus on Internet possibilities, while being aware that there is a growing need for education and management support. Still there are local, regional and national institutions that have not yet initiated green purchasing initiatives, one of the reasons being the uncertainties regarding the (EU) legal framework on the inclusion of environmental demands, although Sweden is working actively to remove this and other barriers.

Concluding, the publication summarises the findings in these countries and compares the strategies chosen. Recommendations are derived for further research and how these will be met by the RELIEF project. Furthermore, a number of conclusions for successful imitation of given experiences are drawn. This first international survey of independent research institutions and networks on green purchasing is a valuable information source for policy makers, researchers and practitioners in the countries covered – and in the countries still to follow them.



## Introduction

In a number of environmental areas, traditional environmental policy has led to significant achievements. There are however a range of environmental problems still waiting to be solved by the industrialised societies. It is obvious that this cannot be done by hierarchic “command and control” protection alone. Environmental experts and recent policy documents therefore call for environmental aspects to be considered throughout society and in all fields of policy.

Public purchasing is one of the environmentally most significant fields in direct responsibility of governments. It therefore plays a key role as to this respect. Green purchasing means basing all decisions regarding purchases and allocation of contracts on environmental criteria along with other criteria such as price and quality. Not only does green purchasing contribute to environmental protection, it also creates a powerful market demand for greening the production and serves as a model to influence the behaviour of companies, private institutions and households.

However, most public purchasers lack information on green goods and services. Additionally, they face legal and technical problems concerning the integration of environmental criteria in calls for tender. The contribution green purchasing could make to sustainable production has not yet been exhausted, there is still a big potential to be exploited.

Against this background, ICLEI started RELIEF, a research project funded under the 5th Framework Programme of the European Commission. It is within the framework of this project that the International Survey on Green Procurement Practices in seven countries (including Austria, North America, Denmark, Hungary, Japan, The Netherlands and Sweden) presented hereunder has been carried out. The study aimed at assessing the current status of green purchasing in the respective countries. It will be followed by in-depth surveys on six pioneer cities.

The description of the structure of this publication and the presentation of the national studies will be preceded by a short description of the RELIEF project.

### **The RELIEF Research Project**

#### **Environmental Relief Potential of Urban Action on Avoidance and Detoxification of Waste Streams Through Green Procurement**

Public authorities have been developing “green” procurement practices for more than 20 years. However, despite the huge potential, innovations triggered in the economy still appear to be marginal. A European strategy is missing, the same applying to sound figures verifying the environmental relief potential of green purchasing.

One of the major difficulties encountered at all levels of purchasing is the scarcity of available and reliable information about the environmental characteristics of products and services. This lack of information is often considered as the main obstacle to further greening purchasing decisions.

Without a sound data basis, purchasers will not be able to prioritise their actions, thus left to their own in making decisions on which products are to be purchased green and which are not. And much too often, everything ends up in mere symbolic actions. Further obstacles, such as the uncertainty about how to integrate environmental demands in a call for tender and which legal criteria to be applied, contribute their share to this situation which can be seen as a direct result of missing information. Moreover, ambitious decisions are in need of a strong political support, which, however, is missing quite often as politicians, as a rule, are not aware of how big the potential of green purchasing actually is. And, last but not least, the legal framework is sometimes perceived as not being favourable to green purchasing for its giving priority to the free market principles of non-discrimination and transparency. As long as there is no real awareness of the potential of an alternative strategy it is unlikely that the need to alter this framework will be seen.

The RELIEF project aims at closing this data gap and developing a set of policy tools to implement a European Strategy. The key idea behind this is to deliver quantifiable figures required for prioritising actions in order for them to be applied by authorities throughout Europe. Joining purchasing powers strategically will not only achieve marginal changes but cause the supply side of the market to shift toward sustainability

## Scientific Objectives and Approach

The project addresses five objectives. The final objective is to develop a strategy for green purchasing in Europe, and it will be approached via a campaign of cities. This is complemented by the development of a set of policy recommendations and tools for policy makers and stakeholders at the European, national and local level. To provide an empirical basis for this, the next objective is to calculate, at a European level, relief potentials for different scenarios and to explore procure

ment tools which trigger product innovation. This entails environmental, socio-economic and market analyses, for which, based on existing approaches, appropriate methods have to be developed. In order to ensure relevant calculations, the first objective is to identify products with high environmental relief potential which can be used by public authorities to achieve a relevant market influence. This is complemented by an assessment of current practices.

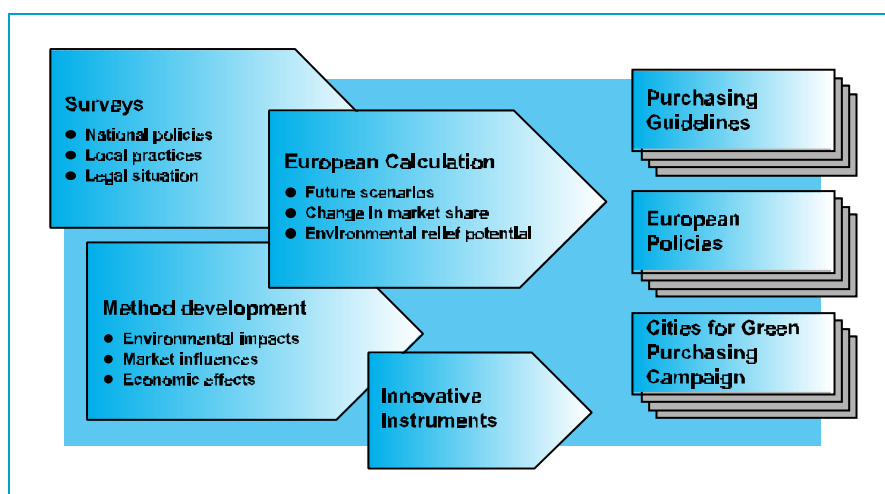


Figure 1: Simplified overview of RELIEF project steps

The project can roughly be divided into a scientific and an implementation-oriented phase. The first phase serves to develop methods and conduct assessments and calculations, while the latter one is used to develop, discuss and implement policy recommendations. The following chart provides a simplified overview of the project steps (arrows indicate the scientific phase and sheets the implementation phase):

The scientific phase will start with an international survey on national, regional and local approaches. The main results of this survey are displayed in the present publication. This will be followed by in-depth surveys on the cities among the partners. The information gathered including an analysis of city-inherent hurdles, will serve as a reference source, focussing particularly on the most relevant product groups.

The step of method development will start by building a consensus on a comprehensive set of indicators for environment and economy of green purchasing. Based on this, three tiers of methods will be adopted with respect to green purchasing: environmental assessment; socio-economic evaluation, market conditions and methods. Once the methods and their fundamentals are clear, the scope for the European calculation will be prepared in the form of scenarios. In parallel to the calculation, instruments to employ procurement for product innovation are explored, such as contracting or other recent schemes.

The implementation phase will start by developing draft policy recommendations and tools. Recommendations for urban environmental policies, product policies and trade and internal market policies are addressed to the European level. The draft (or redraft, if appropriate) of European purchasing guidelines is addressed to the purchasing communities (mainly cities). A specific tool is developed in form of a "code of orientation" addressing the legal dilemma of internal market rules which are blind to environmental criteria.

The draft documents will be discussed in multi-stakeholder roundtables resulting in a set-up of a strategy for a Cities for Green Purchasing Campaign. This will result in the implementation of the project results through the cumulative action of cities across Europe.

## **Expected Impacts**

The project will improve the current scientific situation by delivering methods, calculation and, of course, urgently needed data. Additionally, City Status Reports and Potential Assessments will be published for the pioneer cities taking part in the project that are located in different parts of Europe. This will be the basis for a wide range of activities to follow, some of them located inside, however, most of them outside the project.

The project will provide recommendations on European and local policies. There will be three background papers for the European Union, a legal code of orientation and guidelines on six product groups. All these will be discussed in multi-stakeholder roundtables for further consultation and consensus building, representing the most concentrated European discussion context known so far on green purchasing.

Joining purchasing powers strategically will not only achieve marginal changes but cause the supply side of the market to shift toward sustainability. The project will support this by developing a "Cities for Green Purchasing Campaign". In order to put the results into action, a manual on green purchasing will be written together with an ambitious agenda.

The results on methods and calculations will even go beyond the project enabling scientists all over Europe to make their own surveys on potentials for certain authorities and certain product groups. Local authorities will be able to benefit from the experiences of the six par-

icipating cities and their green purchasing reports. Public authorities, who are looking for guidance, and private business will profit from the guidelines, which will provide them for the first time with a document applying to the Common Market.

## **The International Survey**

To assess the experiences in a number of countries known for green purchasing activities, the RELIEF project partners carried out a survey on the European forerunners Austria, Denmark, Netherlands and Sweden<sup>1</sup>. Due to the importance of the enlargement process for the European framework, a country survey on purchasing practices was also undertaken in Hungary. Furthermore, activities in Japan and North America were assessed.

## **Structure of the Publication**

A short introduction on local government procurement is followed by the actual country studies, which give a detailed overview of green purchasing activities in the countries selected. Each survey comprises six subjects. After a short description of the historical background, the current level of implementation is described at a local and national level. Following this, institutions and practice of co-operation between public authorities and other stakeholders are outlined. Furthermore, the available information as to what is the impact of this policy on environment and market is described. This is complemented by outlining the research activities on green purchasing being carried out and giving a final political outlook for each country.

## Local Government Procurement

In Europe, the greening of procurement has mainly been driven by local authorities. The following section will give an overview on public procurement procedures, and describe examples of experiences of local authorities.

### Green Purchasing in The Public Sector

For a number of reasons, the public sector is often expected to be at the forefront of green consumption: First, public authorities can reduce environmental impacts significantly by managing their own administrations, public property, and public amenities in an environmentally friendly way. Second, public administrations, being focal points of public life, can serve as a model of behaviour for other socio-economic actors, including citizens, private institutions and companies. Being the guardians of public and commercial life, they should in fact display an environmentally respectful behaviour. Last but not least, governments can exert strong influence on the development of environmentally benign products as they are among the largest single buyers in a number of markets.

Through a co-ordinated purchasing policy, public institutions can give market signals: Recycled paper, for instance, has become a standard office supply in some European countries through the cumulative demand of public authorities within the respective countries. Their behaviour has affected domestic as well as industrial consumers and has given the supply of recycled paper a significant competitive edge. This development caused one significant spin-off in that the electronics industry started developing and providing a new generation of office equipment adjusted to the use of recycled paper. In most European countries, recycled paper has come to be cheaper than white paper. In addition, recyclable materials generally have become more marketable as recycled paper lost its negative touch (cf. Mielisch/Erdmenger 2001).

Public purchasing could be a potential tool for various political, social and economic goals beyond mere environmental criteria. Traditionally, public authorities have been expected to back the international competitiveness of the domestic industry by purchasing domestic products while arguing, with a view to foreign product supplies, that social issues (e.g. fair trade and labour principles) should form part of the selection and contract awarding criteria.

### Organisational Structures

There are different governmental levels which normally include the supranational and national levels, state governments, regional and municipal authorities. At each of these levels, a complex set of structures and purchasing agents exists which varies from country to country and even from municipality to municipality.

Adding to the complexity, implementing green purchasing requires the bridging of two disparate worlds: purchasing and the environment. Responsibility for purchasing resides either with a central purchasing department or with several competent individuals in different departments. Purchasers, however, cannot be expected to be environmental

experts. Environmental policy objectives normally concern operations apart from the designated purchasing staff and thus are organised through different departments. Hence, green purchasing requires that various departments or divisions, in particular those charged with environmental care and purchasing, exchange their views and co-operate with respect to concrete purchasing orders. This can be done by having the environmental department specify environmental criteria, so that they can be easily applied by the purchasing department. In Kolding, Denmark, this is for example done via questionnaires. An alternative or complementary measure, as has been carried out in Göteborg, Sweden, consists in setting up a systematic training schedule that is addressed not only to purchasing officers, but also politicians, suppliers and users of the purchased goods. Further information about the practices of these two cities is available in the respective country studies.

Larger administrations normally maintain a central purchasing department as a separate unit within the administration and go for training special staff to design tendering procedures. One advantage of such a separate unit lies in obtaining more favourable purchasing conditions through streamlining ordering procedures. In times of increased budgetary constraints, central purchasing enables public administrations to better monitor and limit overall budget spending on new purchases. Public work contracts, due to their financial volume and their different technical nature, generally are not handled by the central purchasing unit but a separate department. In terms of green purchasing, the advantage of a centralised purchasing procedure lies in the fact that only a limited number of purchasers has to be trained for integrating environmental criteria in the purchasing process.

In many public authorities, however, there is a tendency to devolve formerly centralised purchasing competencies in an effort to limit the administrative effort and better adapt the supply to the specific needs of the department. Consequently, most departments transact all acquisitions or at least those below a specified threshold on their own. Working with decentralised purchasing structures, however, means running the risk that green purchasing will not be systematically spread in all departments. The example of Pori, Finland shows, how it is possible to coordinate efforts by appointing in each municipal department a person as a contact for the green purchasing coordinator, assigning him/her the responsibility for ecological procurement to be put into effect in his/her own department.

Purchasing/ contracting in public institutions - universities, schools, hospitals, theatres and other cultural amenities - is normally handled separately by the central administration or by public authorities. The same holds true for publicly owned real estates. Streamlining green purchasing to all municipal activities therefore requires involving those responsible for purchasing in these areas. Although easily understandable as a general concept, the practical implementation of green purchasing proves to be difficult. Appropriate information and training is of tremendous importance, and it is often difficult for purchasers to find practical help. Despite organisational hurdles, many local authorities successfully implement green purchasing. Some examples are described in the next chapter.

## Examples of Green Purchasing at the Local Level

The following chapter provides information on how local authorities get green purchasing going. It draws on the experiences and recommendations of practitioners who are participants of BIG-Net ("Buy It Green" - Network of Municipal Purchasers in Europe). These examples were collected in the Green Purchasing Good Practice Guide (ICLEI 2001).

At the local level, there are a number of instruments relevant for green purchasing. First, there are the means to identify "greener" products: Life Cycle Analysis (LCA), eco-labelling and direct environmental assessment. Second, the relationship to environmental management systems is important in two ways: How can EMS within a local authority reinforce green purchasing and how can requesting an EMS from suppliers have a positive environmental impact? Third, Local Agenda 21 processes can be an important stimulus for green purchasing. Another important parameter are the legal obligations purchasing has to fulfil. Within the scope of European legislation, it is possible to take environmental criteria into account as long as the internal market principles of non-discrimination, objectivity and proportionality are met. In addition, the EU Treaty principle of a high-level environmental protection calls for integrating environmental criteria into public purchasing.

A number of cities start the green purchasing process in a modest but well-thought way. The example of the City of Dunkerque, France, shows how the introduction of recycled paper could be performed in a six-step procedure, comprising sample testing, decision-making and appropriate communication to users. Ferrara in Italy took another starting point by making use of parental concern about health issues resulting in the green procurement of canteen food. This initiative was further integrated into the Local Agenda 21 process currently carried out by the local community.

While single-product initiatives can be found rather often, taking all products purchased into account is still rare. One of the most extensive initiatives currently taken by a local authority in Europe can be found in the City of Kolding, Denmark. In 1998, the council decided to achieve a 100% rate of public procurement taking environmental criteria into account by 2002. To this end, the environmental unit and the purchasing department agreed on an advanced co-operation scheme. In 2001, Kolding had achieved already green purchasing for 50% of the product groups.

An important aspect in green purchasing is the training and motivation of stakeholders. The State of Vorarlberg, Austria has taken up this challenge by promoting exchange among colleagues, via networking activities between local authorities. Following a survey on the needs of the purchasers, a manual was developed the application of which is discussed in meetings of purchasers from different municipalities. The smaller local authorities in Vorarlberg are additionally motivated by a prize to be awarded for the most successful purchaser.

The ultimate step in implementing green purchasing consists in integrating a number of aspects in an overall strategy. The City of Copenhagen, Denmark, has formulated and currently is executing such a strategy. Based on a general green purchasing policy stating the prin

principles to follow, the city defined a number of concrete targets to be achieved for certain products. Results are monitored, so that respective action can be taken within appropriate time limits.

## International Networking of Local Authorities

In Europe, local authorities have founded BIG-Net, the “Buy it green” Network of municipal purchasers in Europe. The network consists of 45 participants from 20 European countries and is being chaired by the Municipality of Kolding (status October 2001). It is a platform for pioneer and newly committed cities to exchange their experiences and discuss European policies. The network is the municipal branch of the European Green Purchasing Network, which was launched in 1997 with the aim of bringing together stakeholders from public authorities (at the national, state, regional and local levels), companies, legislators and NGOs in the field of green purchasing.

As a so far unique international green purchasing network of local authorities, BIG-Net is administered by the International Council for Local Environmental Initiatives (ICLEI).

ICLEI is a world-wide association of 390 local governments (among them 190 in Europe) dedicated to sustainable development. ICLEI's mission is to build and serve a world-wide movement of local governments to achieve tangible improvements in global environmental conditions through cumulative local actions. ICLEI forms a global network of cities and coordinates regional campaigns and subject-oriented networks. ICLEI's offices on all continents serve as technical assistance and training agencies. Having originally proposed Local Agenda 21 to the UN Conference on Environment and Development in Rio de Janeiro in 1992, ICLEI today is the leading inter-municipal clearinghouse on local sustainable development and Local Agenda 21 issues. Other activities include the Cities for Climate Protection Campaign, the Water Campaign and the development of environmental management instruments for local authorities.

Beside these topics, ICLEI members have voted eco-procurement to be one of the top five issues for global action of local government. ICLEI has therefore launched the European Eco-Procurement Initiative. Beside the “Buy it green”-Network of Municipal Purchasers in Europe, this includes:

- The EcoProcura Magazine – a journal for economic and environmental purchasing by public authorities with recent and background information for suppliers and vendors, distributed to more than 5,000 purchasers in Europe. Latest issues covered “European framework”, “Globalisation” and “Green Electricity” as well as featuring practical experience from cities and an “Eco-Product” in each issue.
- The EcoProcura conferences – a yearly series of international conference and product fair events bringing together procurement officers, researchers, business representatives and other stakeholders. The latest events took place in Brussels (Belgium, 11/2001), Lyon (France, 10/2000) and Bilbao (Spain, 02/1999).
- Research, Development and Information projects, among them RELIEF, the basic project for this publication.

As in many other global environmental concerns like climate protection and Agenda 21, local governments also in green purchasing have taken the initiative to contribute to practical solutions. This is a rather inconspicuous movement, which would, beyond European borders, benefit from world-wide networking and from support provided by global decision making. If national governments and international institutions would contribute by developing favourable framework conditions and providing the necessary means for exchange and capacity building, much would be won for the global environment.

## Information Resources on Green Purchasing

**EcoProcura Magazine:** This magazine is published twice a year free of charge by ICLEI. Interested purchasers can register through the online registration at the following Web site (see following paragraph) or at ICLEI's European Secretariat, Eschholzstr. 86, 79115 Freiburg, Fax +49-761-36 89 2-59.

**ICLEI's European Eco-Procurement Initiative Web site:** The Web site offers latest information on ICLEI's activities, such as events, projects, publications – and links to other useful Internet resources. Furthermore, it provides introductory documents to green purchasing, background articles and information on the European political framework. Last but not least, online versions of the EcoProcura Magazine and the Good Practice Guide can be obtained:

**[www.iclei.org/ecoprocura](http://www.iclei.org/ecoprocura)**

## Literature

**ICLEI 1996,** *Pre-study on eco-procurement*, unpublished (Summary available at <http://www.iclei.org/ecoprocura/info/study.htm>)

**ICLEI 2000,** *Green Purchasing Good Practice Guide*, Géraldine Plas, Christoph Erdmenger, Freiburg 2000

**Mielisch/Erdmenger 2001,** *The case of public purchasing and green procurement at the municipal level – the local and the European dimension*, Arndt Mielisch, Christoph Erdmenger, in: *Greening the Budget*, Peter Clinch (Ed.), London 2001

**Lyons 2000,** *Buying for the Future, Contract Management and the Environmental Challenge*, Kevin Lyons, London/Sterling 2000

**OECD 2000,** *Greener Public Purchasing, Issues and Practical Solutions*, OECD, Paris 2000

**Russel 1998,** *Greener Purchasing - Opportunities and innovations*, Trevor Russel (ed.), Sheffield, 1998



# Austria

## Short History

Activities and projects for green procurement started in the eighties in Austria. In 1994 the Republic of Austria proposed a comprehensive environmental protection, which also inspired new activities. Green procurement in Austria started with a resolution of the parliament in which the Federal Government was asked to arrange guidelines for public procurement so that eco-friendly and energy saving products and systems are given preference in purchasing. According to the public procurement directives of the EU, a national procurement law became necessary, which transformed the directives into national law (first law in 1993). Formerly, purchasers had to follow an Austrian standard (ÖNORM A 2050). This standard is still valid today in the case that the threshold value of the EU directives is not surmounted.

Currently, environmental issues are formulated in two federal laws:

- The waste management law of 1990 requires that the federal government procure solely products causing little impact on the environment and little waste
- The procurement law (passed in 1993) points out that in the tendering process environmental issues have to be considered. Also eight out of nine provinces of Austria have included this (or a similar) requirement in their own procurement laws.

## First projects

In the eighties the first projects concerning green procurement were carried out.

In 1989, Graz and Linz were the first cities to commission a study concerning green procurement. The aim was the evolution of recommendations for a social-ecological reorganisation of the procurement of these two cities. This study analysed sectors such as the office, cleaning, print office and kitchen sector (standing under the administration of the two cities).

In connection with another project financed by the province of Styria the handbook „Modules for an ecological procurement“ was published. It is a guide to facilitate green procurement for offices and municipalities. It can also be used by private consumers. The ring binder contains concrete suggestions about how to do green procurement and also background information about products and their effects on the environment.

A manual for green procurement was also issued in the task of the Federal Ministry of the Environment. It is supposed to help the offices of the ministries dealing with the procurement of eco-friendly and energy saving products and services.

## Further steps

In 1997 an information centre for eco-friendly purchase was created with financial support from the Ministry of Environment. It serves public administration and enterprises.

Within the framework of the OECD environmental ministers' in 1996 in Paris meeting the resolution "Improving the Environmental



Bettina Lackner works as scientific officer for the ProcurementService Austria, IFZ Graz, Austria

Performance of Government” was passed and Austria committed itself to implementing the requirements of the document. As a consequence, in 1998 guidelines were accepted from the Ministerrat (council of ministers). They exceed the requirements of the Austrian environmental law and are an instruction to the federal administration for a more environmentally sound form of procurement. They are however open to further supplementation which are supposed to be carried out in an inter-ministerial agreement from time to time.

## Implementation at...

A great number of projects have been carried out in Austria. To achieve greater clarity, only a few examples will be presented here.

### Local level

#### Eco-purchasing in Vienna

The city of Vienna (including the hospitals and city factories) annually buys products and services totalling more than 50 billion ATS (approx. EURO 4 billion). The need to offer the purchasers an instrument that could assist them in carrying out eco-friendly procurement was formulated in the Vienna Climate Protection Programme (from the working group “waste and procurement”). A regional authority (like the Vienna municipality) has much economic power and can contribute to sustainable development by considering environmental criteria in their own purchasing decisions.

To develop a criteria catalogue for the Vienna municipality, a steering committee was formed that co-ordinates the working groups, the combination of the individual results of the working groups, and the implementation of the catalogue. 14 working groups compile environmental criteria for almost all needed products, materials and services needed within the city administration. Working groups and committees were installed to address topics like building construction, car pooling, civil engineering, interior equipment, electrical devices, water, office printing, disinfectants, lighting, food, cleaning, procurement law, organisation, public relations etc.

The catalogue is intended to be a participative instrument for Vienna. Environmental protection in the procurement of the city of Vienna is supported and documented in a transparent way. The goal is not to increase the work in the different departments but to give realisable recommendations for the tendering.

### Regional level

#### Academy for Environment and Nature of Upper Austria

The Upper-Austrian Academy for Environment and Nature is an institution of the Upper-Austrian Provincial Government. Since its foundation in 1989 they have done a good job in making Austrian people aware of the change from the re-adjusting environmental protection to a sustainable environmental provision. The Academy also has been motivating Upper-Austrians to adopt a sustainable way of living.

The Academy is regarded as a pulse generator in the ecological dialogue between science, politics, economy, administration and the citizens of

the province as well as a “pathfinder” for a sustainable development in Upper-Austria. The academy got publicity through their diverse offerings of information and events, which contained various events, exhibitions, fairs, publications etc. Classes and lectures concerning topics of green procurement such as To Buy Ecologically, Eco-friendly building materials, Energy accounting in municipality buildings, Winter service - salt or crushed stones?, Eco-friendly cleaning etc. were presented. Similar institutions exist in other provinces of Austria.

#### **Environmental Association Vorarlberg (Umweltverband Vorarlberg)**

The association represents the environmental interests of 96 municipalities in Vorarlberg and develops high-quality standards for environmentally relevant sectors. Several activities have been started:

- **Eco-guide (office and building) Vorarlberg:** The municipalities of Vorarlberg spend between 10 and 15 per cent of its yearly budget (that is more than a billion Austrian Shilling) for building (60%), maintenance (20%) and real assets (20%). In 1997-2000 the “Ökoleitfaden Vorarlberg” was developed as a pilot project to aid ecological procurement in municipalities and institutions. It consists of two sections, one about office products and the second about building. It gives practical support for the purchase of products and services, and the tendering procedure. The “Ökoleitfaden” is intended for municipalities.
- **Procuring Network:** Twice annually, accompanying the “Ökoleitfaden”, procurement workshops are offered. Furthermore, the network serves for the exchange of experiences and information as well as for training for procurers in municipalities and other institutions. It also spreads actual information concerning procurement and offers assistance about the use of the “Ökoleitfaden”.
- **Eco-guide-forum (internet):** With the eco-guide-forum current stimulation, information concerning ecological procurement etc. is discussed. It is used for the exchange of experience between procurement teams in the municipalities and selected experts. As is the case with the eco-guide, the eco-guide-forum addresses the fields office and building.
- **Common purchase:** A further important element of the initiative is the Common purchase with professional support according to the instructions of the eco-guide. A common procurement platform is built up in some pilot communities for a common procurement. Among other things, basic agreements with the “best bidders” should be concluded. Moreover an e-commerce-system is under construction. It should contain a register of all (eco-)products for which basic agreements exist, and it should make detailed product information and information about the scaling of price and quantity available via the internet.

## National level

### Guidelines for federal administration concerning eco-friendly procurement

In view of the fact that governments ask for, produce and offer goods and services in relevant amounts, an eco-friendly organisation of all administration procedures can contribute to sustainable consumption and production models. Within the framework of the OECD environmental minister's meeting in 1996 in Paris, the resolution "Improving the Environmental Performance of Government" was passed and Austria committed itself to implementing the requirements of the document.

As a consequence, in 1998 guidelines were accepted from the Ministerrat (council of ministers). These exceed the requirements of the Austrian environmental law and are an instruction for the federal administration for a more eco-friendly design of procurement. They are however open to further supplementation which is supposed to be carried out in an inter-ministerial agreement from time to time.

The guidelines are supposed to support procurers in the federal administration to engage in green procurement. The guidelines include:

- **general guidelines:** affecting the employees and cover topics like office equipment, building, water, energy, cleaning, traffic and car pool and waste;
- **procurement-relevant guidelines:** these provide special hints to the Austrian Eco-label, on external consultants and the already mentioned topics above.

### Eco-Procurement-Management of the "Nationalbank" ("OeNB")

For more than 15 years the Austrian Nationalbank has made efforts to consider environmental criteria in the procurement.

Since 1986, the OeNB used recycling paper in their photocopying machines as one of the first big customer in Austria. At that time the costs could be lowered by 35 % for the paper and it caused an environment relief (per ton recycling paper the wood consumption is reduced around 4 cubic meter, the energy consumption around 3,5 MWh).

In 1992 the OeNB developed a comprehensive concerning detergents and requested the suppliers to declare the ingredients in their products. Initial resistance of the industry initiated the Nationalbank to enforce their demands through a co-operation with two big banks. Finally the producers answered the questionnaire. Thus, three consumers had achieved a "partial" declaration of detergents. The initiative was picked up by other enterprises and the questionnaire spread very quickly. Now it is possible to remove detergents that did not fulfil the required criteria with regard to their environmental pollution and their health endangering potential.

### Verein Faktor 4+

The association factor 4+ was founded in 1997 in Klagenfurt. It is a non-profit and scientific association and stands for the promotion of a sustainable development of environment, economy and society. The aim of the association is the implementation of the philosophy of "factor 4+" created from Prof. Ernst Ulrich vonWeizsäcker. For this pur-

pose results of the environmental research as well as already realised factor4+ concepts and examples should be made known.

In 1999 the association organised the second factor 4+ fair in Klagenfurt. It focussed on “The new procurement - success through efficiency.” A congress event took place at the same time. Target audiences were Austrian communities and federal offices. Approximately 150 exhibitors participated at the event.

As a visible result of the conference a “factor 4+ purchase market” was launched. It represents a kind of permanent fair. The most important instrument of the factor 4+ purchase market will be the internet.

## **Impact on environment and market**

### **CFC, H-CFC and H-FC**

Up to now almost 400 Austrian cities and municipalities joined the “Climate Alliance”. In terms of climate protection they all are asked to renounce halogenated hydrocarbons.

Since 1.1.1993, CFCs have been prohibited in Austria. Since 1.1.2000 and 2002 respectively (for refrigerants), the production of products containing H-CFC has been forbidden. A regulation regarding H-FCs, FCs and SF6 is currently being discussed.

### **Action "Stop H-CFC and H-FC"**

In September 1995 “die umweltberatung” and “Greenpeace Österreich” initiated (with the support of the Federal Ministry of Environment) the action “Stop H-CFC and H-FC.” Municipalities, cities and provinces are supposed to enforce the renunciation of climate-harmful substances at their own initiative.

In 1995 St. Pölten was the first Austrian municipality with a council resolution concerning the “procurement of H-CHC and H-FC-free products.” Since then numerous other cities, municipalities, provinces and ministries have followed this procedure.

After the decision, to renounce halogenated hydrocarbons in public procurement, it is obvious to tie down subsidies that are financed with public money (e.g. energy saving subsidies, subsidies for old-building renovation) to requirements like those governing the use of H-CFC and H-FC-free products.

### **Office**

In 1998 in Graz, 116 photocopiers were purchased (devices were rented, not bought). Next to the price per copy, the power consumption was also considered. Finally, the tender of the company with the best energy saving devices was accepted, even though it did not offer the best price per copy. Euro 17.500 could be saved annually in energy costs.

## **Cleaning**

Vienna hospitals and nursing homes have renounced substances in detergents with high environmental loads. Instead of 120 cleaning agents used formerly, 40 more ecological cleaning agents are used today. 8 % of costs can be saved this way.

## **Building**

Since 1999 Vienna has avoided construction materials containing halocarbons, including their use in subsidised housing projects. Elimination of these materials shall increase demand for alternative products which in turn will have impacts on their availability and price. Provided that these materials are no longer used in any subsidised housing projects of the City of Vienna, the resulting savings concerning greenhouse gases are equivalent to the emissions of a quarter million cars. The first housing projects which is entirely free of H-CFCs were built in 2000. Thus, the “car-free housing project” has a roof insulated completely with non-CFC panels. It is envisaged that all subsidised housing projects in Vienna will do without hydrocarbon-containing construction materials by 2002.

## **Recent and ongoing research**

In Austria a great number of institutions, associations and enterprises are engaged in topics of eco-friendly procurement. The links of selected Austrian institutes (frequently involved in projects during the last years) can be found in the appendix.

## **Co-operations between different stakeholders and public authorities**

### **Eco-Label**

Austria developed its own national eco-labelling system in 1991. The environmental label defines itself as a high-quality label with a high checking-standard which makes – in a broad palette of different products – the most eco-friendly product alternatives translucent to the consumer. The label is supposed to motivate manufacturer and trader to develop less environment loading products. Through the distinction with the label the manufacturer has the chance to position itself in the market in an exceptional way.

### **ProcurementService Austria**

In 1997 the Ministry of Environment charged the Inter-University Research Centre to install an information center for eco-friendly purchasing. This service centre (called Procurement Service Austria – BSA) consults parties responsible for the procurement of public administration or enterprises. The job of the BSA is divided into 2 emphases. On the one hand the BSA is an information platform for all fields of Green Purchase. Information and facts about eco-friendly products and services flow together and are passed on to procurement parties. The second job emphasis on the publication of an information newsletter about green purchase, which appears four times a year and is sent to all municipalities freely.

## **Political outlook**

### **Common Austrian procurement law**

Currently there is no homogeneous procurement law in Austria (there is a separate law for federal ministries and a law for each province of Austria, which means 10 laws all together). The aim of the Federal Chancellors office is the creation of a common law for all of Austria.

### **Implementation of “check it”**

Within a European life-project a criteria catalogue for 9 procurement topics was developed in co-operation with several scientific and consulting institution in Austria, which is under publication right now (2001). In a next step purchasers will be supported to implement the results of this project in their tendering procedures.

### **Centralisation versus decentralisation**

Actually, in most cases procurement is quite decentralised (small communities). But there are efforts to implement common procurement offices, e.g. Bundesbeschaffungs GmbH (Federal Ltd for procurement). The aim is the optimisation of the purchase conditions of the Federal Government according to economical and qualitative criteria. Another example for the centralisation of public procurement is the common procurement of the Umweltverband Vorarlberg (see above).

## Appendix

### Samples for Austrian projects concerning Green Procurement

[(E) = WebPages available in English (15.05.01) ; (G) = WebPages available in German (15.05.01)]

- **Ökostadt 2000** (Ecocity 2000):  
[http://www.graz.at/umwelt/catch\\_me.htm?http://www.graz.at/umwelt/uamt/start/deutsch/oekostadt.htm](http://www.graz.at/umwelt/catch_me.htm?http://www.graz.at/umwelt/uamt/start/deutsch/oekostadt.htm) (G, E)  
<http://www.municipia.at/fallstudien/f0000124.html> (G)
- **Wiener Klimaschutzprogramm und ÖkoKauf** (Climate Protection Programme and EcoPurchase)  
[http://www.klip.wien.at/english/basics/ba\\_programm.htm](http://www.klip.wien.at/english/basics/ba_programm.htm) (E)  
<http://www.klip.wien.at/> (G)  
[http://www.klip.wien.at/english/verwaltung/vw\\_oekokauf.htm](http://www.klip.wien.at/english/verwaltung/vw_oekokauf.htm) (E)
- **PUMA** (Project for Environmental Management at the Civic Buildings of the City of Vienna)  
[http://www.klip.wien.at/english/verwaltung/vw\\_puma.htm](http://www.klip.wien.at/english/verwaltung/vw_puma.htm) (E)  
<http://www.municipia.at/fallstudien/f0001087.html> (G)  
<http://www.magwien.gv.at/m22/> (G)
- **Das Vorarlberger Modell** (Environmental Association Vorarlberg)  
[http://www.umweltverband.at/document/gem\\_76.asp](http://www.umweltverband.at/document/gem_76.asp) (G)
- **Oberösterreichische Akademie für Umwelt und Natur** (Academy for Environment and Nature of Upper-Austrian)  
<http://www.ooe.gv.at/veranstaltung/index.htm> (G)
- **Verein Faktor 4+** (Association Faktor 4+)  
<http://www.faktor4plus.at/> (G, E)
- **Wiener Krankenanstaltenverbund** (Ecological Cleaning in Vienna's Hospitals)  
[http://www.klip.wien.at/german/verwaltung/vw\\_reinigungsmittel.htm](http://www.klip.wien.at/german/verwaltung/vw_reinigungsmittel.htm) (G)  
[http://www.klip.wien.at/english/verwaltung/vw\\_reinigungsmittel.htm](http://www.klip.wien.at/english/verwaltung/vw_reinigungsmittel.htm) (E)
- **Wiener Magistratsabteilung 23 – Energiesparlampen** (City Management)  
[http://www.klip.wien.at/german/energie/en\\_stadtverw.htm](http://www.klip.wien.at/german/energie/en_stadtverw.htm) (G)  
[http://www.klip.wien.at/english/energie/en\\_stadtverw.htm](http://www.klip.wien.at/english/energie/en_stadtverw.htm) (E)
- **Das Wiener Modell der Vermeidung klimaschädlicher Stoffe und Materialien am Bau** (Viennas voluntary ban of halocarbons)  
[http://www.klip.wien.at/german/wohnen/wo\\_verzicht.htm](http://www.klip.wien.at/german/wohnen/wo_verzicht.htm) (G)  
[http://www.klip.wien.at/english/wohnen/wo\\_verzicht.htm](http://www.klip.wien.at/english/wohnen/wo_verzicht.htm) (E)
- **Österreichisches Umweltzeichen** (Austrian Eco-Label)  
[http://www.bmu.gv.at/u\\_kennzeich\\_auszeich/oe\\_umweltzeichen/tmp\\_inhalt.htm](http://www.bmu.gv.at/u_kennzeich_auszeich/oe_umweltzeichen/tmp_inhalt.htm) (G)  
[http://www.bmu.gv.at/u\\_kennzeich\\_auszeich/oe\\_umweltzeichen/uwzenglisch.htm](http://www.bmu.gv.at/u_kennzeich_auszeich/oe_umweltzeichen/uwzenglisch.htm) (E)
- **BeschaffungsService Austria – Informationszentrum für umweltfreundlichen Einkauf** (ProcurementService Austria)  
<http://www.ifz.tu-graz.ac.at/bsa/> (G)
- **Die „Grünen Seiten“ – Bauausschreibungen und Umweltschutz im Bundesland Salzburg** (Green Pages: Tendering of Building Construction and Environmental Protection in the Province Salzburg)  
<http://www.land-sbg.gv.at/umweltschutz/klimaschutz/bauen.htm> (G)
- **KfU Niederösterreich**  
<http://www.noe.gv.at/service/ru/ru3/oekologbeschaffung/oekolbeschaffung.htm> (G)
- **Beschaffungsmanagement der Nationalbank Österreich** (Eco-Procurement-Management of the National Bank of Austria)
- **1. Österreichischer Beschaffertag** (First Austrian Day for Purchasers)

## Samples for Austrian institutions engaged in Green Procurement

Samples for Austrian institutions engaged in Green Procurement

[(E) = WebPages available in English (15.05.01) ; (G) = WebPages available in German (15.05.01)]

### Main focus: Construction

- **Zentrum für Bauen und Umwelt** (Centre for Building Construction and Environment)  
<http://www.donau-uni.ac.at/umwelt/zbau/index.html> (G)  
[http://www.donau-uni.ac.at/organisation/zbau\\_einleitung.html](http://www.donau-uni.ac.at/organisation/zbau_einleitung.html) (G)
- **Österreichische Institut für Baubiologie und –ökologie**  
(Austrian Institute for Biology and Ecology of Building Construction)  
<http://www.ibo.at/> (G)
- Ziviltechniker und Unternehmensberater Dr. Peter Maydl

### Main focus: Energy, Waste and Recycling

- **Energieverwertungsagentur** (Austrian Energy Agency)  
[http://www.eva.or.at/\(en\)/index.htm](http://www.eva.or.at/(en)/index.htm) (E, G)
- **Österreichische Ökologieinstitut** (Austrian Institute for Ecology)  
<http://www.ecology.at/> (G)

### Main focus: Cleaning, Office and Food

- **„die umweltberatung“** (Environmental Helpdesk)  
<http://www.umweltberatung.at/index.html> (G)

### Main focus: Products and Technologies

- **Institut für Industrielle Ökologie** (Institute for Industrial Ecology)  
<http://www.indoek.noe-lak.at/index.html> (G)  
[http://www.indoek.noe-lak.at/index\\_e.html](http://www.indoek.noe-lak.at/index_e.html) (E)
- **Interuniversitäres Forschungszentrum für Technik, Arbeit und Kultur**  
(Inter-University Research Centre for Technology, Work and Culture)  
<http://www.ifz.tu-graz.ac.at> (G, E)



## Denmark

Denmark has 275 municipalities, 14 counties, and more than 100 governmental institutions. The public purchasing activities of goods and services in Denmark annually amounts to totally about 140 billion DKK, corresponding to 19 billion EURO. Of these 19% is purchased by the national governmental institutions, 13% by the regional, 23% by the local, and the last 45% by different public owned companies (Statistics Denmark, 2001).

### Short History

The legal basis for green procurement in Denmark is the Environmental Protection Act from 1992 that charges public authorities to fulfil the purpose of the law, also through their purchase and consumption of products. An action plan for a sustainable public procurement policy was published in 1994, followed by a circular in 1995 pointing out that all governmental institution in the purchasing process of goods and services have to include environmental aspects at the same level as for example price and quality. In 1998, a voluntary agreement on implementation of green purchasing policies in the counties and municipalities by the end of 2001 was made between the Minister for the Environment, the Association of Municipalities and the Association of County Councils.

In 1995 the Danish government published a policy report, which concluded among other things that a green purchasing policy could secure a market for environmentally adapted products. The statement was followed by a discussion paper from the Danish Environmental Protection Agency (DEPA) on “An Intensified Product-orientated Environmental Initiative” (Miljøstyrelsen, 1996), followed by action plans for greener products. The action plans and some of the key actors are described in more detail in the following sections.

### The Danish Environmental Protection Agency (DEPA)

DEPA (in Danish “Miljøstyrelsen”) has been the key actor in the development of strategy and tools for green purchasing in Denmark since the early nineties. The action plan from 1994 (Miljøstyrelsen, 1994) was build upon a series of reports examining the possibilities and barriers for a public, green purchasing. However, by 1996 it was concluded that the effect of the action plan had been modest so far, and it was determined to initiate a number of new activities.

The development of guidelines for environmental purchasing of about 50 product groups is seen as the most important initiative with respect to the development of tools. For each product group (or service function) there is a 4-page guideline, supplemented with a more detailed background document of about eight pages.

There are different ways of using the guidance material developed by the DEPA dependent of the size of the order and the level of focus on environmental issues. The guidance documents are send directly to all subscribers to National Procurement Ltd. (see later) but are also available free of charge from the DEPA information centre (or from the homepage [www.mst.dk](http://www.mst.dk)).



Anders Schmidt works as a research manager in LCA for the consultancy dk-teknik Energy Environment, Denmark

A second focus area in the action plans is the build-up of environmental competence with respect to green procurement. In the “Priority Plan for Cleaner Products 1998-2002” (Miljøstyrelsen, 1998) it is recognised that both private companies and public institutions may have difficulties in finding the necessary resources for planning and implementing a policy for green procurement. The DEPA has therefore opened for the possibility of granting subsidies to projects with this aim, e.g. to networks between smaller municipalities with a decentralised purchasing function.

The third focus area in the action plans is how the efforts of public purchasers may be documented and whether in this connection specific objectives need to be laid down for government procurement. An initial survey indicates that no tools are yet available, implying that there is a need for development in this area. The DEPA and National Procurement Ltd. are therefore considering different possibilities, especially with respect to e-trade.

### **National Procurement Ltd.**

National Procurement Ltd. was formed in 1994 as a merger of two public purchase organisations with the goal of offering a commercial purchase related service to the governmental and municipal institutions.

The basis for National Procurement Ltd. is framework agreements with suppliers of different product categories. At the end of 2000, about 85 framework agreements covering 16 main product groups and 250 suppliers were in function. The turnover was more than 3 billion DKK (425 million EURO), the main area being IT-technology.

National Procurement Ltd. is the largest actor in public purchasing, the framework agreements being used by more than 7000 subscribers. During the past years, National Procurement Ltd. has started the process of including environmental and energy issues along with common requirements regarding price, quality, etc.

Specific demands in new framework agreements are developed most often using the purchasing guidelines and the background documentation from the DEPA as the starting point. DEPA, the Danish Labour Inspectorate and the Danish Energy Agency participate in the formulation of the final criteria. The suppliers subsequently must be able to document that they fulfil the environmental criteria for the products, eventually by placing each product in a certain environmental class, thereby giving the purchasing institution the possibility of balancing their specific demands.

National Procurement Ltd. is currently developing a registration system that probably will make it possible to assess the amount of green purchasing through the framework agreements. The central point in the registration system, “e-service”, is the goods catalogue with information on more than one million different goods. The information comprises general information, purchases, trade and environmental information and can be linked to the most commonly used economic accounting systems in national institutions, counties and municipalities.

National Procurement Ltd. also maintains a special environmental service, “Green-Net”, on their homepage ([www.ski.dk](http://www.ski.dk)). GreenNet contains two groups of information. Firstly, there is an introduction to

green procurement with e.g. good advice and guidance on how to make an environmentally sound procurement policy and how to get started with buying green. Secondly, GreenNet contains a product-oriented section with information on the environmental demands that National Procurement Ltd. has made on specific product groups. It is also possible to find links to relevant criteria for environmental labels (the Nordic "Swan", The European "Flower" and the German "Blue Angel") and to the DEPA environmental guidelines.

## **IKA**

IKA is the Danish Association of Purchasers in the Public Sector, with members primarily from municipalities and counties. The goal of the association is to increase the interest in purchasing activities, increase the level of knowledge, and to make the process more efficient.

In relation to green purchasing, the Association has developed eight product-specific guidelines for inclusion of environmental demands in public purchasing. The guidelines are available to all members for a small fee, about 125 EURO. For each product group, a scoring system including weighting suggestions is developed. IKA has also established a so called "vision group" that has published two booklets to aid the purchasers through the process of incorporating environmental considerations in their purchasing activities.

## **Implementation at the national, regional and local level**

Although there is an obligation to buy green for all public institutions on the national, regional and local level in Denmark, the demand has not yet been met by all.

### **National institutions**

Nine out of ten governmental institutions have previously submitted their green purchase policies to the DEPA. However, a recent survey (Honoré, 2001) shows that to-day only about half of the institutions say they have a written green purchase policy—even though they have been bound by the law to have one since 1995.

### **Regional Level**

Ten out of fourteen counties in Denmark have by 2000 formulated a policy for green purchasing, pinpointing the goal and intentions in the area, and about 80% of counties have also prepared an action plan or are in the process.

The Association of County Councils in Denmark ("Amtsrådsforeningen") has formed a group of purchasers (AMERFA) with the aim of exchanging experiences and to develop demand specifications and specific tenders that each county can use. As a part of the work, a group with special focus on environmental demands has been established. This has resulted in two questionnaires, one for producers and one for wholesale dealers, along with guidelines for how to use the questionnaires.

The county of Aarhus has developed special guidelines for purchase of PVC-free products for hospitals, offices, packaging, etc. The guideli-

nes have been developed in order to promote the Danish policy of substitution of PVC with other materials where possible, and includes a catalogue of suppliers that are able to supply relevant products without PVC.

### **Local Level**

Only about half of the Danish municipalities attest to have a written policy or being in the process, but the survey from the DEPA indicates that some may have forgotten that they may be part of a group of municipalities with a common policy.

A survey of the status for green procurement in the municipalities in 1997/98 (Miljøstyrelsen, 1999) showed that many green purchasing activities were started from the single institutions, i.e. a bottom up approach. The main barrier to green procurement in the municipalities is how to assess and compare the environmental performance of the products. The purchasers have no environmental training and must to a large extent rely on the information from suppliers. Another barrier is the price, as the willingness to pay more for “green” alternatives is limited. The municipalities with a defined green procurement policy are more willing to pay more for “green” products. The difficulty for smaller municipalities to introduce green procurement on their own has caused a number of collaborating “teams” with a common green purchasing policy to emerge. Other municipalities co-operate by arranging conferences and seminars in order to improve the understanding of the possibilities for inclusion of environmental demands in decentral purchasing.

### **Municipality of Kolding**

The Municipality of Kolding in 1998 decided on a green purchasing policy with the overall goal of including environmental considerations on equal terms with quality, function and price. The environmental department and the department of logistics cooperates on green purchasing, and within two years from the start, environmental demands has been specified and integrated in 40% of all calls for tenders issued.

The town council acknowledges that additional resources are needed for implementation of environmental considerations and has allocated an extra six manmonths per year to the environmental/logistics department. The work includes continuous handling of green purchasing, being chairman of the EMGPN (European Municipalities Green Procurement Network), maintenance of the purchasing tool, and development of a new tool securing that local and global environmental impacts are considered in service contracts. It is expected that decreased costs in use and disposal of the green products will be the result of the additional work. It is the experience of Kolding that the range of green products on the market is sufficient and not too expensive – with organic food as the exception with respect to the price.

### **Municipality of Stenløse**

As a response to the agreement between the local authorities and the Minister for the Environment, the Municipality of Stenløse has begun the development of a unique internet-solution for inclusion of environmental concerns in everyday purchasing.

The main advantage of the system is that the end-user makes environmental considerations in direct relation to the actual purchase by drawing the attention to the best solution from an environmental point of view. The system is built up around formulated goals for national as well as local environmental policies, e.g. that PVC-free products and eco-labelled products are preferred. When such goals are identified the framework agreements and contracts in the municipality are examined to see whether they conform to the policy. If not, the necessary changes are made in a way that directs the decentral purchasers' attention to possibilities for a green purchase, e.g. by pinpointing alternatives with an official ecolabel.

## **Co-operation between public authorities and between different stakeholders**

The first efforts in the "Intensified Product-orientated Environmental Initiative" by the DEPA were directed towards development of specific tools for assessment of products (Life Cycle Assessment, LCA) and tools for public purchasers to include environmental considerations.

To support the development of a more attractive market for green products the Priority Plans for Cleaner Products from 1999 and 2000 aimed at influencing both the supply and demand sides in order to create both a market push and a market pull. The Priority Plans identified four important areas, i.e. textiles, electronics, transportation, and buildings and enterprises, where special efforts were initiated.

The co-ordination of the work within each area is taken care of by so-called product area panels, composed of central actors from raw material suppliers, manufacturers, retailers, distributors and purchasers, dealers and stockists, consumers, waste processors and authorities with competence and knowledge about the product chains. The panels are intended to identify various co-ordinated initiatives by use of a combination of authority-based instruments and those of the market itself. These initiatives must promote a trend towards cleaner products as well as be able to promote production and sales within the product area on usual market conditions.

The most visible result so far of the work of the product area panels is the development and marketing of a broader range of textile products with the European ecolabel, The Flower, and of detergents with the Nordic eco-label, The Swan. The product area panel for textiles is composed of representatives from producers, designers, branch organisations, retailers, industrial laundries, consumer organisations and NGO's with special interest in health and environment. The initiatives from the panel have resulted in 9 Danish licenses for eco-labelled textile products out of a European total of 25. On the marketing side it is worth noting that an intensive campaign in TV, newspapers, leaflets, etc. was initiated in February 2001 by the DEPA following the completion of the product range. It is however too early to assess the market penetration of the eco-labelled products.

There have also been other initiatives on the co-operation between public authorities and different stakeholders during the last decade that more indirectly has to do with green procurement. Two different examples have been described below.

## Green Network

Green Network is a co-operative project on the environment with private and public companies and institutions, the municipalities of Fredericia, Horsens, Kolding, Middelfart, and Vejle, the county of Vejle and the Labour Inspectorate. The primary focus in the Green Network is on the presentation of environmental statements and green accounts, but also within green purchasing there are some initiatives, e.g. regarding purchase of food for institutional kitchens and canteens.

## Green City Denmark

GREEN CITY DENMARK was funded as a limited liability company in 1994 on the initiative of the Danish Ministry of Business and Industry in co-operation with the Ministry of the Environment and Energy. Four municipalities and two counties in "the Green Belt" region was chosen to form the backbone of the company. The aim of the company is to establish a visible showcase for Danish environmental technology and know-how. GREEN CITY DENMARK also co-operates in relation to green procurement, e.g. the purchasing policies of the four municipalities are developed in co-operation and are almost identical with a few exceptions.

## Impacts on Environment and Market

There are no precise calculations of the impact on environment and market from green public purchasing in Denmark. However, two recent investigations give a good indication of the present situation.

Eighty-five out of about 250 suppliers to National Procurement Ltd. answered a questionnaire regarding their experience with public, green purchasing. Only 56% of the suppliers had been met by written environmental demands in 2000, but 81% expected an increase in the environmental demands in the future and 76% planned to change their product range and offer more environmentally adapted products. Finally, 51% of the suppliers claimed that the public environmental demands already had caused their products to have less environmental impacts. The suppliers, however, find it very important that green public purchasing is strengthened as this is one of the main drivers in their environmental work (Sørensen & Jensen, 2001)

The purchasers in the governmental institutions and in regional and local authorities were in another investigation asked to evaluate the extent of their green purchasing (Honoré, 2001). The overall picture is that the majority of purchasers answers that 0-40% of the purchases can be considered as green, i.e. that environmental demands have been integrated in the purchase, e.g. by giving preference to suppliers with a certified environmental management system or by specific demands for eco-labelled products.

The purchasers in the national institutions tend to include environmental demands more often than purchasers at regional and local level. Another interesting finding is that institutions with a written, green purchasing policy have a higher degree of green purchasing – and that this trend is more pronounced if the institution has a co-ordinator for green purchasing.

## Recent and Ongoing Research

The DEPA is currently evaluating the results from the survey of the penetration of the environmental purchasing guidelines that has been a key effort in the intensified product-orientated environmental initiative and has received large support. More than 200 purchasers have been questioned about the content of the guidelines and how they are used in everyday purchasing.

Seen in a broad perspective, the guidelines are only used by a minor part of the sub-subscribers to National Procurement Ltd., who receives the guidelines automatically as a part of their subscription. Central purchasers are the most frequent users, and about a fourth of all “environmentally active” purchasers use them once a month. The back-ground documents are only used by a minor part of purchasers, primarily central purchasers.

## Political Outlook

A strengthening of the public purchase of cleaner products is seen by the DEPA as an important element in the creation of a larger market for such products. The efforts in this area are therefore being closely coordinated with the other elements in the 2001 Priority Plan for Greener Products from the DEPA. In this plan, there is a continued focus on electronics, textiles, transportation, building and construction. Also, the possibilities of improving the interaction between specific sectors and the public purchasers with respect to environmental concerns are investigated in pilot projects in three other areas, i.e. furniture, washing and cleaning agents, and cleaning and laundry services.

Education of purchasers and further development of information tools is another important initiative, together with demonstration projects for co-operation between purchasers and suppliers. Existing guidelines for environmental purchasing will be revised if necessary, and (a few) new ones established. A revised layout in order to create better usefulness of the guidelines for the purchasers is being considered, as is better ways of distribution.

On the strategic level, the obligation of public institutions to buy green will be stressed. The questionnaire on purchasing policies, action plans and environmental education will be repeated, supplemented with questions on the actual amounts of green purchasing done by each institution or municipality/county. As an integral part of this, the possibility of combining e-trade with environmental information will be explored. As indicated in the previous sections, both central (National Procurement Ltd.) and local (Municipality of Stenløse) initiatives already have been started, but other solutions are also investigated.

On the supranational level, Denmark will participate actively in the implementation of the ideas in the green-book on integrated product policy from the EU-Commission. Of special concern is the potential conflict between the free trade and environmental considerations, and how the integrated product policy can be combined with regulations on the EU-level.

## Literature

Danish Environmental Protection Agency. Statement on a Product-orientated Environmental Initiative. Miljøstyrelsen, 1998.

Honoré C. Offentlige grønne indkøb. Resultater af spørgeskemaundersøgelse. Ar-bejdsrapport fra Miljøstyrelsen Nr. 5, 2001.

Miljørådet for renere produkter. Prioriteringsplan for Program for Renere Produkter m.v. 1999.

Miljørådet for renere produkter. Prioriteringsplan for Program for Renere Produkter m.v. 2000.

Miljørådet for renere produkter. Prioriteringsplan for Program for Renere Produkter m.v. 2001.

Miljøstyrelsen. Handlingsplan for en offentlig, "grøn" indkøbspolitik. Miljøstyrelsen, 1994.

Miljøstyrelsen. Oplæg fra Miljøstyrelsen. En styrket produktorienteret miljøindsats. Miljøstyrelsen 1996.

Miljøstyrelsen. Handlingsplan for offentlig, "grøn" indkøbspolitik. Miljøstyrelsen 1996.

Miljøstyrelsen. Miljøprojekt nr. 498. Status for miljøbevidst indkøbspolitik i kommuner og amter 1997/1998. Miljøstyrelsen 1999.

Statistics Denmark. Unpublished appendix to Honoré 2001.

Sørensen SY, Jensen ML. Notat: Mens vi venter på de grønne indkøbere. CASA, 2001

## Hungary

Green purchasing in Hungary at present is a rather sporadic or even exceptional fact. There are very few people, institutions or organisations practising it. Even though, besides environmental NGOs, there are individuals, companies, and some local and national governmental institutions occasionally favouring environmentally friendly products, the number of environmentally aware purchasers is limited. Also, there is only little or no contact between them and no green purchasing network is there to support them in their activities. What is more, the volumes purchased by them are quite insignificant, and correspondingly low is their contribution to developing a green market, let alone lessening environmental impacts.

### Background

Paradoxically, the development of organisations issuing certificates for environmentally friendly products began quite early in Hungary. The Biokultura Association, for example, which fosters the production and certification of organic food, was established in 1983. In 1986, it joined IFOAM and, in 1992, adopted a certification system that was in full compliance with IFOAM guidelines. In 1994, the Biokultura Association was authorised as an inspection organisation in EU Member States. Besides the Biokultura Association, which is a producers' organisation, an independent certification body, Biokontroll Hungaria, was established in 1996 and given the status of an accredited auditing organisation. The certification scheme was legally regulated by a governmental regulation in 1999 and a joint regulation of the ministries of agriculture and environment in 2000. Much of the certified produce, however, is still being exported, as for most Hungarian customers organic products are too expensive.

The set-up of the general eco-labelling scheme was established by the government in 1993 and the certification body took up its work in January 1994. In 1997, a law regulating the conditions for awarding the Environmentally Friendly Product label was enacted.

There are other regulations on the preferential treatment of environmentally friendly products and their producers. The law on public procurement passed in 1995 requires that, all other aspects being equal, preference be given to environmentally friendly products.

### Green Purchasing in Practice

Information on green purchasing in Hungary is rather scarce. A 1998 survey of individuals revealed a limited interest in environmentally friendly goods. Some investigations show that between 1993 and 1996 this interest even decreased due to economic hardship characterising the Hungarian economy in 1996 and the widespread opinion that it is producers who cause pollution and who therefore should also finance pollution control measures.

Another survey conducted in 1998 made it obvious that actual green purchasing practices of people lag behind this limited interest due to various obstacles: people do not know how to recognise environmentally friendly products and where to obtain them. Another hindrance to a more widespread green purchasing practice is that customers are not



Dr. Vilma Eri is the Executive Director of the Center for Environmental Studies in Budapest, Hungary

willing to pay more than insignificant supplementary charges for green products and services, and the difference in prices is often too big for them.

Green procurement is also unusual in private businesses, governmental or non-governmental organisations. Purchasing decisions are predominantly cost-dependent. As already mentioned, there is a law on public procurement requesting that, on the basis of all other conditions being equal, preference be given to green products and services. In fact, the power of this law is rather limited as it does not occur frequently that all other conditions apart from environmental characteristics of products to be compared are equal. In not requiring special environmental performance or including environmental performance as a general selection criterion, current tendering practices of public procurement bodies usually do not go beyond this preferential treatment. If any reference is made to environmental issues at all, the requirement, as a rule, consists in meeting existing environmental regulations and not to go beyond them. A review of 198 calls for tender selected on a random basis showed that only two calls made special reference to environmental conditions. One of them had been published by a local government, the other by a governmental organisation. The first one called for a special Christmas season illumination of the city centre stating explicitly that an environmentally friendly service be provided. The other one was on daily cleaning services and claimed the environmental impact of the proposed service, with a 40% weight, to be the most important selection criterion.

Given all this, the market of green products is correspondingly small. The weakness of the green market also shows clearly in the finding that a large proportion of the 10-15 businesses listed in environmental business databases as suppliers of important services for green procurement, like Life Cycle Assessment or marketing of environmentally friendly products and services, do not work on such projects at all. In fact, we have a vicious circle here: as people cannot afford environmentally friendly products, these goods being often more expensive than their conventional equivalents, companies only make limited efforts to produce more and cheaper green products, thus preserving the unfavourable price relation between green and regular products.

In Hungary, green purchasing mainly refers to office materials (environmentally friendly paper, envelopes and pens), cleaning agents, and occasionally, energy efficient lighting fixtures, which in fact is a very limited number of products and services possible. In general, the prices of these products are competitive with the prices of their conventional equivalents, some of them even outdoing the latter. (In the case of lighting fixtures, price competitiveness is fostered by frequent promotions.) In addition, using the green product alternative does not involve much inconvenience.

Another sign of green purchasing activities being underdeveloped is the lack of green purchasing co-operative networks. Due to the product range being limited and quantities purchased being insignificant, the environmental impact of green procurement currently is correspondingly low.

## **Green Purchasing – the Case of Miskolc**

In Miskolc, the local government has introduced green purchasing quite recently. Like in all local governments, procurement decisions are entirely price-dependent. Currently, the share of green goods purchased is very small, purchases occurring irregularly and depending on price-driven decisions. So far, the city has not come to establish a green procurement policy.

Nevertheless, between October and December 2000, 80% of A6 envelopes and 20% of A4 paper purchased was bought from environmentally friendly sources. This was due to the favourable prices of these products. Environmentally friendly envelopes are cheaper than the usual ones, and the price of environmentally friendly paper is similar to the usual one.) In the field of cleaning, toxic chemicals, like e.g. chlorine, have been phased out to a large extent. Further improvements in environmentally friendly cleaning, however, have not been achieved as yet.

Other, non-office related procurements do not include special environmental components although suppliers are required to meet legal environmental regulations. The preferential treatment of environmentally friendly products prescribed by the law on public procurement affects local purchases exceeding a certain order volume the limits for which are also set by the law. By lowering these limits for purchases affected by the public procurement process, preferential treatment would also have to be adopted in case of smaller investments. However, this is all theory. In practice, not only the term “all other conditions being equal” is hardly ever met, but a large proportion of procurement activities is targeted at products and services that have no environmental alternatives at all. The only exception is the procurement of road salt in the winter season, as the city requires the use of less harmless substances though the general law does not specify any requirements in this respect.

Future green purchasing activities will be supported by the ongoing EMAS project of Miskolc. The city is in the process of introducing EMAS for local government operations as well as for a major company of the city, the public transport company. Within the framework of this project, two city officers participated in green office operation training and there will be further training for the staff.

## **Ongoing Research**

### **Research on and Certification of Environmentally Friendly Products**

According to the law on the Hungarian eco-labelling scheme, products or services can qualify as environmentally friendly if they have a similar or even better quality than alternative products, and their environmental impact, assessed via a Life Cycle Analysis (LCA) and expressed in a quantitative form, clearly meets the eco-label requirements as approved by the qualification commission. The certificate is awarded for three years and has to be revised after this period.

So far, qualification requirements have been set for 33 product categories, including office paper, cleaning services, telephone switchboards, catalytic converters for cars, etc. From these, 15 product categories include products that can be used (to some extent) by local govern-

ments. Within the mentioned 33 product categories, 32 products were deemed to meet the requirements, 21 of which can be used by local governments. (Most of them, however, are not typical for local governments as these 21 products include household refrigerators, catalytic converters for cars or electric boilers as well.)

The official scheme is not very popular or widespread. There are very few labelled products, hence, public awareness of the scheme and the logo is not very high.

Besides the official eco-labelling scheme, there are some other catalogues of environmentally friendly products created and updated by non-governmental organisations like the Hungarian section of INEM, the Independent Ecological Centre, Ökotárs - Environmental Partnership or the Ecological Institute for Sustainable Development (co-financed by the Center for Environmental Studies). These catalogues extend the variety of environmentally products available. They may be browsed for special products or certain target audiences, e.g. environmentally friendly building materials, office materials, environmentally friendly household products or products for local governments and households in rural areas, etc. which increases their usefulness. On the other hand the catalogues are not always based on detailed LCA but recommended because they list products that either are manufactured from recycled materials, are energy efficient or make use of alternative energy sources. The lack of detailed LCA, however, might reduce their credibility. The biggest problem with them is, however, that they are quite difficult to find and only a limited amount of people have access to them.

There are several other investigations on potentially environmentally friendly products done by research institutions or environmental services for products like computers, packaging materials, or detergents, the results of which have not yet been published or the products have not yet been testified. These studies will increase the variety of green products available.

Another approach to green purchasing is represented by the efforts made to build up a database of products and services provided by companies with certified environmental management schemes (EMAS or ISO 14001). As companies planning to introduce environmental management systems (EMS) are obliged to give preference to environmentally friendly suppliers, this database may help them to find qualified suppliers, which is a direct effect of these efforts. Products of suppliers with certified environmental management systems are not necessarily environmentally friendly products, but purchasing these products still fosters environmental improvement as it supports companies with an environmentally friendly mission.

## Political Outlook

Currently, green purchasing in Hungary is in a preliminary stage. However, some achievements preparing the ground for future development have been made. There is a growing number of organisations dealing with some aspects of environmentally friendly procurement and the willingness of Hungarian business and governmental organisations to adopt environmentally friendly management practices has increased.

As already mentioned, the number of organisations practising green purchasing is currently still small. However, there is a growing number of stakeholders providing technical assistance to those interested in green purchasing. They include organisations issuing certificates of environmentally friendly products, i.e. those involved in the official eco-labelling scheme and the certification of organic food. Their efforts are completed by research activities on environmentally friendly products done by environmental businesses, business associations, NGOs and governmental and academic research centres representing different levels of scientific competence and addressing different target groups. There is also a growing number of green NGOs, environmental business associations, and database businesses that provide awareness raising and training for corporations and individuals.

Stakeholders also include environmental consulting companies providing assistance to the introduction of EMS systems. There are over 120 companies in Hungary running certified ISO 14001 systems. EMS in local governments, on the other hand, still is in a preliminary stage. There are hardly any local governments that have initiated the process on introducing EMS and definitely not a single local government has a certified EMS system as yet. It is expected, however, that their number will increase with similar intensity like in the case of business organisations.

Stakeholders also include regulators preparing laws. This sector is still weak, as environmental regulations still are perceived as being an obstacle to business development and restricting income.

## References

Füzesi, Zsuzsanna – Tistyán, László (1998Ö): *A környezeti tudat alakulásának elemzése a rendszerváltozás óta eltelt id\_szakban*. (Analysis of the Change of Environmental Awareness since the Beginning of the Transformation) Manuscript.

Környezetvédelmi Minisztérium (2000): *Pályázati Tájékoztató a környezetbarát, környezetkímél\_megkülönböztet\_jelzés min\_ségtanúsítási rendszerér\_l és a védjegyhasználat feltételeir\_l* (Ministry of Environment, Information on the Quality Assurance System of Environmentally Friendly Products and the Conditions of the Use of the Eco-Labels).

Környezetvédelmi Szolgáltatók és Gyártók Szövetsége (Association of Environmental Manufacturing and Service Companies): XIR Database, at [www.kszgysz.hu/xir.htm](http://www.kszgysz.hu/xir.htm)

ÖKOTÁRS Foundation (1998): *Mindennapi bevásárlásaink - zöld szempontból* (Daily Household Shoppings from a Green Aspect), Manuscript.

Zsótér, Gabriella (2000): *Környezetbarát iroda kézikönyv* (Environmentally Friendly Office Manual). KÖVET-INEM Hungária, Budapest.



# Japan

## Short History

Japan has a ten-year history of active green purchasing policy. Activities started in the eighties, with an eco-labelling scheme realised in 1989 by the Federal Government in form of a private company.

Public purchasing activities were started by local authorities in the early 1990s. One of the forerunners, the Prefecture of Shiga, set about coordinating activities at a national level and bringing together buyers and vendors in order to develop common guidelines.

In 1995, the government adopted the first “Action Plan for Greening of Government Operations”. This action plan set objectives and indicated the methods required to achieve a greening of public procurement by the year 2000.

In 1996, the Green Purchasing Network (GPN) was established to promote green purchasing among consumers, companies and governmental organisations in Japan. It currently employs five persons and has 2,350 members, including 350 local authorities, 1,640 private companies, consumer groups, environmental NGOs, and co-operative associations. The GPN promotes the ideas and practices of green purchasing, draws up purchasing guidelines for each type of product, publishes environmental data books on various products, holds seminars and study meetings, and awards commendations to organisations that have shown remarkable performance in implementing green purchasing.

## Implementation

### National Level

In Japan, green purchasing is very often seen as a first step to change general consumer behaviour. Activities focus on office material and electronics, as well as vehicles, whereas approaches like Green Canteens or Green Cleaning are largely unknown.

Decisions are mainly based on Japanese eco-label criteria, which are called eco-marks in Japan and which are purely private.

The national government's “Action Plan for Greening of Government Operations” required that all national ministries and agencies establish their own plan. The governmental initiatives aimed at enhancing voluntary actions by local governments, business enterprises and citizens. The action plan is implemented by a council of 23 agency and ministerial director-generals. Besides product standards, it is also on process standards. The action plan has been regarded as one of the most important strategic policy measures to change production and consumption patterns toward the sustainable society.

A recommended list for the procurement of goods has been created on the initiative of the Environment Agency. The list is mainly composed of three parts: (1) principles of green procurement, (2) guidelines for each category of goods and (3) a product list for each category. The state of implementation is measured by regular mandatory reports on the share of products from these product lists.

The Green Purchasing Network published its first guidelines on paper, copiers and printers in 1996. These guidelines enumerate important



Vivien Führ works as a project officer at ICLEI's Eco-Procurement Programme. Christoph Erdmenger has visited Japan in February 2001 in the course of the RELIEF project.

He is the Director of ICLEI's Eco-Procurement Programme

points to be considered from the environmental point of view when purchasing paper for office machines, printing paper, copiers, laser printers, laser faxes, or multifunctional devices. The guidelines cover machines which are used mainly in offices, not including ink-jet printers, thermal faxes, and colour copiers.

In 1997, the first so-called Data Books on copying and printing paper as well as on copiers and printers were published. The "Environmental Data Book for Product Selection" provides purchasers with quantitative/qualitative environmental information on each product in accordance with the purchasing guidelines. They are based on the information to register for the eco-label. Data books on copying and printing paper, copiers, printers, and fax machines, PCs, stationery and office supplies, toilet and tissue paper, lighting apparatus and lamps, motorcars, refrigerators, and washing machines have been published.

The "copiers and printers" version presents environmental information on about 330 products regarding energy efficiency, compliance with international Energy Star standards, double-side copying functions, recyclable designs, the use of reusable parts and recycled plastics, etc. GPN guidelines and data books have considerably influenced the industries so far, not only because many purchasers use the guidelines and data books for their decisions, but also because it is the first time for companies to be compared with competitors' products from the environmental point of view.

## **Local Level**

Among the 2,350 members of the Green Purchasing Network, there are 340 local authorities. These are very active, and several local authorities even report to have achieved „100% green purchasing“ for office material and electronics.

The first regional Green Purchasing Network was established in Shiga in December 1999. In 2000, the first Green Purchasing Fair took place in Kita Kyusu, Sapporo and Osaka. A Green Purchasing Act demanding „Action plans“ from all federal departments and proposing this to local authorities and companies was enacted on 1 April 2001

## **Green Purchasing in Sendai**

Having introduced recycled paper in 1990, Sendai, the “City of Trees” started using electric cars in 1991 and then introduced hybrid buses into the transit bus service in 1992. In 1996, Sendai joined the Green Purchasing Network, gathered employees in charge of commodity contracts from all its municipal departments and held a study seminar to promote green purchasing. This seminar has been held every year since then.

After having promoted green purchasing unsystematically, Sendai enacted the Sendai Basic Environmental Ordinance, which explicitly vested citizens, business operators and administrative bodies with the responsibility to promote green purchasing. In March 1997, a basic environmental plan called “City of Trees Environmental Plan” was developed. It established a definite course for the promotion of systematic green purchasing.

In March 1998, Sendai has created the “Leading Ecoplan Sendai”, a detailed environment-oriented action plan. Items concerning green purchasing include two quantitative targets based on the concept of effective utilisation of limited resources. One is to reduce the overall paper goods consumption by 6% compared to 1996 amounts, and the other is to raise the used paper percentage to 40% or higher

Sendai has set criteria of its own to encourage green purchasing. Details including product name, price, specifications, and environmental considerations are compiled in a catalogue which is distributed to purchasers in all departments and sections and made available on the Intranet.

### **Green Purchasing in Shiga**

Shiga Prefecture was one of the initiators of the Green Purchasing Network and was among the first local authorities to start green purchasing. It was Shiga that established the first regional Green Purchasing Network in December 1999. It took the lead in Japan to establish “the basic purchasing guidelines for green products”. Green purchasing in Shiga started in 1994 with 50 products (mainly stationery), and today amounts to 168 products including vehicles, furniture and clothing. 94% of all office stationery is green, including computers and copiers, and 30 out of 100 cars are hybrid gas/electric.

Purchasing is organised centrally by the purchasing department. As criteria, the administration basically uses eco-labels (eco-mark, green mark and recycle mark). Green purchasing is not integrated into a wider environmental programme but carried out independently. Training for purchasing officers is offered on a regular basis, and explanation of green products is part of the training course for new staff. Annual training also includes information related to green purchasing.

One of the main benefits gained from green purchasing was a drastic change in the behaviour of municipal staff. Employees are reported to be much more sensitive as regards environmental questions.

## **Co-operation Between Public Authorities and Different Stakeholders**

The Green Purchasing Network strongly supports the exchange of experience. It enhances the collaboration among businesses, municipal governments, the Environmental Agency and NGOs interested in green purchasing. Activities of the GPN include the organisation of study meetings, an annual forum and product exhibitions. This provides a platform for practitioners and policy makers to exchange their experiences. The GPN also initiates the establishment of local networks led by local governments and companies.

The Basic Policy on Promoting Green Purchasing established by the Japanese Ministry of Environment plans the establishment of contact groups for government agencies and others. These contact groups study promotion policies and watch the successful co-ordination of green purchasing among each institution, in order to increase the effectiveness of the process.

All Japanese companies and local authorities willing to join the network have to commit to the objectives of green purchasing, but there is no monitoring process and stakeholders so far do not have to make any financial contribution. Funding is provided by the national government, but membership fees are planned for the future.

While the Green Purchasing Network's secretariat considers itself as politically fully neutral, some companies and local authorities represented in the network do take influence on national level politics.

## Impact on Environment and Market

The Green Purchasing Network has 2,350 members, among them 350 local authorities. The GPN members are well-known big companies, small and medium-sized enterprises, the Environment Agency of Japan, local governmental bodies, consumer organisations, and environmental NGOs. Along with the establishment and expansion of GPN activities, stakeholders became increasingly interested in green purchasing. Green purchasing is often featured in TV or in newspapers, and is frequently chosen as a theme for seminars sponsored by governments or private companies. In particular, local governments and major corporations, which are large purchasers, are generally moving towards implementing green purchasing. In response to this development, many Japanese manufacturers are currently pushing eco-design and the development of eco-products.

From September to October 2000, the GNP carried out a survey. Questionnaires were distributed to members and non-members of the GNP including local authorities and private companies. Its outcome was that GNP members are more advanced in green purchasing activities than non-members. They also commit more actively to diffusing the concept and raising consumers' awareness of green purchasing. The objective of the survey was to find out about prices of green products and about the level of green purchasing activities as regards different product groups.

For office material and electronics, a participation of 80-90% of the institutions involved in green purchasing has been achieved. Copiers, computers and automobiles were found to be purchased green by 50% of institutions. Tools used for the identification of greener products are mainly based on Japanese eco-label criteria.

The survey on green purchasing showed that most of the participants considered environmental awareness raising among employees as the greatest achievement of green purchasing.

## Recent and Ongoing Research

In spite of numerous green purchasing activities having been performed in Japan during the last 10 years, no research in a more narrow sense has been conducted on the actual impact of the policy. Nevertheless, there are research activities going on as regards technical product and production improvements, and natural scientific questions, like life-cycle assessments. Activities in the field of social science and environmental economics are more limited, and restricted to a small number of projects on a very general level.

A wide variety of information about environmental goods is constantly available, including all kinds of environmental information.

## Political Outlook

Approaches to green purchasing in Japan have been developed mainly on the practitioners' level. Local authorities and companies have fostered activities, because they wanted to demonstrate their environmental credibility. All activities in this field in the end are aimed at influencing private consumers hoping to change consumption patterns and awareness thereby influencing market structures.

At the national level, the process is driven by the environmental administration, sometimes supported by single parliamentarians, but widely respected in general. As of 1 April 2001, the Japanese government will make green purchasing obligatory for all national departments. This obligation is enforced via a positive list of green products, mandatory set-up of action plans for each department and reports of progress. These principles are also applied to companies and local authorities, although without strict obligation. Product categories for green procurement include paper, purchased printed material, general office supplies, office furniture, office machines, consumer electronics and electric appliances, lighting, automobiles, uniforms and work clothes, interior fixtures, public works and services.

Every year, each governmental institution must formulate and publish a green purchasing policy complying with the basic national policy. This green purchasing policy must contain a clear description of a concrete green purchasing system. In addition to conventional issues such as price and quality, environmental conservation must be taken into consideration when making purchasing decisions. As far as possible, goods and services must be selected with respect to their reducing environmental impacts throughout their entire life cycle, including production. Furthermore, governmental institutions shall establish procurement targets for the different items for every year. The publication of these targets is expected to prompt enterprises to supply environmental goods.

International issues (e.g. GATT or WTO General Agreement on Public Procurement) are hardly addressed or taken into consideration, but the interest in these activities is high.

Japan can be considered to be the international forerunner in green purchasing of office equipment and electronics. This is surely one reason for the advanced position Japanese electronics companies have even on other markets when it comes to environmental compliance. Now, the challenge for Japan will be to harmonise its policy with the initiatives of other countries at the international level. There may also be hope that Japan will take an active role in disseminating its experience to other countries in East Asia or even other regions of the world.

## Literature

**OECD**, Greener Public Purchasing, Issues and Practical Solutions, OECD, Paris 2000

**Japanese Ministry of the Environment**: , Basic Policy on Promoting Green Purchasing, Policy paper, February 2001

**The Government of Japan**, Action Plan for Greening the Environment, Cabinet Decision June 13 1995

**City Council of Sendai**, The Green Purchasing Efforts of the City of Sendai, Sendai, February 23 2001

## Links

<http://www.gpn.jp>, Green Purchasing Network Japan

# Netherlands

## Introduction

The Netherlands is a moderately centralised country with the following administrative structure:

- a national government consisting of 13 ministries,
- 12 provinces,
- 503 municipalities,
- 58 water boards.

Provinces and municipalities alike have their own umbrella organisation. The provinces' organisation is called the Union of Provinces ('Inter Provinciaal Overleg' (IPO)), the one for the municipalities is called the Association of Dutch Municipalities ('Vereniging van Nederlandse Gemeenten' (VNG)). In the Netherlands, responsibility for public procurement is largely split up between and within public organisations. In addition, public officers are quite independent in the fulfilment of their duties and in making procurement decisions.

The total value of public procurement in 1997 amounted to € 25 billion, with € 8 spent

by the central government, € 1.5 by the provinces, € 14 billion by the municipalities and

€ 1.5 by the water boards) (Minister of Economic Affairs, 1999). At the central level, the biggest spenders belong to the Ministry of Defence, the Ministry of Transport and Water Management, and the Ministry of Housing, Spatial Planning and Environment.

## Background

There are three governmental memoranda which had been published in the course of the 1990s that provide the most distinctive landmarks in the Dutch history of greening public procurement (Van der Grijp, 1998). It started with the publication of the first National Environmental Policy Plan (NEPP) in 1990. In this policy plan aiming at an integrated approach to environmental problems, the Dutch government explicitly acknowledged public procurement as an instrument of environmental policy. According to this plan, public authorities should fulfil an exemplary role with regard to environmentally sound behaviour. Environmental management systems (EMS) were considered to provide a good starting point for the actual implementation of green procurement practices. The Dutch EMS approach that is open for companies as well as governmental organisations, roughly corresponds to the one pursued in the EU Council Regulation on the voluntary introduction of Eco-Management and Audit Schemes (EMAS) that is only business-oriented. The government never issued any legal obligations to implement environmental management systems and green procurement practices, but provided for various strong financial incentives to stimulate compliance. The explicit acknowledgement of the environmental potential of public procurement was backed by a first attempt to set up a product information centre, which, however, unfortunately failed. The Memorandum on Products and Environment ('Nota Product en Milieu'), the second



Nicolien van der Grijp works as a researcher at the Institute for Environmental Studies in Amsterdam, Netherlands

landmark, was issued by the Ministries of Housing, Spatial Planning and Environment and that of Economic Affairs in 1996. The memorandum emphasised the joint responsibility of manufacturers, retailers, consumers and public officials for a shift towards sustainable production and consumption. In relation to public procurement, it recommended the integration of environmental clauses in invitations to tender and terms of delivery. Furthermore, it proposed obliging suppliers to provide public purchasers with environmental information on their products. In a later stage, this idea was abandoned. The memorandum also announced a second attempt to set up a product information centre, that, similar to its predecessor, proved again to be unsuccessful.

A third impetus for the greening of public procurement was given by the Memorandum on Environment and Economy ('Nota Milieu en Economie') that was published by the Ministries of Housing, Spatial Planning and Environment and that of Economic Affairs in 1997. The memorandum focused on the opportunities of integrating environmental and economic objectives and acknowledged public procurement as an important means to realise a breakthrough in this respect. At the release of this memorandum, the government reserved a budget of approximately 4.5 million Euro for the further development and promotion of the instrument in the period from 1998-2003. One of the measures financed on the basis of this budget is a special Sustainable Procurement programme ('programma Duurzaam Inkopen') with a threefold objective:

- to set an example for others,
- to achieve direct environmental benefits,
- to influence the market by creating a demand for environmentally less harmful products and to stimulate product innovation.

Most practical measures of the programme are aimed at enhancing the commitment of procurement officers at all government levels, to provide practical information to them and to stimulate communication. Participation in the programme is organised on a voluntary basis. The core of the programme is a Web site providing a toolbox with environmental specifications (<http://www.inkopers.net>). It is also envisaged to start an online shop in the future. The programme is managed by the Ministry of Environment.

During an evaluation of the Memorandum on Environment and Economy in 2000, it was concluded that the Sustainable Procurement programme is a good step forward in the process towards the greening of public procurement (KPMG & IVM). Bottlenecks, however, include the translation of the product information given into concrete procurement decisions and the lack of Internet facilities in many municipal administrations. In fact, only 30 to 40% of the Dutch procurement officers have Internet access (Programmabureau Duurzaam Inkopen, 2001).

## Implementation at Local, Regional and National Level

As environmental management systems are considered to be a sound basis for the implementation of green procurement practices, it is important to mention that most public administrations at the national, regional as well as local level have now come to get such systems up and running. Furthermore, there is a general consensus about Dutch public authorities acting as a role model with regard to environmentally sound behaviour. In fact, most procurement officers claim to use environmental criteria in their procurement decisions, but the extent and type of criteria applied appear to be largely subjective. According to a preassessment within the framework of the Sustainable Procurement programme in 1999, it seemed that procurement officers have a more positive image of taking environmental considerations into account in their purchasing decisions than their actual behaviour indicates (R & M, 2000). When taking a closer look at the activity level of Dutch municipalities, the municipality of Rotterdam attracts the attention as one of the pioneers in the greening of public procurement as well as in applying efficient procurement procedures.

As has already been pointed out in Section 1.2, a lack of suitable product information and the difficulties in organising an appropriate facility for this have hindered a progressive development of green public procurement. Governmental attempts to establish a product information centre have repeatedly failed because of its vulnerable position as a public institution. This does not mean, however, that procurement officers have no access to information sources at all.

First, there is the Dutch eco-label ('Milieukeur') that may provide guidance for purchasers. In 1992, the independent Dutch Eco-label Foundation ('Stichting Milieukeur') was established at the initiative of the Ministry of Environment. The foundation aimed at developing a national eco-labelling scheme. After a slow start, which is not an uncommon characteristic of many of these schemes, the programme seems to be making quite a progress now. In the non-food sector, criteria have been developed for more than 35 products and product groups (Stichting Milieukeur, 2001). In the majority of these cases, the eco-label could indeed be awarded to producers and manufacturers. Examples with relevance for public procurement include concrete products, fire extinguishers, office furniture and toilet chemicals. In 1995, the Eco-label Foundation also started to develop criteria for food products from agricultural origin, the range now covering approximately 30 different products. Compared to the non-food sector, the number of awarded products still is relatively low. In the context of eco-labelling, it should be stressed that procurement officers are not allowed to ask for products carrying an eco-label, because this would put similar unlabelled products at a disadvantage. Decisions may only be based on the requirements set out in the tendering specifications.

Second, the independent environmental consulting agency PMA has filled an information gap by starting to publish loose-leaf manuals about environmentally sound products and services (Van der Grijp, 1998). In 1992, PMA published its first loose-leaf manual about office stationery that was later followed by manuals on office machinery, cleaning, catering, building maintenance services and office furniture. These manuals provided general guidance on choosing environmental-

ly preferable products, and moreover, contained positive lists of brand name products, sorted by best and second best options. More recently, PMA has started to publish its product information on CD-ROM.

Third, some suppliers are providing environmental information about their product range. An example is the Central Purchasing Office of the Association of Dutch Municipalities that offers office stationery to local authorities. The office uses a special logo for products that are the best choice from an environmental point of view. In addition, products from the PMA CD-ROMs have got a special indication.

Fourth, there is a lot of useful information arising from related policy fields, such as building and energy use. These include the governmental Sustainable Building programme ('programma DUBO) and specific programmes for energy efficiency and reduction. The Government Buildings Agency ('Rijksgebouwendienst', a directorate of the Ministry of VROM) is an important public actor that commissions building projects at the central governmental level. This agency is considered to have an exemplary function in the field of sustainable building. With regard to energy issues, a specific department of the Ministry of Economic Affairs, called NOVEM, is charged with the development and execution of practical guidelines, and target group specific projects.

The Sustainable Procurement programme is meant to force a breakthrough in the implementation of green procurement practices in the Netherlands. One of its aims is to enhance the commitment of politicians and procurement officers at all State levels. To make this commitment more explicit, a special endorsement procedure was created. On 1 January 2000, the programme was officially launched for endorsement. By the end of May 2001, the programme bureau had received 88 declarations of participation from public administrations, including (<http://www.inkopers.net>, 31/5/2001):

- all 13 ministries
- 7 out of 12 provinces
- 16 out of 58 water boards
- 52 out of 503 municipalities

These numbers make it obvious, however, that the quantitative target set for the year 2000 has been too optimistic. Expectations amounted to 100 declarations of participation at a participatory level (Programmbureau Duurzaam Inkopen, 2001). By the end of May 2001, this number had still not been reached. As a consequence, expectations as to the final implementation of green procurement in all public administrations were cut back correspondingly. The prevailing idea now is that it will only be realised after termination of the programme which was planned to expire in 2003.

Activities in the framework of the Sustainable Procurement programme are focused on the development of a toolbox for procurement officers including environmental specifications for a series of product groups. Office supplies have been excluded from the programme, because they are already covered by the work of the consulting firm PMA. By the end of May 2001, the bureau of the Sustainable Procurement programme had finalised specifications for 15 categories of products and services, including for example catering, cleaning,

paper, office furniture and equipment, street furniture, means of transport, and green space maintenance (<http://www.winkopers.net>, 31/5/2001).

The bureau for the Sustainable Procurement programme has announced that it will award a prize to the public organisation with the most remarkable achievement with regard to green public procurement in the year 2000. This will happen in the course of 2001.

## **Impact on Environment and Market**

It is not possible to give a quantitative assessment of the environmental and economic impacts of the current Dutch policy concerning the greening of public procurement, because monitoring has up to now only taken place on an incidental basis. Qualitatively speaking, it can be stated that, in the Netherlands, environmental aspects are increasingly taken into account in procurement decisions.

In the near future, there will be more quantitative and qualitative information available as a result of the evaluation of the Sustainable Procurement programme. The evaluation consists of three assessments of the state of affairs concerning greener purchasing in 1999, 2001 and 2003, respectively. It focuses on the organisational procurement policies, the attitude of public officials, and their performance in practice (Programmbureau Duurzaam Inkopen, 2000). During the first assessment, the interviewees were asked to give a report mark for the policy of their own organisation. The average mark amounted to 6.5, with the provinces scoring above average with 7.2 (R & M, 2000).

The higher costs of products and services that are preferable from an environmental point of view is often mentioned as a barrier to the greening of public procurement. As to this, the consulting firm KPMG investigated to what extent environmentally less harmful products are indeed more expensive than conventional ones. The study revealed that price differences between the two groups are smaller than expected. Moreover, it cannot be ruled out that an increased awareness as to procurement issues will bring about benefits like higher efficiency and cost reduction.

## **Co-operation Between Public Authorities and Different Stakeholders**

It is generally considered to be of utmost importance to constantly keep at live the co-operation and communication between all stakeholders. Concrete activities in this respect include for example the work of the consulting company PMA and the Sustainable Procurement programme. The PMA Green Purchasing CD-ROMs are compiled in co-operation with product manufacturers and suppliers. PMA also provides tailor-made consulting services for the greening of offices and procurement. It has, for example, developed a special programme for the provinces.

The Sustainable Procurement programme is largely based on a bottom-up approach. It is centred around the idea of exchanging experiences and information between procurement officers. The Web site mentioned above is one of the media to enhance communication. Regional meetings of procurement officers and policy makers constitute another

means. With regard to the development of environmental specifications, the participatory approach of the Sustainable Procurement programme allows for involving all relevant stakeholders, including producers, manufacturers and trade organisations.

## Political Outlook

Although the central government had committed itself to greening public procurement already in an early stage, the lack of practical product information has been hampering large-scale implementation of this instrument for many years. The Memorandum on Environment and Economy was an important landmark in the slumbering implementation process. It resulted in the establishment of the Programme Sustainable Procurement, that has a strong potential to improve the Dutch green procurement practice.

In 1999, the Ministry of Economic Affairs launched the Professional Purchasing and Tendering ('Professioneel Inkopen en Aanbesteden') action plan to increase the efficiency and transparency of public procurement by the central government. The main aim of the plan consists in stimulating competition between suppliers (Minister of Economic Affairs, 1999). The government aims at making arrangements for the co-ordination between the action plan and the Sustainable Procurement programme.

The action plan focuses on three interdependent issues:

- innovative tendering,
- electronic tendering,
- European tendering.

As to innovative tendering, the goal is to get procurement officers to increasingly define challenging tendering specifications that encourage product innovation. One of the means is the use of functional instead of technical specifications. Electronic tendering includes the use of Internet and other modern information and communication facilities in procurement procedures.

European tendering refers to the open procedures that are enforced by EU directives on public procurement whenever the intended purchases or tenders exceed certain financial thresholds. These directives cover nearly all types of public orders: public work contracts, supply of products, contracts in the utility sector and service contracts. The level of compliance of Dutch authorities to these directives is still considered to be highly insufficient, although compliance has improved after complaints were delivered to the Commission about two Dutch municipalities ('Zaanstad' and 'Dordrecht') that had not followed the open tendering procedures (Cobouw, 8 March 1999). The increased attention for European tendering has also resulted in a stronger interest for the possibilities to include environmental specifications and selection criteria in open tendering procedures.

## Recent and Ongoing Research

Evaluation of governmental policy is a common phenomenon in the Netherlands. Several examples have already been mentioned in the sections above. Worth mentioning in this respect is also the work of the Audit Office ('Rekenkamer') that for example evaluates

the implementation of environmental management systems and the compliance to EU procurement procedures. The current Sustainable Procurement programme also provides for an evaluation project consisting of three assessments of the state of affairs concerning greener purchasing in 1999, 2001 and 2003, respectively.

Research on LCA methodologies and sustainable product development is reasonably well developed in the Netherlands. Key stakeholders include the University of Leiden, the Technical University of Delft, and corporate research centres.

Concerning research on legal aspects, it is interesting news that in May 2000, the University of Amsterdam has established a special chair for the law of public procurement. The work of this new chair focuses on the impact the EU directives will have on public procurement. The chair is being financed by the Dutch Association of the Law of Public Procurement, a research organisation that also intends to act as a platform for government, consultants, business and lawyers.

## References

- KPMG and IVM (2000). Eindrapport Evaluatie Nota Milieu en Economie (Final Report Evaluation of the Memorandum on Environment and Economy). De Meern, The Netherlands.
- Minister of Economic Affairs (1999). Actieplan Professioneel Inkopen en Aanbesteden (Professional Purchasing and Tendering Action Plan). Letter to the Chairman of the Parliament. Den Haag, The Netherlands.
- Programmabureau Duurzaam Inkopen (2001). Programma Duurzaam Inkopen, Jaarverslag 2000 (Sustainable Procurement Programme, Annual Report 2000).
- R & M (2000). Rapport inzake Monitor Duurzaam Inkopen (Report concerning the Monitoring of Sustainable Procurement). Maastricht, The Netherlands.
- Stichting Milieukeur (2001). Jaarverslag 2000 (Annual Report 2000). Den Haag, The Netherlands.
- Van der Grijp, N.M. (1998). The Greening of Public Procurement in the Netherlands. In: T. Russel (ed.), Greener Purchasing, Opportunities and Innovations, Greenleaf Publishing, Sheffield, UK, pp. 60-70.



## North America

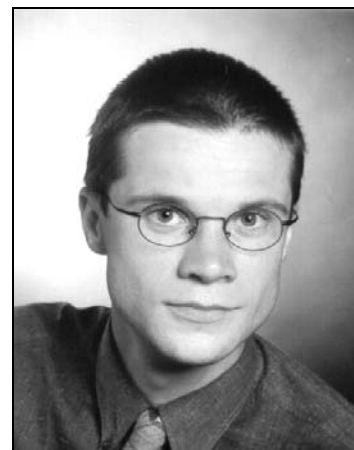
### Short History

Green purchasing in Canada and the US has been developed from two roots: First, there was the aim to save energy, which strongly promoted the development of energy-saving products. By setting up eco-labeling schemes and leveraging public purchasing potential, national governments supported the use of these products. Second, recycling activities saw themselves confronted with the fact that markets were not capable of absorbing large quantities of recycled materials. Thus, alongside creating a market for products containing recycled contents ("Buy recycled"), new markets for recycled materials were developed. This was achieved by pointing out the possibilities of substituting raw materials in more and more products.

One of the earliest initiatives was taken by the City of Toronto which, in 1989, organised a forum on purchasing and waste prevention. Its outcome was the foundation of "Governments Incorporating Procurement Policies to Eliminate Refuse (GIPPER). This regional network of provincial and local authority purchasers, in 1992, published "GIPPER's Guide to Environmental Purchasing", which still is one of the main reference sources for green purchasing in Canada (cf. GIPPER 2001). Meanwhile, it has been complemented by a guidebook of the City of Richmond.

In the US, the State government in Massachusetts established its environmental purchasing programme in 1988. In 1990, the City of Santa Monica issued a "Tropical Rainforest Wood Purchasing Ordinance" and, in 1993, launched its "Toxics Use Reduction Programme (TUR)". This was followed by the "Sustainable City Programme" in 1994, which, among eight sustainability principles, establishes "Procurement Decisions which minimise negative environmental and social impacts". (cf. SANTA MONICA 2001)

In parallel to these local activities, several initiatives were started at the federal level. Thus, in 1992, the US Environmental Protection Agency (EPA) presented the first Energy Star label for personal computers, subsequently expanding its programme to other office and building appliances. Since 1996, the programme even has included buildings, thus demonstrating the wide range of products it has come to cover. In parallel to this, the EPA Toxic Division developed the Environmentally Preferable Purchasing Programme, starting in 1993. In 1995, Canadian legislation required all federal government departments to table sustainable development strategies. Environment Canada launched a number of demonstration activities and published a "Guide to Green Government" as well as its "Directions on Greening Government Operations". At the same time, the Canadian eco-label "Environmental Choice" was privatised and acquired by TerraChoice. This company set about identifying public and private purchasers as a target group and started "Eco Buyer" activities.



Christoph Erdmenger is the Director of ICLEI's Eco-Procurement Programme. He has visited Canada and the United States in April 2001 in the course of the RELIEF project.

## Implementation

The Canadian government has committed itself to implement green purchasing at all federal departments until spring 2002. The commitment stipulates that “environmentally responsible goods and services” shall be the “default condition” for purchase, also referring to environmental criteria in standing offers, if these are requested, and the National Master Specifications. Another stipulation is to provide training to all purchasing staff.

The Canadian federal department for “public works and government services” (PWGSC) is in charge of assisting federal departments with green purchasing by integrating it into the general purchasing services. To this end, an existing Intranet database on standing offers has now been complemented by providing the option to qualify standard offers as “green products/services”. Purchasers can apply this criterion when searching the database. Furthermore, the department offers access to a “Green Procurement Network” Web site, which provides some useful links and a list of experts in federal departments ready to share their experiences. The Centre for Indigenous Environmental Resources, Inc. (CIER), a charitable organisation, runs an information site on green purchasing and a database of green products. The activity is funded by the PWGSC.

Implementation in the US is well documented through a set of case studies provided by the US EPA Toxic Division. This shows that a big number of examples exist within the Federal Government as well as within the state and local governments. Beside Santa Monica, among the forerunners in the US are the cities Seattle, Atlanta, Saint Paul and Tuscon as well as King County and San Diego County (cf. EPA 2000, ICLEI 2000). The State of Massachusetts has set up a rather unique system through the Operational Service Division, the central purchasing agency of the state. It employs two officers in charge of environmental issues, thus ensuring that environmental aspects are integrated into specifications for statewide contracts. Even municipalities and other organisations (such as schools) can use these contracts to buy products (cf. EPA 1998b).

The Energy Star programme offers various helpful programmes for implementing energy-efficient purchasing (see also next paragraphs). Apart from publications, there is an extensive Web site offering guidance on certified products while providing background information. The most outstanding here are the “Energy Star Purchasing Tool Kits”, one volume of them being a “Communication Starter Kit”, with example of press releases as well as check lists (cf. DOE 1999).

## Co-operation Between Public Authorities and Different Stakeholders

In general, it can be stated that there is quite a lack of overall co-ordination at a national or continental level in North America. The US National Association of Counties (NACO) started a “Purchasing Campaign” in 1998 and in the course of it provided a sample of guiding documents. One example is a guide to greening government called “Local Government Environmental Purchasing Starter Kit”. The Starter Kit includes programme implementation strategies, case studies, model resolutions, and a list of resources. It also provides information packets on different product categories.

Recently, the US-based Centre for the New American Dream took on the initiative to arrange for an experience exchange between purchasers, but also to enable a dialogue between vendors and suppliers. ICLEI's US office has been running the Green Fleets project since 1994 and also carried out a national project on energy-efficient purchasing in 2000.

An important initiative can be reported by another player in Canada. The eco-label "Environmental Choice" has identified purchasers as an important target group for their information. The Environmental Choice Programme (ECP) promotes higher standards of environmental performance against which services and products may be assessed. Suppliers and manufacturers are encouraged to participate in the programme and to have their products certified. The managing company TerraChoice publishes the "Eco Buyer Catalogue" which contains the label's criteria as well as a characterisation of certified products and potential suppliers. Company names, product and service details and contact information on more than 180 suppliers can be found as well as label-specific guidelines and criteria, which have been developed in cooperation with industry, environmental groups, consumer groups and governmental bodies. This catalogue is also available on the Internet.

The US lacks a national eco-labelling scheme that would give full consideration to all product characteristics, a fact which some observers rate to be the major obstacle for green purchasing in the US.

## **Impact on Environment and Market**

There are several activities which, although not systematically researched, show evidence of an impact of green purchasing on environment and market.

The US EPA Green Light programme is based on Memoranda of Understanding (MOU) between EPA and private and public sector institutions to implement energy-saving lighting improvements. Between 1991 and 1996, 2,300 institutions were registered in the programme and saved a total of US\$ 440 million via reducing energy cost, savings of last year alone (1996) amounting to US\$ 254 million. An average of a 40% reduction could be achieved, which, on the environmental side, summed up to overall savings of 7.4 billion kWh, 2.5 million tons of CO<sub>2</sub> and to 8,500 tons of NO<sub>x</sub> (EPA 1997a).

While Green Light mainly led to the application of energy-efficient technology at the purchasing institution, there was another programme having a higher impact on manufacturers. The number of Energy Star labelled PC manufacturers rose from a number of 10 in 1992 to a number of 600 in 1998, which is said to be virtually 100% (cf. EPA 1998a). This led to an estimated energy saving of 2,3 billion kWh for 1994 and 1995 (EPA 1997b). To a large extent, this success was triggered through a presidential order by Bill Clinton, who committed all federal departments to buy Energy Star computers, once they are on the market. The US Federal Government buys a total of 1,000,000 computers a year, holding a 3% market share.

On the level of individual gains, the US Energy Star programme provides a number of tools to assist interested purchasers in calculating the environmental and economic benefit to be realised (i.e. to benchmark the energy performance of buildings).

Canada is considering trying to measure the overall impact of green purchasing, although this idea is still being developed. The Canadian federal departments' obligation to greening their operations is monitored by the Commissioner for the Environment and Sustainable Development, who reports directly to the Parliament. Although a common performance measuring system is called for, this is still under development by the Canadian Government (cf. CESD 2000). A first draft for a guidance document (cf. MARBEK 1999) proposes eight indicators to monitor green purchasing: Number of specifications with green statements, number of products included in department's green source list, number of trained employees, percentage of trained employees, dollar value of green purchases reported, dollar value of green purchases as a percentage of total procurement budget, total cost of procurement.

At the local level, Santa Monica, on the implementation of its "Toxic Use Reduction Programme (TUR)", reports that replacement with non-toxic alternatives in 15 of 17 cleaning product categories could be realised, and that 1,600 kg of hazardous material purchased annually could be eliminated, resulting in cost savings of 5%. Also Santa Monica claims to be the first US local authority using 100% renewable electricity for municipal facilities. Evidence for the market impact of green purchasing is given by the City of Toronto's purchasing department, which processed 700,000,000 Can\$ in purchases (52% construction, 40% goods and services, 8% professional services) in 1999.

These scattered examples give some evidence of the impact on market and environment already achieved – and much more is possible. However, so far no research has been undertaken on valuating the overall impact of the programmes or the potential savings through future programmes.

## Recent and Ongoing Research

So far, research on green purchasing mainly seems to have focussed on social issues. Case studies have been conducted in order to identify existing hurdles and develop effective models to overcome them. For example, the US EPA EPP programme published a number of brochures on successful green purchasing stories (cf. EPA 1998b, EPA 2000). Additionally, environmentally motivated research on technology and natural sciences is well established in the US, but no reference to green purchasing could be found.

## Political Outlook

The political prospects in the two countries differ significantly. In Canada, activities certainly are on the move, as the commitment to greening federal government operations is fairly strong. Monitoring activities launched by the Commissioner for Sustainable Development are expected to create an increasing momentum, if a system on performance measurement is successfully installed. Realising its installation within the Department of Public Works and Government Operations has the potential to integrate green purchasing as an intrinsic component of sound purchasing practices.

At the local level, Canadian municipalities partly have started green purchasing activities already. But, more important, in a survey carried out by the Federation of Canadian Municipalities Green Purchasing was voted to be the top issue in the context of national and international networking.

In the US, the growing success of green purchasing activities at the federal level was closely connected to the name of President Bill Clinton. The priorities of the Bush administration in terms of green purchasing were unsettled at the moment of writing this article.

In North America, green purchasing is a well established topic that benefits from the active contribution of a number of very capable stakeholders. The exploitation of its full potential, though, is still pending.

## Literature

**SANTA MONICA 2001**, *Sustainable Purchasing Programs and Policies*, CITY OF SANTA MONICA, unpublished 2001

**DOE 1999**, *Energy Star Purchasing Tool Kit*, Volume 1: Guide to Buying Energy Efficient Programmes, Volume 2: Communications Starter Kit, US DEPARTMENT OF ENERGY, US ENVIRONMENTAL PROTECTION AGENCY, Washington 1999

**EPA 1997a**, *Building on our Success: Green Lights and Energy Star Buildings 1996 Year in Review*. Office of Air and Radiation, U.S. Environmental Protection Agency, Washington 1997

**EPA 1997b**, *Risk Reduction Through Voluntary Programs*, Office of the Inspector General, U.S. Environmental Protection Agency, Washington 1997

**EPA 1998a**, *Energy Star Office Products Program*, Atmospheric Pollution Prevention Division, U.S. Environmental Protection Agency, Washington 1998

**EPA 1998b**, *Green Spending, A Case Study of Massachusetts' Environmental Purchasing Program*, Environmentally Preferable Purchasing Program, U.S. ENVIRONMENTAL PROTECTION AGENCY, Washington 1998

**EPA 2000**, *State and Local Government Pioneers, How State and Local Governments Are implementing Environmentally Preferable Purchasing Practices*, Environmentally Preferable Purchasing Program, U.S. ENVIRONMENTAL PROTECTION AGENCY, Washington 2000

**CESD 2000**, 2000 Report, COMMISSIONER FOR THE ENVIRONMENT AND SUSTAINABLE DEVELOPMENT, Ottawa wa 2000

**GIPPER 2001**, *GIPPER's Guide to Environmental Purchasing*, 3<sup>rd</sup> Edition, Toronto 2001

**ICLEI 2000**, *Energy Efficient Purchasing: Save Money, Reduce Pollution*, ICLEI US Office, unpublished, 2000

**MARBK 1999**, *Environmental Performance Measures for Government Operations*, prepared for The Committee on Performance Measurement for Sustainable Government Operations (PMSGO), MARBEK RESOURCE CONSULTANTS, unpublished 1999

**PWGSC 2000**, *Sustainable Development in Government Operations: A Co-ordinated Approach*, GOVERNMENT OF CANADA, Ottawa wa 2000

## Links

Canadian eco-label criteria and certified products: <http://www.environmentalchoice.com>

Information site of CIER Ltd: <http://www.greenpurchasing.ca/> and their green products database "Procara": <http://www.procara.ca/>

US EPA Environmentally Preferable Purchasing Program: <http://www.epa.gov/oppt/ep>

Massachusetts Purchasing Program: <http://www.state.ma.us/osd/enviro/enviro.htm>

National Association of Counties: <http://www.naco.org/programs/environ/purchase.cfm>

## Sweden

Sweden has 289 municipalities, 21 counties and about 50 governmental departments and publicly owned institutions. All in all, more than 400 institutions refer to the Swedish government.

Public purchasing in Sweden amounts to about 400 billion SEK (43 billion EURO) per year. One third is used for purchasing of goods and two thirds are used for services and enterprises.

### Short history

Environmental considerations in public purchasing were implemented in some local and regional public institutions already in 1990, e.g. through development of specific tools for green purchasing. The main initiative has been the development of “Västernorrlandspärmen”, a manual for green procurement, which by the end of 2000 contain guidelines for more than 25 product groups. The best known of the Swedish tools is the TCO-requirements for office equipment, the first version being from 1995. The requirements and the accompanying certification system have gained widespread international acceptance.

In the spring of 1997, the Swedish Prime Minister set up a commission on ecologically sustainable development. In relation to public procurement, the most relevant initiative of the Commission has been to form the EKU-Delegation (the Delegation for Ecologically Sustainable Procurement). The work of the Delegation ends in 2001 with a strategy for the future development in public, green purchasing. Also the work of the Delegation for Sustainable Technology may play an important role for a future sustainable development as the activities of the Delegation aims at building a bridge between purchasers and suppliers.

### The EKU-Delegation

The EKU-Delegation has been the main actor on the national level since 1998. According to its terms of reference (M 1998:01), the EKU-delegation is charged with the task of actively promoting public procurement in central, regional and local government administrations as a means of achieving ecologically sustainable development.

The most important activities for the Delegation has been:

- To analyse and monitor the rules in national legislation and international agreements.
- To initiate and issue instructions and methods. This activity has been focused on development of an Internet-based tool (see 1.6.1).
- To disseminate knowledge and information about experiences and good examples from local, regional and national projects.
- To launch training initiatives and arrange seminars for procurement officers and suppliers.
- To monitor developments towards ecologically sustainable procurement in other countries.

The EKU-Delegation maintains the central homepage for green, public procurement in Sweden (<http://www.sou.gov.se/eku/>), where information on tools, experiences, etc. can be found.



Anders Schmidt works as a research manager in LCA for the consultancy dk-teknik Energy Environment, Denmark

## **The Swedish Confederation of Professional Employees (TCO)**

The Swedish Confederation of Professional Employees (TCO) has more than 1.3 million members. The Confederation has for many years had environmental and occupational issues as a main focus, the most visible initiative being the development of detailed environmental requirements and an accompanying certification system for personal computers and monitors (TCO 95 and TCO 99). The initiative is widely recognised internationally, and purchasers world-wide use the criteria. Requirements at a similar level of detail are also available for other product groups with relation to offices, and it is interesting to note that the suppliers have accepted the TCO-requirements to a much larger extent than both the European and Scandinavian eco-labelling programs, despite the many similarities.

TCO has recently developed a new concept, “6E”, that has a broader range than TCO 95 and TCO 99. “6E” (Ecology, Emissions, Efficiency, Energy, Ergonomics, Economy) is a tool for companies and public institutions and aims at improving all factors within the same framework. More details about the work of TCO can be found at their homepage ([www.tco-info.com/i/omtcodevelopment/index.html](http://www.tco-info.com/i/omtcodevelopment/index.html)).

## **Implementation at the national, regional and local level**

### **National institutions**

As a part of the environmental management systems in national institutions, a working group has made a status report and considered some of the barriers in public, green procurement.

A questionnaire on the status for different types of environmental work was sent to 39 institutions. Of these, only three answered that they had implemented environmental demands in their purchasing, while six was working on the subject.

Among the most important barriers and actions identified by the working group is that a clear decision from the EU that environmental demands can be included in purchasing is missing. Other barriers are the need for tools and education.

### **Regional initiatives**

Swedish municipalities and their companies bought goods and services for about 165 billion SEK (18 billion EURO) in 1997. Both regional and local activities aim at reducing the environmental impacts from products and services through green public purchasing, and some of the best documented efforts are described in the following sections.

#### **County of Västernorrland**

The Association of Municipalities in the County of Västernorrland initiated in 1993 a project with the aim of integrating environmental considerations in public purchasing ([www.y.komforb.se/projekt/mau/index.htm](http://www.y.komforb.se/projekt/mau/index.htm)). To achieve this goal a common framework was developed, the main result being a manual for environmentally adapted purchasing. The manual consists of three parts for each product group:

- A fact sheet where relevant technologies and environmental facts are described shortly (one page)
- Environmental criteria. For each product group, three levels of criteria are described. The first level regards products that will not be bought under any circumstances, the second level regards products that will be bought in exceptional cases and the third level regards products that are preferred, provided the price is competitive.
- Environmental declaration. A company giving an offer must always fill in an environmental declaration and a background documentation.

A manual for more than 25 product groups is available on a commercial basis (subscription fee approx. 130 EURO) and has been sold to 80% of the municipalities in Sweden as well as national and regional legislative bodies and private companies. In total, the manual has more than 1000 users.

With the widespread success of the manual, it has become the main instrument for Swedish public purchasers. However, the initiatives from the ECU-Delegation are supposed to end with new guidelines and methods for public green purchasing that will replace the current manual from the county of Västernorrland. The project will therefore come to an end in 2001.

### **The County Council Assembly (Landstingsförbundet)**

The purchasing group in the County Council Assembly has developed a tool for inclusion of environmental considerations in their purchasing ([www.lf.se/lfu/abonnemang/miljokravsystem.htm](http://www.lf.se/lfu/abonnemang/miljokravsystem.htm)). The main focus is on health care products for hospitals, but also services and electronic office equipment and paper products are included in the tool.

The tool is divided into two parts. One part is directed towards actual product group and consists usually of a few (<5) questions. The second part consists of five appendices with more general questions on the environmental aspects of the producer and the products, i.e. on environmental status, chemicals, energy efficiency, packaging and materials.

### **The County of Västra Götaland**

The county of Västra Götaland has in the years 1999-2000 run a project on environmentally adapted purchasing with participation of the County Council, the assembly of municipalities in the county and the environmental departments in single municipalities [www.vgregion.se/miljo/miljosamverkan/index.htm](http://www.vgregion.se/miljo/miljosamverkan/index.htm).

One of the main efforts in the project has been to produce an overview of the status for green purchasing in the region. A questionnaire showed that 30 out of 33 municipalities has an environmental purchasing policy, and that the tool from the County of Västernorrland was used for environmental purchasing in 22 out of 33 municipalities. Many municipalities co-operated in green purchasing, the main areas for green purchasing being foodstuff, washing and cleaning agents, office products, paper and fuels.

The questionnaire also examined the barriers for green purchasing. It was concluded that the economical barriers were most pronounced, but

also difficulties in development of environmental demands and the subsequent evaluation and comparison of answers from potential suppliers were seen by about 90% of the respondents as important barriers.

## Local initiatives

Environmental considerations at the local municipal level in Sweden mainly take place in relation to two kinds of activities, Local Investment Programmes and public purchasing.

Local Investment Programmes (LIP) is seen a main element in the development of Sustainable Sweden. The main focus in LIP has been on changes in energy supply (e.g. district heating instead of electricity bio-fuels instead of oil), transportation (carpools, buses with bio-fuels, efficient public transportation) and improved waste management. They may thus be a part of a technology procurement project (see 1.4.1), but there are no formal bonds.

Green purchasing in municipalities is another main element in the development of Sustainable Sweden. The basic national and regional frameworks for this are described in the previous sections. In the following a few examples are presented.

### Gothenburg

Each year, the municipality of Gothenburg makes contracts for about 7 billion SEK (0.8 billion EURO) with about 1000 suppliers.

In 1990 it was decided to include environmental demands in public purchasing. For this purpose, a unique strategic model (“The Gothenburg Model”) for green purchasing was developed, including four elements: Purchasing strategy, urban policy decisions, laws and regulations, and an environmental tool with three elements ([www.upphandlingsab.goteborg.se/](http://www.upphandlingsab.goteborg.se/)).

A main feature of the environmental tool is that companies responding to a tender must prepare an environmental product declaration (EPD) for each product or service.

Another feature of the tool is that reference groups are established. In the reference groups the users evaluate the functionality of the products in relation to the environmental demands. The actual suppliers of the products are attached to the reference groups in order to follow-up on the purchase and eventually make further development. Throughout the contract period purchasers, users and suppliers are supposed to initiate and complete projects that can improve the environmental performance.

Finally, the tool specifies that it must be secured that specified environmental considerations and properties are fulfilled. It has not been possible to find more detail on the actual procedure for this.

In practice, actual demands are specified by using the purchasers' own environmental competence, supported by the environmental department in Gothenburg. In order to disseminate environmental knowledge, co-operation between organisations and administrative bodies has been established, e.g. in the form of working groups, networks and informal contacts. The co-operation has resulted in development of general and product-specific environmental criteria, criteria for envi

ronmental evaluation of tenders, development of environmental management systems and specification of environmental demands in enterprises and buildings. It is, however, also stated that better environmental education is necessary if all possibilities in the tool are to be utilised.

### **Malmö**

The municipality of Malmö uses about 2 billion SEK each year for purchasing of goods and services. In the county of Skåne the municipalities (including Malmö) have agreed upon a common policy for environmental purchasing. Criteria have been developed for several product groups and services, e.g. cars, chemicals, furniture, textiles, paper, electronic office equipment, food, building materials, cleaning services and building enterprises. Besides meeting product specific requirements, all suppliers must be able to account for their internal and external environmental performance.

The co-operation of the municipalities in the county of Skåne is assumed to reduce the need for distribution of the purchased goods, which generally are "imported" from other Swedish counties. The municipality is however aware that it must be possible to buy locally produced and organic foods within the frames. The co-operation is also assumed to give lower prices, simply because larger volumes are being purchased at the same time.

More information on the environmental activities in Malmö can be found in the city's environmental program 1998-2002 ([www.miljo.malmo.se/pdf/miljwebb.pdf](http://www.miljo.malmo.se/pdf/miljwebb.pdf)).

### **Stockholm**

Technology procurement and joint procurement is used by the council for Local Investment Programmes to stimulate the market introduction and dissemination of environmentally adapted technology in Stockholm and other part of the county ([www.stockholm.se/lip/english/index.asp](http://www.stockholm.se/lip/english/index.asp)).

Technology procurement is assumed to accelerate the development and market introduction of new, environmentally adapted technology or environmental technology that still has to achieve a commercial breakthrough. The following product groups are examples of areas where technology procurement is applied: Solar cells, solar heating systems, demand-controlled ventilation, public outdoor lighting and concrete paving stones.

Joint procurement is supposed to increase the level of demand and bringing down the costs of existing environmentally adapted technology, through combined orders and other activities on the part of customers. Joint procurement comprises the following product groups: Windows, white goods and lighting in multiple-unit dwellings.

## Impact on environment and market

Many local authorities have the goal of accounting for the environmental impacts of the products and services they purchase. It has however only been possible to find a few accounts on the municipal level, i.e. regarding the total consumption/emissions from a particular municipality. The reason for this is that an adequate tool for accounting of environmental impacts on the product level does not exist.

The county of Västra Götaland conducted a survey on its municipalities and concluded that in order to be able to monitor the development from year to year for a municipality, an authority or a product group, a more precise tool was needed. The recommendation of the initiative was that the tool should be based on supplier information regarding the amount of green products and their value.

There is however no doubt that the Swedish industry is taking the challenge of production of greener products seriously. On the homepage [www.godaexempel.nu](http://www.godaexempel.nu) more than 50 Swedish industries have described their efforts regarding development cleaner production and greener products. It is not possible to link all efforts directly to demands from public purchasers, but the furniture industry provides a good example on how the TCO requirements can be handled in product development.

## Co-operation between public authorities and between different stakeholders

### The Delegation for Sustainable Technology (DST)

The Delegation for Sustainable Technology (DST, in Swedish “Miljöteknikdelegationen”) was formed by the Swedish Government in 1996 with the task to stimulate and facilitate introduction and purchasing of environmentally adapted products, processes and technology. The efforts of the Delegation are directed towards the demand side of the market and a large part of the work is – in co-operation with users and technicians – to formulate which demands on functionality new and environmentally adapted products should fulfil.

DST has used different tools for identification and visualisation of potential solutions for future users and customers. The most important are demand specifications and criteria lists, technology procurement, demonstration projects and competitions. There are no strict borders between the different tools.

The basic principle in technology procurement is to organise the small buyer’s requirements of future products. Here, DET is the link between purchasers and suppliers. DET identifies potential areas, products and purchasers where technology purchasing is viable. DET then forms a group of purchasers and helps them formulate (environmental) demands to a certain product. When this is done, tenders are invited at an international level. Until now, two projects have been initiated, fuel-flexible vehicles and IT-support for goods transportation companies. The work of the Delegation ended at the end of 2000 and is to a large extent summarised in the report “Work methods and tools 1996-1999” that can be downloaded from [http://miljoteknik.nutek.se/rapporter/Pm\\_2000\\_6.pdf](http://miljoteknik.nutek.se/rapporter/Pm_2000_6.pdf).

## Political outlook

The need for continuous work for integration of environmental demands in public procurement has been stressed many times, most recently in a statement from “Miljövårdsberedningen”, which is an Expert Committee referring to the Swedish Government (SOU 2001:20).

The Swedish work for environmentally adapted purchasing is currently being co-ordinated by the EKU-Delegation (see section 1.1.1). The EKU-Delegation acknowledges that governmental, regional and local organisations and institutions have a need for a policy for how to conduct the purchasing in order to achieve a sustainable development. The policy must be developed by the single organisation and of a nature that suits the goal and activities of the actual organisation. The environmental considerations should be seen in a larger perspective regarding different types of demands. The Committee suggests that the following issues are considered when establishing and implementing a policy:

- Demands in EU-regulations should be implemented in the policy, e.g. regarding purchase of products with the environmental label “The Flower” and purchase from suppliers with an EMAS-certification
- The management must endorse the efforts, e.g. through clear statements in the policy
- The suppliers should be aware of the policy
- It should be clear at all levels of the organisation how environmental demands are considered in purchasing – and who the actors are. The policy should therefore address the co-operation between different functions in the organisation like the purchasing and the environmental department

The uncertainty with respect to the legislative possibilities in the EU of integrating environmental demands in tendering is seen as one of the main barriers. The need for an interpretative document from the EU-Commission is stressed on all levels, ranging from purchasers on the local level to the State Secretary of the Environment. It is also very important to increase the possibilities for Green Procurement in the public procurement directives.

The analysis from the EKU-Delegation is described in detail in a report to the environmental department in the Swedish Government (Dnr 31/00, Nov. 18, 2000).

## Recent and on-going research

Sweden has for many years been a fore-runner regarding environmental initiatives at the product level. The country has a good international reputation in the area of Life Cycle Assessment, and is currently developing and introducing environmental product declarations as a tool for communication of environmental performance of products.

## Development and implementation of an Internet-based tool

A central initiative for public, green purchasing is the internet-tool that is described shortly in section 1.1.1. The tool should both secure that public purchasing contributes to a sustainable development and assist in product development that leads to goods and services for the public sector with better environmental properties. The tool will be based on Västernorrlandspåmen and the tool from the County Council Assembly with the following general specifications:

- The tool should be an aid/guideline in establishing environmental demands at a high level within the legal frames of public purchasing.
- The public organisations decides which environmental demands that are included in the tool, but it must be possible for producers, suppliers and environmental organisations to state their views regarding relevant and important questions in the tool.
- The continuous operation, updating and development of the tool should be integrated as far as possible in everyday purchasing routines.
- The tool should be free of charge and accessible for all. It should be suitable for direct use in public purchasing and all stakeholders should be able to access information on actual demands for specific product groups.

The specifications of the tool are described in more detail in a report from the EKV-Delegation to the Environmental Department in the Swedish Government (Dnr 34/00, Nov. 28, 2000).

# Conclusions

## Main Results of the Country Studies

There is no common approach to green purchasing in Europe yet, and even less on a world-wide level. But still, in spite of the lack of a common strategy for green purchasing, the different approaches show some similarities.

### Promotion of Green Purchasing by National Governments

Most of the green purchasing activities started in the beginning of the 1990s, some of them already in the 1980s. Recognising green procurement as an important instrument for sustainable development often coincided with the introduction of an eco-label system. In 1989, the Nordic Environmental Label “Nordic Swan” was introduced in the same year as the Japanese eco-labelling scheme. In Austria, the Federal Government started eco-labelling in 1991 with the “Umweltzeichen”, and a Dutch Eco-label Foundation (Stichting Milieukeur) was established in 1992. While green purchasing in Hungary is quite exceptional, an eco-labelling scheme was set up by the government in 1993. In the following years, green purchasing was increasingly taken into consideration by national and local governments, but also by private actors and non-governmental agencies.

The recent years saw the creation of a number of green purchasing institutions, like the Austrian Procurement Service (Beschaffungs Service Austria - BSA), which was installed in 1997 as an information centre for eco-friendly purchasing. In Sweden, a Commission for Ecologically Sustainable Procurement (EKU-Delegationen) was formed in 1998. The National Procurement Ltd. in Denmark has existed since 1994 and offers a commercial purchasing service to governmental and municipal institutions taking environmental issues into consideration. The Green Purchasing Network in Japan has been established in 1996 to promote green purchasing among consumers, companies and governmental organisations in Japan. It can be regarded as the largest of its kind, counting 2,350 members today, among them 340 local authorities.

During the 1990s, green purchasing issues found their way into numerous national and regional policies, programmes and legal instruments. Two approaches can be distinguished in general.

The first is to integrate an obligation for green purchasing into national law, be it the purchasing law or environmental law. Although tried at least in Germany and Austria, there is no case where this approach is reported to have been successful. This might be due to the lack of sanctions, but it is even more important to state that enforcement of such a requirement is virtually impossible.

The second approach was taken by Denmark and Japan. It consists in obliging public authorities to set up a green purchasing policy. Denmark adopted its “Action Plan for Sustainable Public Procurement Policy” in 1994. This action plan requires public authorities to contribute to environmental objectives via their purchasing activities and draw up a green procurement policy before 1996. However, by 1996, it became obvious that the so far achieved effects had been quite modest, and a number of new activities were initiated. The most important initi-

ative was the development of guidelines for environmental purchasing. Building-up of environmental competence with respect to green procurement is another measure that was taken. Subsidies are granted to those companies or institutions that do not have the resources to plan and implement a green purchasing policy. In 1998, 90% of the State institutions and governmental companies had set up such a policy and adopted an action plan.

In 1995, the Government of Japan adopted an “Action Plan for Greening of Government Organisations”, which requires all Ministries and governmental agencies to adopt their own policy. It provides a framework for the selection of ecological goods and supports institutional developments to implement the plan. This action plan was revised in 2000 and accompanied by a law requiring all national departments to monitor their policy by reporting on their purchasing share of a specific list of green products. Local authorities and companies were called for similar action.

### **Status of Green Purchasing Activities**

As in most countries no accounting system for green purchasing is available, there is little quantified information on the actual impact of green procurement on the environment and market. In general, green procurement has not been implemented to the extent originally expected, but activities are increasing and there are great expectations for the future. In Sweden, green purchasing scored points rather at the local than the national level. Although 90% of Danish governmental institutions had previously submitted their green purchase policies to the Danish EPA, only about half of all local and national public institutions today can present a written green purchasing policy, even though the governmental institutions are obliged to have one.

Many countries have chosen to implement green purchasing via guidelines. In Denmark, e.g., guidelines for about 50 product groups are available for free from the Danish EPA. In 1998, the Austrian Council of Ministers introduced guidelines for the federal administration. In Japan, guidelines of the Green Purchasing Network are a major source of information for purchasers. Support programmes also play a major role. A special Sustainable Procurement Programme was started in 1999 in the Netherlands, which has the objective to achieve direct environmental benefits, to influence the market by creating a demand for environmentally sound products, and to stimulate product innovation. It has been endorsed by all 13 ministries.

Another important instrument for the implementation of green purchasing are eco-labels, on which Canada, USA, Japan and Hungary largely base their decisions. However, as eco-labels only cover part of the relevant product groups, this approach is limited to mass consumer products like office equipment.

Going by the reliable information sources available, the impacts on environment and market vary significantly from country to country. Whereas in Hungary the impact is insignificant, countries like Denmark or Japan achieved very good results. For office materials and electronics, some Japanese local authorities state to have achieved a 100% green purchasing rate. Very good results have been documented by the U.S. Environmental Protection Agency (EPA) on their Energy

Star labelled products. After federal departments were committed several years ago by presidential order to purchase only Energy Star computers, virtually no personal computers without energy-saving technologies are produced anymore.

However, purchasing decisions are often driven by pecuniary reasons, and most purchasers still believe that environmental goods have to be more expensive than conventional ones.

Although different countries know legal obligations to implement green purchasing, no sanctions have been planned so far for cases of non-compliance with this obligation. Virtually no example could be found showing how compliance with the direct obligations to take environmental criteria into account is monitored. For the different programmes and action plans developed to formulate green purchasing policies, at least in Japan and Denmark a monitoring mechanism is in place that requests a justification for non-compliance, at least at a political level.

## **Future Developments**

The integration of environmental demands in public procurement will remain on the policy agenda of all researched countries in the coming years. Activities include capacity building, and the development of information tools and favourable framework conditions.

Even countries with currently little efforts to green public procurement provide encouraging conditions for future development. This is the case in Hungary, where a growing number of organisations deal with green procurement, and where business and public institutions show an increasing willingness to adopt environmentally friendly management practices.

As lack of information was identified in most cases as being a barrier to green purchasing, better possibilities for documentation on products and suppliers are considered as an essential tool for further implementation, especially in Denmark and Sweden. One of the main current activities in Sweden is the development of an Internet-based tool for green purchasing. Respective specifications have been published. In Denmark, there are activities going on as to integrating environmental issues into e-trade. Environmental purchasing guidelines are being updated and additional guidelines are being developed. In North America, a wide range of information has already been made available on the Internet, including catalogues with product criteria from ecolabels. Now, another step of promotion has been taken by arranging for particular events, training and networking facilities. Hungary makes use of an additional approach by developing a database of products and services provided by companies with certified environmental management systems.

Increasing attention is paid to the European policy and legal framework, as well as to the international context (WTO), although to a smaller extent. In Sweden, the prevailing uncertainties about the legislative possibilities in the EU for the integration of environmental demands in tendering is seen as one of the main barriers to green purchasing. The need for a clear framework is stressed on all levels, ranging from purchasers at the local level to the Secretary of State for the Environment. Sweden also considers it especially important to increa-

se the possibilities for green procurement in the European public procurement directives. In the Netherlands, the grown attention for European tendering has resulted in a stronger interest for the possibilities to include environmental specifications and selection criteria in open tendering procedures. In Austria, the Federal Chancellor is striving for creating a common procurement law. Currently, legislation differs between the federal ministries and the provinces.

Denmark and Sweden are the ones to drive on the development of an EU integrated product policy. Their governments are especially concerned about the potential conflict between freedom of trade and environmental considerations, and are pondering on how to combine the integrated product policy with EU regulations.

To sum it up, there is clear evidence of green purchasing being an emerging concept. Recognition for its potentials is spreading widely, opposition is fractional and concerns only details. This means, the political potential for a broad consensus on the concept is given. In most discussions, though, green purchasing still is considered to be a complementary tool. The insight that green purchasing is a powerful leverage to green the market place has not yet sunk in completely.

## Outlook

Local governments play an important role in the implementation of a sustainable development. In the last 10 years, achievements in this field have mainly been realised at the local level. This is also true for green purchasing. As local governments spend a considerable amount of money on purchasing goods and services, they can significantly influence the market with their purchasing power.

However, there is a great potential for sustainable production and consumption within green purchasing that has not been fully exploited yet. In order to achieve better results, a number of hurdles have to be overcome. One important factor is that there is still a lack of reliable data to calculate the environmental relief potential connected with green purchasing. The availability of sound data would provide decision makers with better arguments, thus paving the road to political engagement and commitment to green purchasing. This is where the RELIEF research project comes in. Both political commitment at the highest level and practical support for purchasers are necessary for a successful implementation of environmental friendly purchasing strategies. Once priorities are identified for the European market, the challenge will be to organise the purchasing power of public authorities in order to foster significant changes on the European market. Joining forces for large-scale tenders could well serve this goal, just like common European purchasing guidelines would.

As can be clearly seen in the survey conducted, it is not sufficient to have laws on green purchasing to guarantee their successful implementation. It proves to be much more useful to oblige departments to set up their own green purchasing policy and to monitor their achievements. In Denmark, already 50% of the governmental institutions have a written green purchasing policy (although all would be obliged to have one).

However, the legal uncertainties even at the European level are identified as one of the most significant hurdles. Consequently, removing

them would contribute to clarifying the legal situation and therefore can be considered as a more appropriate way to a successful implementation of green purchasing activities.

When it comes down to practice, the debate will always concentrate on feasibility. The most crucial points, in this context, are appropriate training, easily accessible information and networking for an experience exchange with others.

RELIEF will contribute to all four dimensions of challenges for green purchasing: reliable information, political support, legal clarity and networking.



## Annex

### List of scientific and local partners within the project and contact address

ICLEI European Secretariat  
Eco-Procurement Programme  
Eschholzstraße 86  
D-79115 Freiburg  
phone: +4976136892-0

Technische Universität Wien  
Institut für Finanzwissenschaft und  
Infrastrukturpolitik  
Karlgasse 11  
A-1040 Wien  
phone: +43 58 80 12 67 00

Vrije Universiteit Amsterdam  
Institute for Environmental Studies  
De Boelelaan 1115  
NL- 1081 HV Amsterdam  
phone: +31 20 444 95 55

dk-TEKNIK ENERGY & ENVIRONMENT  
15, Gladsaxe Mollevej  
DK- 2860 Soborg  
phone: +45 39 55 59 99

Interuniversitäres Forschungszentrum für Technik,  
Arbeit und Kultur (IFZ)  
Beschaffungs-Service Austria  
Schlögelgasse 2  
A- 8010 Graz  
phone: +43 316 81 39 09 0

Centre for Environmental Studies (CES)  
Angyal u. 15/b 4. Szoba  
H-1094 Budapest  
phone: +36 1 216 03 77

Technische Universität Dresden  
Lehrstuhl für Betriebswirtschaftslehre,  
betriebliche Umweltökonomie  
D- 01061 Dresden  
phone: +49 351 463 28 33

City of Kolding (Denmark)  
Environmental Department  
Teknisk Forvaltning  
Nyrtorv 11  
phone: +45 75 50 15 00

City of Miskolc (Hungary)  
Department of City Development and Information  
Varoshaz ter 8  
H- 3525 Miskolc  
phone: +36 46 348 911

City of Hamburg (Germany)  
Umweltbehörde  
Department for the Rational Use of Water and  
Energy  
Billstraße 84  
D- 20539 Hamburg  
phone: +49 40 42 845 0

City of Stuttgart (Germany)  
Amt für Umweltschutz  
Gaisburgstraße 4  
D-70182 Stuttgart  
phone: +49-711/216 7118

City of Malmö (Sweden)  
Department of Environmental and Public  
Health Protection  
Procurement Department  
Augustenborgsg. 26 A  
S- 20580 Malmö  
phone: +46 40 34 10 77

City of Zürich (Switzerland)  
Umwelt und Gesundheitsschutz Zürich (UGZ)  
Umweltschutzfachstelle  
Walchstraße 31  
Postfach  
CH- 8035 Zürich  
phone: +41 1 216 43 54

## List of BIG-Net participants sorted by countries as of November 2001

### **Albania**

Municipality of Kukës

### **Austria**

Umweltverband Vorarlberg

### **Bulgaria**

Municipality of Bourgas

### **Denmark**

Aarhus County

Kolding Kommune

Københavns kommune

Association of Local Authorities in Denmark

City of Odense

### **Finland**

City of Espoo

Efektia Ltd.

City of Helsinki

City of Pori

### **France**

Ville de Rouen

### **Germany**

Stadt Augsburg

Stadt Bottrop

Landeshauptstadt Hannover

Stadt Heidelberg

Kreis Bergstraße

Hansestadt Rostock

Gemeinde Uhdlingen-Mühlhofen

### **Greece**

Municipality of Amaroussion

### **Hungary**

Municipality of Miskolc

### **Italy**

Comune di Ferrara

Comune di Firenze

Envision S.r.l.

Netherlands

Gemeentewerken

### **Portugal**

Municipality of Almada

### **Spain**

Ayuntamiento de Almoradi

Ajuntament de Barcelona

Diputació de Barcelona

Ayuntamiento de Vitoria-Gasteiz

City of Reus

### **Sweden**

Göteborg Stad Upphandling AB

City of Malmö

City of Stockholm

### **Switzerland**

IGÖB-Interessengemeinschaft ökologische Beschaffung

### **Ukraine**

City of Kiev

City of Nikolae v

### **United Kingdom**

Kirklees Environment Unit

Suffolk County Council

Leicester City Council

Norwich City Council

St Helens Metropolitan Borough Council

A survey on green procurement practices has been carried out in 7 countries by the following scientific institutions:



• Austria: IFZ Procurement Service Austria (Graz)



• Denmark, Sweden: dk-TEKNIK Energy & Environment (Søborg)



• Hungary: CES, Centre for Environmental Studies (Budapest)



• Netherlands: IVM, Vrije Universiteit, Instituut voor Milieuvraagstukken (Amsterdam)



• North America, Japan: ICLEI European Eco-Procurement Programme (Freiburg)

Public purchasing is one of the environmentally most significant fields which comes under the direct responsibility of governments offering a huge, albeit unknown, environmental relief potential. Although public authorities have been developing »green« procurement practices for more than 20 years, no common strategy has yet been established and little is known about green purchasing practices in other countries. In order to assess the experiences in countries that are known for their green purchasing activities, scientific institutions have taken stock of green purchasing activities in the European forerunners Austria, Denmark, Netherlands and Sweden. In the light of the European Union enlargement process, a survey was also undertaken in Hungary. The picture is complemented by a feature on the leading international example Japan and the activities on the world's second largest internal market in North America.

The publication summarises the findings in these countries and compares the strategies chosen. Following this, recommendations are derived for further research and how these will be met by the RELIEF project. Furthermore, a number of conclusions for successful imitation of given experiences are drawn. This first international survey of independent research institutions and networks on green purchasing is a valuable information source for policy makers, researchers and practitioners in the countries covered – and in the countries following them.

