



LOCAL SUSTAINABILITY

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and The International Council for Local Environmental Initiatives (ICLEI)

The Kanton of Zürich, Switzerland:

Saving money and resources with ecological office materials Integration of environmental criteria in municipal procurement

Short Description

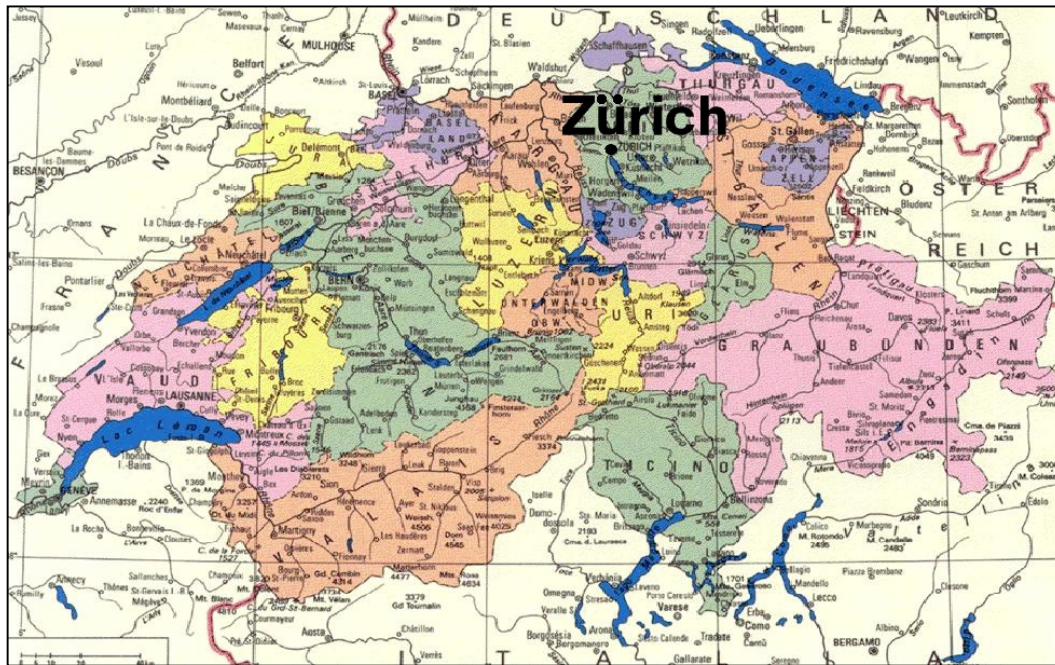
The city of Zurich introduced an environmental management system (EMS) in 1995 which is characterised by a central procurement system, department-specific consumption recording, integrated personnel training programmes and a subsequent efficiency review in the form of an ecological controlling system (ISO 14001).

Changing to recycled paper alone produced a cost reduction of EUR 125,000 per year as well as a reduction in the environmental impact of 41.5 t of CO₂, 1.56 GWh energy, 44.2 t of waste and 2,950 m³ wastewater. The expected ecological and economical savings potential resulting from the reduction in consumption cannot yet be estimated but it looks very promising indeed.

Introduction

The canton of Zurich is one of the most densely populated and developed regions in Switzerland: the developed areas, which are populated by approximately 1.2 million people, make up more than one fifth of the canton by now. Correspondingly the cantonal administration with more than 40,000 employees has taken on the dimensions of a large company. In order to cover various requirements such as training, health, safety etc., enormous flows of materials, energy and cash are triggered by the central administration and the cantonal offices (schools, hospitals, police, airport etc.). Each year the entire cantonal administration procures materials and services amounting to around CHF 1.2 billion. This corresponds to approx. 4% of the procurements of all public administration institutions in the whole of Switzerland. With such dimensions, any possible saving potentials through environment-friendly procurement become much more impressive, as shown in the example of the canton of Zurich.

Map



City profile: <ul style="list-style-type: none">• Number of residents: ~ 1.2 million• Area: 1,729 km²	Profile of the local economy: <ul style="list-style-type: none">• Financial services, commerce and hospitality	Environmental activities: <ul style="list-style-type: none">• Since 1991, project for ecological procurement EMS according to ISO 14001
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Background - Information and objectives

In 1991, the "Ecological procurement - Model behaviour by the public administration" project was initiated by the canton of Zurich. The main objectives are, on the one hand, to reduce material and energy consumption and, on the other hand, the cantonal administration, in its function as an enforcement agency, wants to set a good example to the municipalities and private companies. The idea is to gain more acceptance and credibility in enforcing environmental protection laws. At the same time the canton's more environmentally compatible behaviour can save quite a lot of money in such a large administration.

One good example is paper and office materials: as a rule these are perishable goods that are used each day by the individual employees in small quantities. This often gives rise to the impression that these products are completely unproblematic from an ecological point of view and that cost savings are virtually impossible. However, within the scope of the efficiency review in the cantonal administration in the area of "ecological office materials" considerable resource, environmental impact and cost reduction potentials were identified. For instance, in 1997 a complete changeover to environmentally compatible recycling photocopying paper saved around CHF 200,000 (EUR 125,000), 41.5 t of CO₂, 1.56 GWh energy, 44.2 t of waste and 2,950 m³ wastewater. Although the ecological and economical savings potential resulting from a reduction in consumption cannot yet be estimated, it should be considerably higher. Besides paper, the same applies to other office materials.

Environment-Friendly Procurement

Strategy

In order to integrate the most important procurement offices into the "ecological procurement" system, a project organisation was developed which consists of the expert committee, a committee of environment, administration, financial and information system specialists from various offices and the so-called sponsor groups. Important procurement offices are represented by the respective managers (e.g. central office material procurement office [cantonal central office for printed matter and material - KDMZ], janitor services). In addition, there are two large cantonal operations (airport management, university hospital). The tasks of ecological procurement are supported from a conceptional point of view in the expert committee. The sponsor groups cover the relevant procurement areas (offices, vehicles, janitor services, building construction and civil engineering) and implement the measures that have been decided on a functional level in their respective areas. The sponsor group "office", which is especially interesting for this case study, processes the areas of office materials and EDP. For instance, the group has so far attempted to introduce measures to:

- Reduce total paper consumption
- Encourage the use of recycled paper
- Minimise disposal costs
- Lower electricity consumption for photocopiers and EDP workplaces

In the first years, "ecological procurement" was mainly limited to individual activities. However, the need for more efficient ecological administrative action grew. Therefore, in 1995 the canton of Zurich began developing an environmental management system (EMS) with eco controlling (according to ISO 14001). This allowed the canton, as an operative unit, to develop in the direction of reducing the impact on the environment and resource preservation and to represent the successes in a clearly measurable manner. Parts of the EMS have already been implemented into operations.

Measures, Activities

- Communication with those involved plays a central role in the area of environmental protection in the office. Therefore the sponsor group "office" developed a special information concept. According to this, they should make their presence known at any available opportunity, be it in articles in the relevant newsletter, presentations at government offices and in leaflets. In the latest edition of the office material catalogue (printed on recycled paper) and in the KDMZ intranet an information system is planned that will emphasise the ecologically recommended articles and point to environmental problems caused by other articles. Products that are not just more favourable from an ecological point of view but also from an economic viewpoint will be clearly marked as such ("Prodoppelök" products, i.e. products with a double ecological and economic benefit).
- Office material warehouse stock is examined in respect of criteria such as whether they can be refilled, the concentration of dangerous substances or the concentration of organic solvents, disposal and energy consumption. It is planned to draw attention to these criteria by means of internal labelling.

- Since 1995 staff have had a revised training module in the area of "office ecology" at their disposal.
- Since 1997 an electronic printing plant allows printed matter to be created at KDMZ independent of the number of copies required (from one copy). This system of "printing on demand" saved the administration approx. CHF 100,000 in storage and disposal costs in the first year of operation. Savings in the region of CHF 200,000 were calculated for the subsequent years.
- The cantonal administration only uses photocopiers that are able to handle recycled paper without a problem. In addition, they must bear the energy 2000 label (see: www.energielabel.ch).

Partners

- IGÖB - the community of interests for ecological procurement - exchange of information, mutual projects
- The cantonal central office for printed matter and material (KDMZ): Central procurement office
- External consultants: e.g. for the development of the EMS

Legal Framework, Awarding Public Contracts

The legal framework for external tenders is covered by the contract awarding regulations (WTO contracts, domestic market law, cantonal submission law and ordinance). These should be designed to favour the ecology where possible. In Article 26, the cantonal submission ordinance determines a framework for reasons for exclusion, and in Article 31 criteria for awarding contracts:

Article 26: In particular, a tenderer will be excluded if he or she: f) does not comply with the stipulations in regard to environmental protection measures in the manufacture of the product comparable to those measures that are in force at the place of execution. ...

Article 31: The contract will be awarded to the most favourable economic tender. In the assessment, the price performance ratio should be taken into account. In addition to the price, the following criteria can be considered: quality, deadlines, economic efficiency, operating costs, customer service, ecology, convenience, technological value, aesthetics, creativity, apprentice training, infrastructure.

In addition, the ordinance concerning the cantonal central office for printed matter and material (KDMZ) stipulates that ecological as well as technological and economic viewpoints should play a central role in awarding contracts.

Within the administration two governmental resolutions (RRB) are central to the issue: RRB 2935/1991 regulates ecological procurement, while RRB 2043/1998 regulates material recycling in the central administration. Other RRBs regulate the reuse and disposal of computer articles that are no longer used.

The use of paper is regulated by instructions issued by the State Chancellery in 1992 concerning the use of recycled paper in the cantonal administration.

The ordinance from March 29, 1995 set up the cantonal central office for printed matter and material (KDMZ) as a central procurement and service office for the areas of printed matter, office material and paper products, reproduction and xerography, office machines and equipment. Their tasks include checking the requirements of the supply sources and assessing the orders according to technical, economic and ecological viewpoints. In addition, the office also takes back products that it has procured but that can no longer be used and disposes of these in a suitable fashion (Article 4 of the Ordinance).

- The KDMZ awards its contracts, which generally do not exceed a volume of CHF 50,000, in a discretionary process, as neither the GATT ordinance (threshold value CHF 400,000 for goods and services) nor the WTO regulations (threshold value of CHF 260,000 for goods and services) specify public tenders. In spite of this, the KDMZ regularly follows ecological criteria. For instance, the following rules apply to photocopiers:
- Photocopiers are not bought, instead all-in contracts are finalised and copies are paid for by volume; this reduces product consumption and helps save resources.
- Photocopiers must be able to handle recycled paper without any problem.
- In addition, they must comply with the standards of the Energy 2000 label.

Cash and Other Resources

Each year, approximately CHF 30,000 is spent on services provided by external consultants. Internally, around 1.5 person years are expended annually.

In the past, approx. CHF 10,000 was invested for the development of training modules.

The individual offices had to pay the actual costs of the courses, which were offered through the personnel department. The course "Office Ecology" is offered free of charge by the KDMZ. Also free of charge is a course offered by the personnel department for new employees in which such issues as "ecological procurement" are dealt with.

Results and Effects

- The cost saving potential for the entire administration by changing over to recycled paper is approx. CHF 200,000 per year. However, at the same time approx. 41.5 t of CO₂, 1.56 GWh energy, 44.2 t of waste and 2,950 m³ wastewater were saved in paper production (environmental company report, 1997). These figures include the costs associated with the product lifecycle, which do not directly affect the administration, but which are accrued downstream in the production process and which affect the overall costs.
- According to the KDMZ, paper consumption, especially in the categories of envelopes and notepads, has been considerably reduced (-10% and -12.6% respectively); however, as a whole there was a further increase in consumption from 1996 to 1997, particularly in the categories of copy paper (20.3 % and 31.6 % respectively). To counteract this tendency, the sponsor group "office" has, on the one hand, increased its general education measures (copying on both sides of the paper, circulation instead of duplication, etc.); besides this, from autumn 1999 a new EDP system will allow the KDMZ to record specific office consumption and then introduce special measures to reduce consumption in a more targeted manner.
- More than 80% of envelopes are made from recycled paper, while the average percentage of the total paper consumption in 1997 was still just below the 30% mark: The continuously rising target for copy paper was 41% for 1999
- Considerable savings potentials can be identified in other product groups apart from copy paper (e.g. toners for laser printers, refillable highlighters etc.), which could be achieved

over and above product selection through different behaviour from the people using the products in the office.

Limits and Conflicts

The reorganisation of the administration (project *wif!* = *wirkungsorientierte Verwaltungsführung* [*effect-oriented administration management*]) made the introduction of the EMS more difficult, as the associated decentralisation and outsourcing complicated the efficiency review. Therefore an attempt will be made to solve these problems by means of contracts between the offices etc. Borders are created where various government offices have to take over the respective parts of the lifecycle costs of a product, which means that the overall expense and savings potential are difficult to itemise. One example of this is are personal computers: The investment costs are borne by the office that uses the computer. The disposal costs (e.g. for the packaging) are posted to the account of the janitor service while the technical building equipment office in the building surveyor's office pays the costs for the electricity consumption.

The implementation of the "office" sponsor group's information concept sensitised many people working in the various offices and even their superiors to the requirements of an environmentally compatible deployment of office material. Still, some measures could fail due to the resistance of a few individuals. Therefore, education and persuasion will continue to be important measures.

Lessons Learned From the Project and Transferability

Within the scope of the canton's ecological procurement measures, emphasis was placed on the active participation of the people working there. The KDMZ itself ensures that it uses as much environment preserving office material as possible but it also has to take account of the requirements of its customers - the government offices. Because of this, the customers are offered "conventional" office material (e.g. total chlorine free copy paper) as well as the ecological alternatives (e.g. recycled copy paper). Thus, environmental information about the office material is decisive for the personnel, especially those people employed in the offices. Product information must be easily accessible, e.g. beside the photocopier, in the office material catalogue etc. With this approach, ecologically sensitised and cost conscious government offices have the possibility of choosing more environment friendly products.

Additional Information

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