Battery recycling switzerland



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The law distinguishes between portable, automotive and industrial batteries. Accumulators, also known as secondary or rechargeable batteries, are also a type of battery. All types of batteries are classified as special waste and must be disposed of separately.

Portable batteries are very common and used in numerous electrical and electronic devices which are operated independently of mains electricity. Automotive batteries are used to power vehicle starters, lights and ignition systems. Industrial batteries are used for a variety of industrial and commercial purposes. This category includes batteries for electric vehicles and all batteries that are not included in the other two categories.

In recent years, lithium-ion batteries, which are rechargeable, have become much more common in all three categories. With high energy density, long life and low self-discharge, these batteries can be used in a wide range of applications - from smartphones and laptops to electric bikes, scooters and cars. They are also increasingly being used as stationary storage devices, for example to store the electricity generated by photovoltaic systems.

Batteries contain valuable raw materials such as lead, iron, cobalt, graphite, copper, aluminium, lithium, nickel, manganese and zinc. Thanks to very strict regulations, harmful heavy metals such as cadmium and mercury are only present in trace amounts. Extracting raw materials from natural deposits is harmful to the environment. When consumers recycle their old batteries, many of the raw materials remain in closed material and energy cycles, reducing the need to extract new raw materials. This is in line with circular economy principles.

Solar-powered devices, mains-powered devices and rechargeable batteries are alternatives to disposable batteries. Using rechargeable batteries in devices that consume a lot of power (e.g. smartphones, laptops, power tools or digital cameras) makes economic and environmental sense. While it is also possible to use them in devices that consume very little power (e.g. remote controls, computer mice or alarm clocks), this is rarely worthwhile. A disposable battery will typically last for months or even years in these devices.

Consumers are required to return used batteries to a point of sale or collection site. There are more than 11,000 collection sites throughout Switzerland. Unfortunately, some batteries are still thrown away with household waste. Valuable raw materials are lost as a result. Incorrectly disposed lithium-ion batteries can also cause fires in waste collection vehicles, recycling plants or collection sites. Proper handling of lithium-ion batteries can prevent fires and the associated costs.

Since the early 1990s, portable batteries have been recycled in Switzerland by BATREC Industrie AG. The recycling plant recovers iron, manganese, zinc and mercury and converts pollutants into a harmless form. At the end of 2023, BATREC commissioned a plant for recycling lithium-ion batteries in order to be able to

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handle the increasing volume of returned batteries in a sustainable way. Nickel-cadmium and lead batteries are not treated by BATREC, but are sorted out and sent to specialised companies, mostly based abroad, for recycling.

Lead, plastics and battery acid are recovered from automotive batteries and various metals, depending on the type, are recovered from industrial batteries. Licensed waste management companies collect automotive and industrial batteries and export them abroad for recycling. Only exports to OECD and EU states are permitted. The FOEN only issues export licences if the foreign recycler meets Swiss standards.

A prepaid disposal fee covers the costs of collection, transport and material recovery of the used batteries. The prepaid disposal fee is included in the purchase price. It is set by the federal authorities based on the type and weight of the battery.

INOBAT collects, manages and uses the prepaid disposal fee on behalf of the FOEN. INOBAT also uses the revenue from this fee to fund awareness-raising campaigns such as the Battery Man campaign to promote the return of batteries. It is also the registration office for all batteries that are placed on the Swiss market.

The law allows for certain types of batteries to be exempted from the prepaid disposal fee. The precondition for this is that the sector maintains an effective collection system and secure financing system with a very high return rate, as well as state-of-the-art recycling methods.

Lead-acid vehicle batteries used for vehicle starters, lights or ignition systems may also be exempt from the prepaid disposal fee. For lead-acid batteries, the proceeds from selling the recovered materials cover all disposal costs.

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Web: https://hollanddutchtours.nl/contact-us/ Email: energystorage2000@gmail.com WhatsApp: 8613816583346

