

The engagement of the largest Swiss retailer in battery recycling

Peter Bär

Migros-Genossenschafts-Bund, Abteilung Energie und Umwelt, Logistic TA, Limmatstrasse 152, Zurich, Switzerland

Abstract

The actions undertaken by Migros, a retail enterprise in Switzerland, for the promotion of environmental protection, are described in the case of the collection of spent household batteries.

Keywords: Recycling; Spent batteries; Switzerland; Retail enterprise

1. Introduction

Migros is primarily a retail enterprise. The retail business is governed by 12 regional cooperatives which together operate 568 stores and 80 mobile shops. They sell a more or less complete range of food and non-food articles, according to the size of store. In 200 stores one will find also a restaurant. The Federation of Migros Cooperatives (FMC) is responsible, among others, for the procurement of goods. This Federation is in the hands of the 12 cooperatives.

2. Environmental protection

In keeping with its social responsibility, one of the aims of Migros is to set up its activity as environmentally compatible as possible, and regards environmental protection as part of a complete concept. Responsible action at the same time includes the whole value-added chain from the procurement market to the disposal. The Migros founder himself, Gottlieb Duttweiler, had already specified that: (i) we want to set an example in the saving of natural resources, and (ii) we support effective measures designed to ease the environmental burden.

Thus, environmental protection at Migros has a long tradition. Many individual schemes and ideas for rationing energy in individual business sectors had already been implemented when, in 1985, it was decided to establish an all-embracing model. A team made up of people from the various sectors of the Migros Community drew up the Migros environment protection model, which was approved by the decision-making bodies at the end of 1985. The Migros environment policy has since been revised every five years.

3. Promoting the collection of domestic batteries

At the initiative of the competent product manager in the FMC, the collection of mercury batteries (button cells) in the stores started as early as 1983. Realizing that the total quantity of mercury from the normal types of batteries used in the households is far greater, the product manager encouraged the collection of all types of batteries in domestic use. In 1984, i.e. two years before the taking-back of old batteries became a regulation under the 1986 Materials Act, Migros introduced, on a national scale, the free taking-back of batteries. A special cardboard container was designed for this purpose which was placed in the stores in the customer-service sector.

4. Disposal of batteries

The collected batteries were initially dumped at special landfills in Kölliken, Switzerland, in accordance with the facilities at the time. After this dump has been closed in 1985, the only remaining possibility of disposal involved exportation to a foreign landfill site.

This way of disposal became ecologically and morally less and less defensible as time was going on. Migros was therefore in favour of an independent Swiss battery disposal. In order to reach an ecologically satisfactory solution, the recycling of batteries had to be taken into consideration.

In line with the principles of the Migros environment model and on behalf of the Federal Office of Environment, Forests and Landscape (BUWAL), engineers of the FMC together with the Swiss Federal Institute of Technology, in Zürich, examined, from 1986 to 1988, various approaches to solve the problem. During a study trip in Japan, the attention

of representatives of the FMC Planning and Logistics Department at the time was drawn to a pilot installation of Sumitomo Heavy Industries. This technology seemed to augur well for battery recycling.

However, it was also clear that the construction and operation of an area-wide waste disposal plant could not be charged to Migros alone. Therefore, in 1989, a small group headed by the FMC, BUWAL and the City of Zurich, set up the company Batreco AG, which subsequently started its production in autumn 1992. It has since then greatly expanded its shareholders.

5. Battery collection logistics at Migros

The afore-mentioned cardboard containers for spent batteries are displayed in every Migros store in the customer service or packing table area. In addition to this, various cooperatives had introduced their own, visually more attractive containers in which the cardboard boxes are 'hidden'. The full collecting cartons are transported with the returns from the store supplies (e.g. deposit bottles, empty returnable packages and containers, separately collected waste) to the

distribution centres, the logistics centres of the cooperatives. The cartons are palletized in the distribution centres. The fully loaded pallets are transported by rail to the Migros Distribution Centre Neuendorf, the central storehouse and distribution firm for non-food products. Here the pallets are stored temporarily and then transported by rail wagon to the recycling plant.

6. Present situation

Only just over half of the domestic batteries sold in Switzerland are brought back by the consumers to roughly 8000 collecting points. The rest unfortunately still ends up in rubbish bins. This situation is unsatisfactory, even if the range of Migros batteries for instance is free from mercury and cadmium. It is important to increase the proportion of the collected batteries and to inform the public accordingly by more efficient communication means.

Migros informs the consumers by marking the products (text reference and recycling symbol) and providing brochures, advertisements and various articles in the in-house press about problems of battery disposal, and thus motivates them to bring back the batteries.