

VILLE DE LUXEMBOURG, GRAND-DUCHÉ DE LUXEMBOURG

## Background

In 2007, the City of Luxembourg established an environmental action plan with the aim of creating a better and healthier environment for its citizens. The plan particularly focuses on limiting the use of pesticides and alkylated gasoline, limiting electromagnetic fields and using certified “organic” products. It also covers the use of low environmental impact cleaning products. The action plan, which is revised annually, outlines the City’s environmental objectives along with corresponding actions. In 2012, Luxembourg received the Corporate Health Award in the category “Work in healthy buildings”. The prize was awarded by the Ministry of Health of the Grand Duchy of Luxembourg.

## Procurement objectives

In 2013, the City of Luxembourg carried out an open tender for the Provision of Cleaning Products & Services for three of the City’s theatres. The procurement was prepared by a team made up of: two representatives from the city theatre, a lawyer and a member of the Environmental Protection Office. The latter has established environmental guidelines for cleaning services, which can then be adapted and used in all procurement procedures. The guidelines consist of detailed lists of environmental criteria, complemented by health criteria, which were defined in consultation with the Ministry of Health Luxembourg.

## Criteria used

Green criteria were taken into consideration at an early stage, as the City of Luxembourg requested the assistance of the Environmental Protection Office in the preparation of the technical specifications.

**Subject matter of the contract:** Cleaning Products and Services

**Selection criteria:** The City of Luxembourg requested that each bidder have:

- An environmental management certification such as EMAS, ISO14001 or other evidence of equivalent environmental management measures

**Technical specifications:**

The technical specifications included a list of substances such as flame retardants, Volatile Organic Compounds (VOCs) and phthalates, which were banned from being included in products offered by the tenderers. This list was based on guidelines established by Luxembourg’s Department of the Environment initiative “*SuperDrecksKescht*” and the Austrian environmental organisation “*Umweltberatung*”. Each bidder had to sign a declaration stating that their products did not contain any of these substances.

Additionally, the City also requested the following means of verification:

- A safety data sheet consistent with the REACH Regulation (EC) No 1907/2006. The winning company was also required to update the safety data sheets when the composition of any of their products changed.
- Products must comply with the Regulation No 1272/2008 as regards classification, labelling and packaging of substances and mixtures. The City specified that when such regulations are modified, supplemented, substituted or repealed by a new European regulation in this area, the requirements of the new regulations are to apply.
- Every bidder was requested to supply samples of each proposed cleaning product, so that tests could be carried out to ensure that they did not contain any of the banned substances.

**Award criteria:**

85 points were allocated to price, and 15 points to environmental criteria. Alongside those substances banned as part of technical specifications, a second list was used as part of the award criteria, which discouraged the use of certain substances. These included types of dyes, colorants, fragrances, bleach and acids. Points were therefore available to bidders offering products that did not contain these listed substances, or only contained a small proportion. The contract was to be awarded to the most economically advantageous tender based on the points awarded to price and environmental criteria.

### Contract performance clauses:

The winning company was required to supply samples of any new product introduced during the contract at least one month prior to using it. In order to ensure that the products continued to meet the established criteria, the City reserved the right to randomly test any of the cleaning products at any stage of the contract. This involved carrying out a detailed analysis to access their chemical composition. The company was obliged to provide an alternative product, should the City not be satisfied that the product being used was compliant with the tender requirements as a result of this analysis. Under the contract, should the City discover that the winning company was using a banned substance, the company would then be fined €1,500 for the first offence, €3,000 for the second and €6,000 for the third, at which stage the City was also entitled to cancel the contract.

## Results

Four companies submitted bids, and a contract with an annual value of €300,000 was awarded to the winning bidder. The contract duration is two years with the possibility of extension. The City continues to use these technical specifications for other tenders as the market has demonstrated that it is developed enough to meet demand. The City felt that from the beginning, due to the large number of public buildings in Luxembourg (approximately 200), the market adjusted quickly in order to be able to meet the City's requirements.

By devising environmental guidelines and using these to develop technical specifications that banned certain harmful substances and award criteria to reduce the use of others; the City was able to create a healthier environment for both its employees and citizens.

## Environmental impacts

An important environmental impact associated with cleaning products and services relates to the hazardous or harmful substances that may be present in certain cleaning products. Prior to establishing its action plan, the City of Luxembourg carried out an analysis on the main cleaning products it used, which showed that only 15% of these products were free from harmful substances and 52% of products tested contained a combination of at least three such substances. The exclusion of hazardous substances reduces the impacts on:

- air quality and ozone formation
- aquatic organisms and humans through exposure caused by bioaccumulation in the food chain
- water quality
- human health following chronic exposure to harmful substances (allergies, respiratory problems, damage to the nervous system)

As well as avoiding certain substances, it is also important to ensure that appropriate dosages of cleaning products are used, or to consider alternative cleaning techniques, which do not require the use of chemical substances. A reduction in substance use will also reduce the environmental impact from resource, energy and water consumption over the manufacturing lifecycle.

## Lessons learned

- The City of Luxembourg recognised that requesting a sample of each proposed cleaning product was essential, as the statements provided by companies often proved to be incomplete and/or unreliable.
- Spontaneous checks during the execution of the contract also ensured that the winning company continued to use the proposed products throughout the duration of contract. The fact that penalties were applied and immediate compliance was required when violations were found, gave the winning company further incentives to adhere to the contract.
- The City established that cleaning products represented only 3-8% of total contract value. The possible additional cost of purchasing products with a lower environmental impact as opposed to traditional products therefore proved to be marginal.