Annual Report ECOBAT 2020







The take-back system for batteries and accumulators has operated in the Czech Republic for more than 18 years

The organisational, financial and awareness activities are implemented by the ECOBAT collective system, a non-profit limited liability company.

The company was established by the leading battery producers: Bateria Slaný CZ, s. r. o., EMOS spol. s r.o. (GP Batteries), Energizer Czech, spol. s r. o., Panasonic Energy Europe N.V., and VARTA Consumer Czech spol. s r.o.

ECOBAT has operated the collective system for the take-back of portable batteries and accumulators based on the authorisation granted by the Ministry of the Environment in 2009. Through the Czech Association of Portable Battery Producers, ECOBAT has joined the activities of the Czech Circular Economy Association. It is a member of the European association of national collection schemes for batteries (EUCOBAT), which currently represents 20 major collective battery and accumulator take-back systems from 17 European countries.

The year in figures



1,766 t

Weight of batteries collected within the network of the ECOBAT collective system (take-back)



45.1%

Take-back rate (percentage of batteries returned for recycling from the total yearly amount of batteries sold)



25,711

Number of collection points where used batteries can be returned for recycling; 21,310 of these points are public



1,138

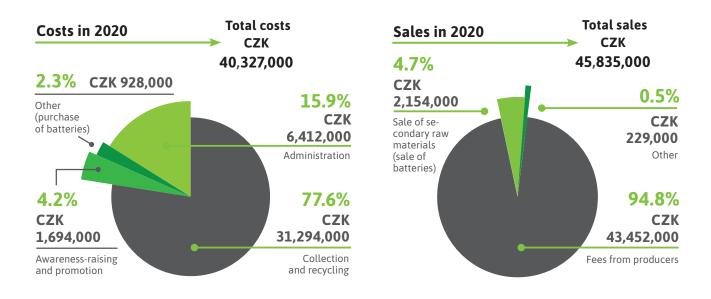
Number of producers that trust the ECOBAT collective system



Company performance

CZK 5,508,000

In 2020, ECOBAT reported a profit of CZK 5,508,000, which accounts for 12.0% of its total turnover





Word of the Managing Director

In 2020, the company reported a record-breaking net profit amounting to CZK 5.508 mil. Paradoxically, this was due to poor estimates of the impact of the coronavirus epidemic on the economy. Instead of an expected retail decline, we witnessed a significant boom in the sale of batteries and electrical appliances, which led to a growth in our sales.

As in the previous years, the generated profit was not distributed among the shareholders. The funds available will be soon invested primarily into precautions to increase safety in handling lithium batteries. Furthermore, ECOBAT established a sound base for a financial reserve to cover any future costs and risks related to fulfilment of obligations based on the new Act No. 542/2020 Coll., on end-of-life products.

RNDr. Petr Kratochvíl, Managing Director, ECOBAT s.r.o

Producers and importers



Battery producers and importers participated in the ECOBAT collective system in 2020

The number of producers cooperating with the ECOBAT collective system increased by 3% year-on-year.



72 Industrial6 Automotive

Take-back and responsibility of producers (and importers)

Batteries and accumulators are products for which the principle of producer responsibility throughout entire life cycle has been introduced in the Czech Republic; the principle is called "product take-back". Producers have therefore established the ECOBAT collective system to fulfil legal obligations on their behalf.

Activities of the ECOBAT collective system

To ensure effectiveness of the battery and accumulator take-back system, ECOBAT communicates with virtually all stakeholders from marketing of the product to final processing in the recycling plants.

Overview of activities

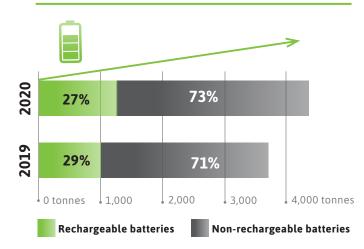
- Communication and management of contractual relationships with producers;
- Assistance to system partners in terms of registration, equipment and operation;
- Professional counselling and surveys;
- · Awareness-raising and research;
- Enhancing collection safety;
- Fulfilment of collection quotas and legal obligations.



Less Each Czech citizen bought on average 18 batteries, including 11 non-rechargeable batteries, 5 rechargeable batteries and 2 button cells

A record-breaking amount of 170 million batteries was sold in the Czech Republic in 2020.

Rechargeable vs. non-rechargeable batteries



Batteries can be found everywhere



Based on data from producers and vendors,

the amount of batteries put into circulation increased by 15% year-on-year.



Regular batteries were increasingly used in electric toys, remote controls and other home appliances.





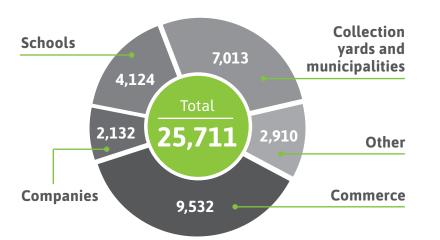
Electromobility has become a trend across the whole portfolio – e-scooters, e-bikes, electric motorcycles, electric vehicles.

Take-back

25,711

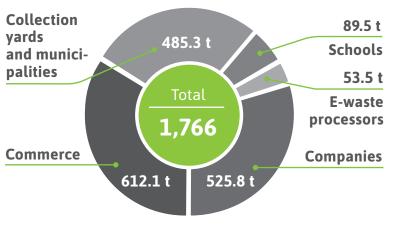
Waste batteries can be easily returned for recycling free-of-charge at any of our 25,711 collection points. 21,310 of these points are public

Structure of take-back points of the ECOBAT collective system



Take-back in 2020 as per collection channels

Take-back (in tonnes)





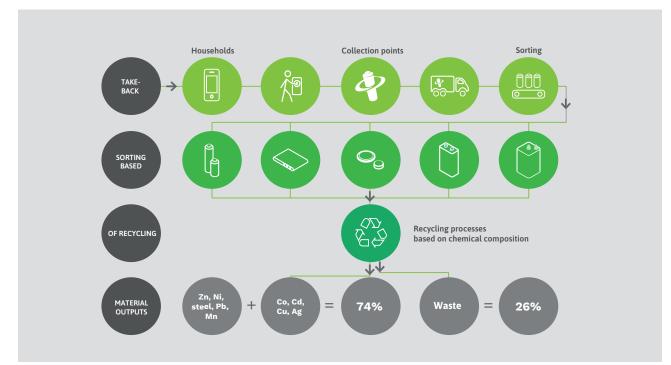
The number of collection points increased by 11% year-on--year. Thanks to participation of TESLA BATTERIES, since mid-2020 people can also return their waste batteries in more than 3,500 Czech Post branches.

In late 2020, the collective system network already covered 64.1% of the territory of the Czech Republic (municipalities). The smallest municipality in which ECOBAT provided a collection point for local residents had only 25 inhabitants (Bludov, dictrict of Kutná Hora).

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The highest amount of batteries was collected in stores (retail and wholesale). Moreover, battery collection in this segment rose by 6% year-on-year.

Battery life cycle



From take-back to materials

What do we do with sorted batteries?

From collection points, batteries are taken to a sorting line. Semi-automatic battery sorting process is used. Button cell batteries are removed first, which is followed by manual sorting of batteries based on their chemical composition. Sorted batteries are then packed and stored according to their safety-risk degree. Then they are transported to facilities ensuring further processing, either in the Czech Republic or abroad, most often in Germany or Poland. When their life comes to an end, only approximately 45% of all batteries marketed in the Czech Republic are handed back for recycling. As a result, the opportunity to provide for their efficient recycling is wasted for over 2,000 tonnes of batteries. More precisely, the amount is 2,500 tonnes or almost 76,500,000 battery units!

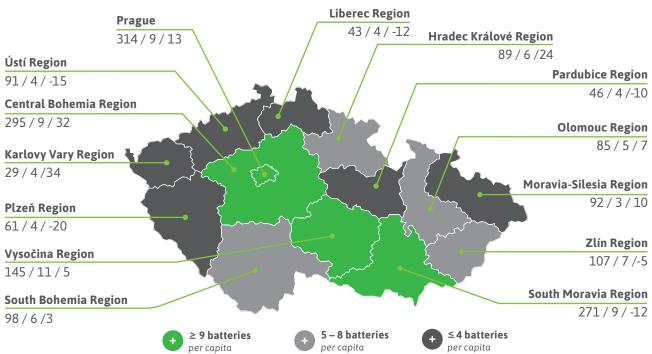
We are able to recover at least 74 kg of noble metals or their alloys from 100 kg of



batteries. From AA batteries, we recover mainly iron and manganese. From other types of batteries, it is cobalt, nickel, copper and silver. By re-using batteries, we protect nature against unnecessary exploitation of mineral resources.

Take-back in the regions

In 2020, every inhabitant of the Czech Republic sorted seven AA batteries on the average. The most active sorters were inhabitants of the Vysočina Region with 11 batteries per capita



Region

Take back (in tonnes) / No. of batteries (AA type) per capita / Y-o-y development (%)

In 2020, the Vysočina Region was the most successful collector of all regions. Every inhabitant sorted approximately 11 AA batteries. It was followed by the Capital City of Prague, South Moravia and Central Bohemia with nine batteries per capita. The opposite end ofthe scale featured the Pardubice and Moravia-Silesia regions with four and three batteries sorted per capita, respectively.

In 2020, people brought over 1,776 tonnes of batteries to the ECOBAT collection network in the Czech Republic. It is approximately ten times the weight of the Petřín Lookout Tower's metal structure.

Awareness-raising projects

Baterkománie in the Moravia-Silesia Region

ECOBAT actively cooperates with regional, city and municipal authorities. In addition to other projects, it organises Baterkománie (Battery Mania), which combines – in a non-traditional way – charity, competition among towns, and battery collection in regions.

In 2020, Baterkománie took place in the Moravia-Silesia Region in cooperation with the respective Regional Authority. The total of 9,882 kg of batteries was collected in 22 towns during the campaign. According to the competition rules, the organisers donated CZK 10 for each kilogramme of collected batteries to charitable projects. Their financial contribution was divided among three projects: CZK 50,000 for neurorehabilitation of little Eliška from Frenštát pod Radhoštěm, who has experienced effects of polio from her birth; CZK 30,000 for purchase of adjustable beds for St. Elizabeth Nursing Home in Jablunkov; and CZK 20,000 for construction of a gazebo in the Horní Benešov kindergarten. Apart from that, the organisers donated another CZK 15,000 to 9-year old Ondřej from Opava to purchase a rehabilitation aid.



Recyklojízda ranked first at LEMUR 2020

The highlight of the Recyklojízda (Recycling Tour) project, organised by ECOBAT in 2017–2019, was the LEMUR annual award presented to the best PR projects. Recyklojízda ranked first in the category of State Administration, Politics and Non-governmental Sector. Its purpose was to promote battery collection in Czech, Moravian and Silesian regions and cultivate relations with representatives of towns and municipalities, to thank those who dutifully return batteries for recycling and to win over those who have not done so yet. In three years, a team of cyclists on e-bikes visited 72 towns, travelled 2,400 km and collected 7.5 tonnes of batteries



Awareness-raising projects

Recyklohraní

For as long as 13 years, ECOBAT financially supports the Recyklohraní aneb Ukliďme si svět (Recycle with Fun to Clean Up the World) awareness-raising programme for schools. In late 2020, the project included almost 3,800 schools from all over the Czech Republic. As a project partner, ECOBAT engages in awareness-raising activities in kindergartens, primary and secondary schools to improve the children's knowledge about the battery life cycle. For example, pupils and students held a challenge aimed at development of improving proposals in the sphere of recycling. At the same time, the schools could participate in battery collection. In 2020, they returned 87.3 tonnes of waste batteries that were subsequently recycled with a yield of at least 56.7 tonnes of metallic secondary raw materials.



Think ECO, say CHEESE :-)

The main ambition of the ECOCHEESE project is to make life of those sorting batteries at home easier. Anyone interested can order an ECOCHEESE sorting box with attractive design for free. At home, they can use it to store waste batteries before taking them to a collection point. In order to develop cooperation with towns and municipalities, ECOBAT also distributes ECOCHEESE boxes to town and municipal authorities. They are then distributed among residents to encourage sorting.

In almost 10 years of the project's existence, ECOBAT has already distributed hundreds of thousands of boxes in this way. The project has its own website: www.ecocheese.cz and a FB profile.



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