

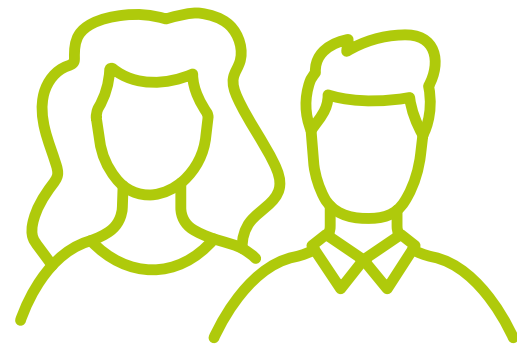


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Basic figures



4,868

Participants



3,907 tonnes

Collected weight



25,111

Collection points



26,730

Collections



60.3%

Collection rate



>90%

Collection efficiency



2023 by the numbers

Recycling together, better for all of us

Our new baseline says it all: recycling batteries is not only better for nature, but for all of us. Thanks to our national campaign – with a new battery icon – we have managed to focus on all batteries, visible or non-visible, as we want to collect and recycle all of them.

Collection results to be proud of

Thanks to everyone's efforts, we are proud to have collected 3,907 tonnes of used batteries in 2023: an increase of 5% as compared to 2022. A lot of schools participated in our successful campaigns, which included a chance to win recycled benches and playground furniture made from our own waste plastic collection barrels. Together we made more than 100 playgrounds in Belgium more sustainable.

Creating awareness

Our efforts have raised awareness about battery collection. A good measure is the number of participants to our system: over a period of 10 years, their number has tripled to 4,868 participants. This increase also highlights how fast the battery sector is evolving.

European legislation

Thanks to our efficient collection system, we achieved a collection rate of 60.3% in 2023. Belgium is already the country closest to the EU target for 2027 (63%), which makes us confident that we can meet this future collection target. However, the European collection target for 2030 of 73% is not realistic, according to Bebat. This is because the calculation method does not consider the longer lifecycle of lithium-ion batteries that are now entering the market in vast numbers. Nor does it consider that these batteries are often built into appliances and exported or reused. Together with compliance organisations in other member states, Bebat is working on a calculation method based on the real life of these batteries – which is much longer. Only then will the European collection target accurately reflect the changing battery market.

Ready for the future

As the collection channels for lithium-ion batteries can be very different from traditional ones, we will continue to push for innovation and creativity to increase the collection and recycling of these batteries in 2024. We also continue to innovate and carry out pioneering work elsewhere. In the coming years, for instance, we will use AI to sort batteries, for optimal recognition and recycling of the important raw materials. We will continue to improve and expand our smart collection drums and will go live with our new software mid-2024; this will help collection points and participants interact more easily with Bebat.

We are incredibly proud of what Bebat achieved in 2023 and look forward with confidence to the challenges the future holds.



Peter Coonen
Managing Director



Yves Van Doren
Chairman of the Board of Directors



Mission

- At Bebat we work for a better environment by collecting ever more used batteries and recycling them ever better.
- We make the collection and recycling process as easy, safe and efficient as possible.
- We stimulate sustainable use, collection and recycling through a wide-ranging and transparent communication strategy.



Organisation

Bebat is a non-profit organisation (NPO) established in 1995 by the battery manufacturers to enable companies to meet the take-back obligation.

Bebat gives a new life to used batteries and ranks among the world leaders in the collection of used batteries. At our more than 24,000 collection points, used batteries can be handed in easily and free of charge. Bebat organises their collection as well as the sorting and recycling.

The Bebat management board is formed by representatives of the following companies, organisations and government authorities:

Observers

- DSD (Département du Sol et des Déchets)
- Bruxelles Environnement – Leefmilieu Brussel
- The OVAM (Openbare Vlaamse Afvalstoffenmaatschappij)
- COMEOS
- TECHLINK
- TRAXIO

Members

- Commission Automotive
- Duracell
- Advanced Power Solutions
- Varta
- Commission Home Batteries



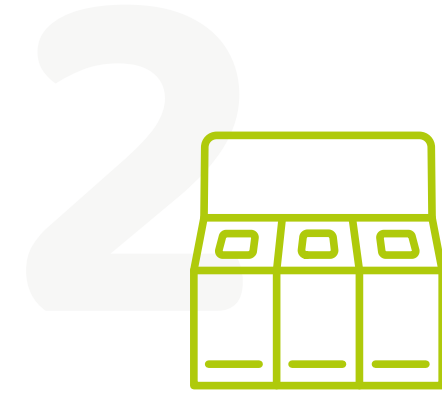
Participants

What does Bebat do for its participants?



Report

Registering and reporting the number of batteries put on the market.



Collection network

Organising and maintaining a nationwide collection network.



Raise awareness

Raising consumer awareness and taking preventive actions.



Collection objective

Reaching the legal collection targets.



Reporting weight

Reporting the collected weight.



Recycling correctly

Recycling the collected batteries in the appropriate manner.



Recycling efficiencies

Achieving and reporting on the legal recycling rates.

Total number of participants

PARTICIPANTS

4,868

4,591
2022

4,090
2021



4,868 participants? That's a tripling of the number of participants over 10 years.



Number of participants with an annual declaration

3,109

2021

3,294

2022

3,445

2023



Number of participants with a monthly declaration

981

2021

1,297

2022

1,423

2023



Number of participants to only put separate batteries on the market

1,080

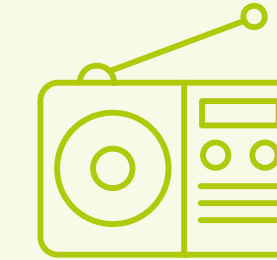
2021

1,294

2022

1,402

2023



Number of participants to only put batteries on the market that are installed in a device

1,696

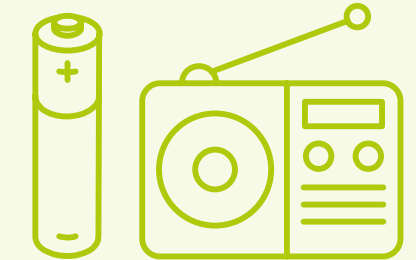
2021

1,847

2022

1,941

2023



Number of participants to put on the market both separate batteries and batteries installed in a device on the market

1,314

2021

1,450

2022

1,526

2023



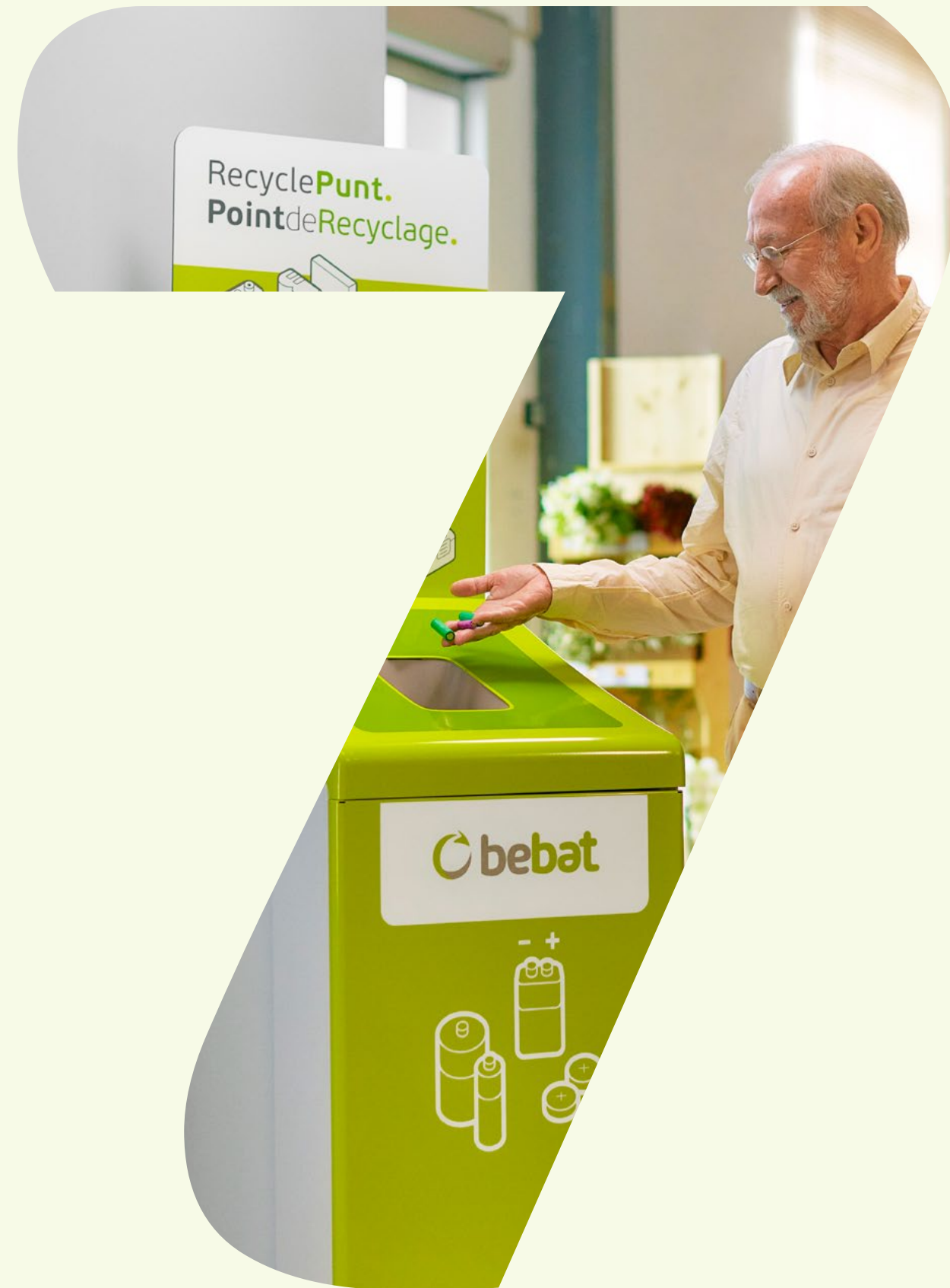
On average,
that's 4 audits
per day.

Audits

Bebat helps its participants meet all legal obligations. We try to make the process as simple as possible and to communicate in a transparent manner.

The audits are key in ensuring that all participants make a fair contribution to the Bebat system. Participants are audited at least once every 3 years.

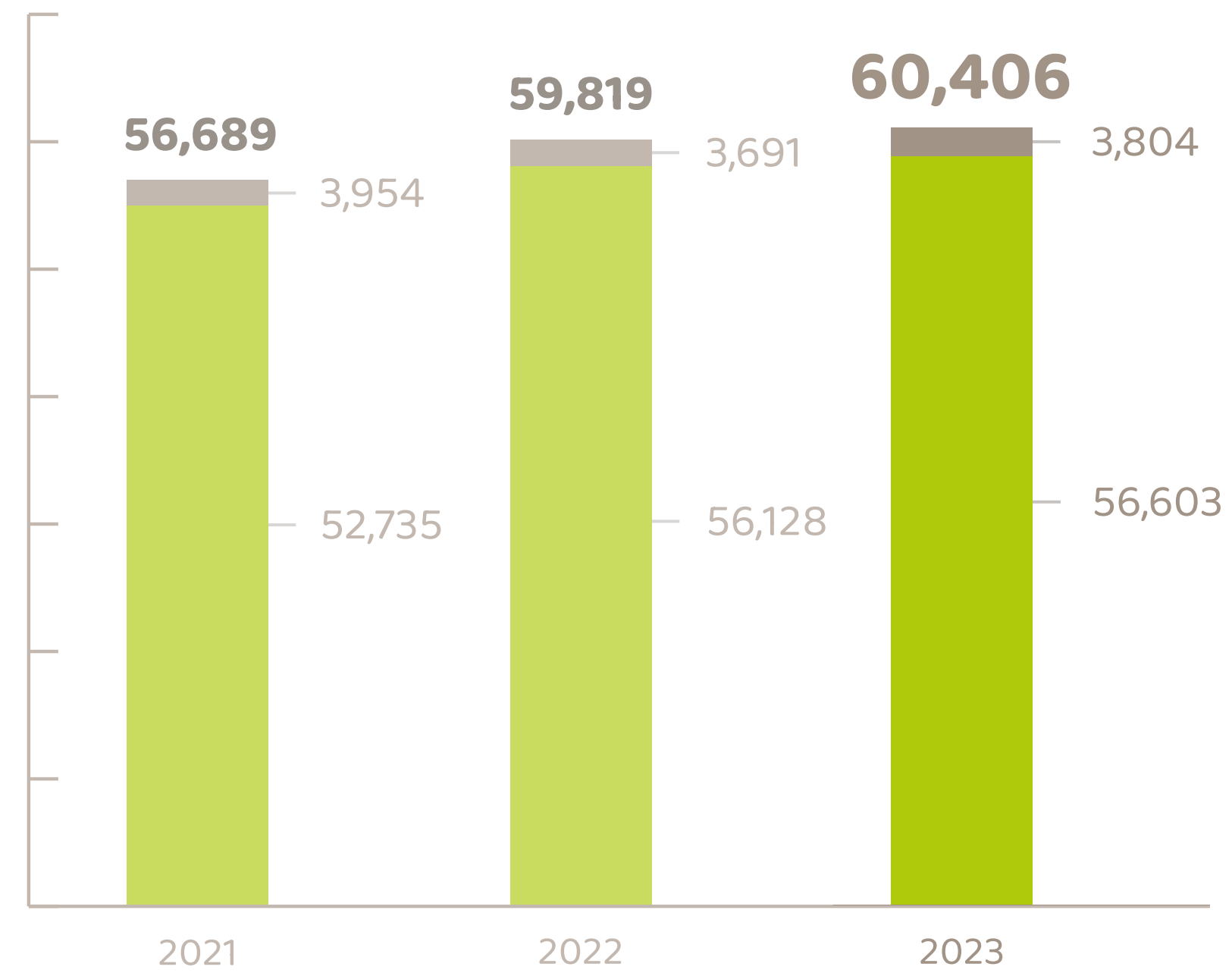
Full audits	232
Online audits	1,283
TOTAL	1,515



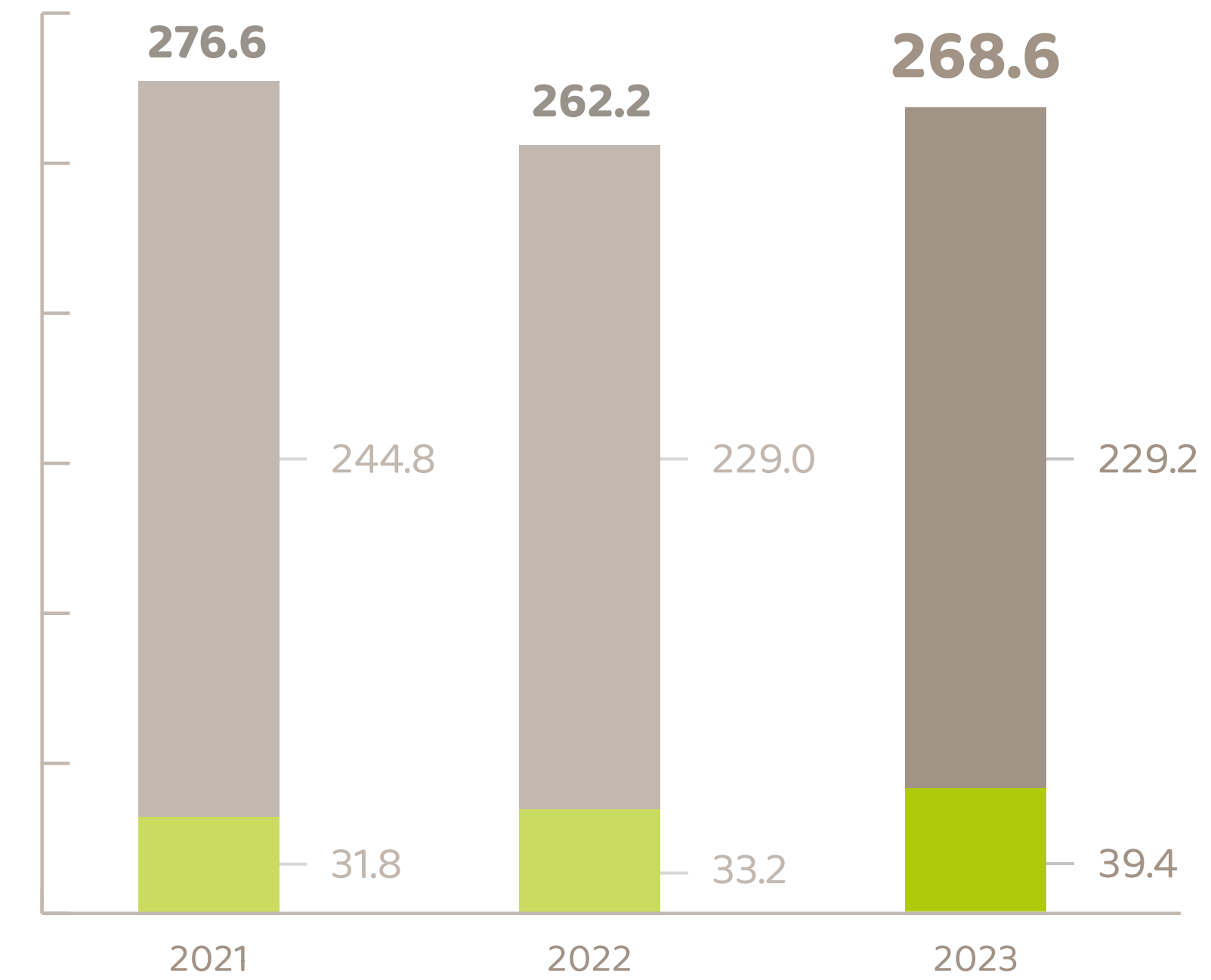
Batteries put on the market

Built-in versus replacement market

Weight (in tonnes)*



Numbers (in millions)*

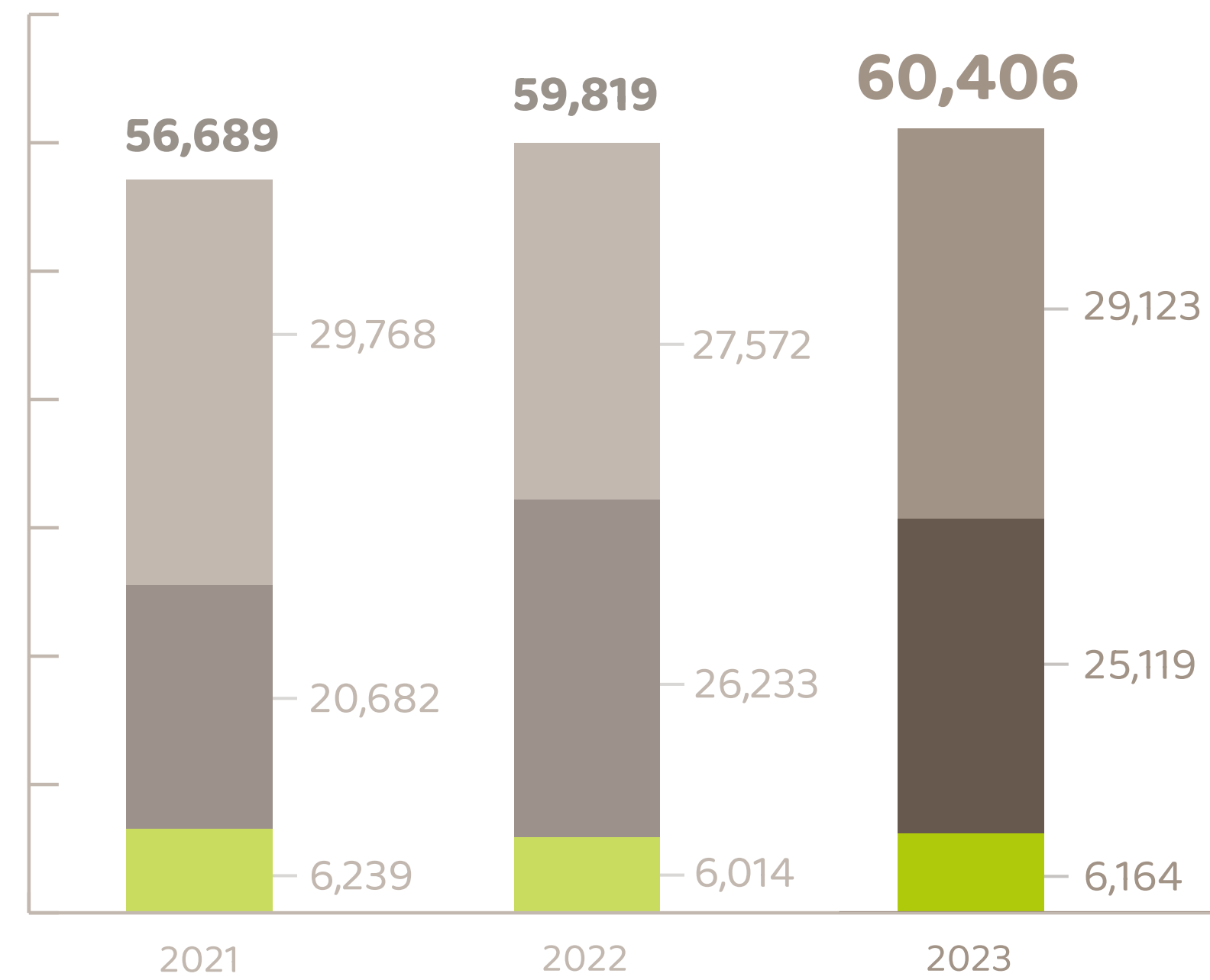


■ Rechargeable
 ■ Non-rechargeable

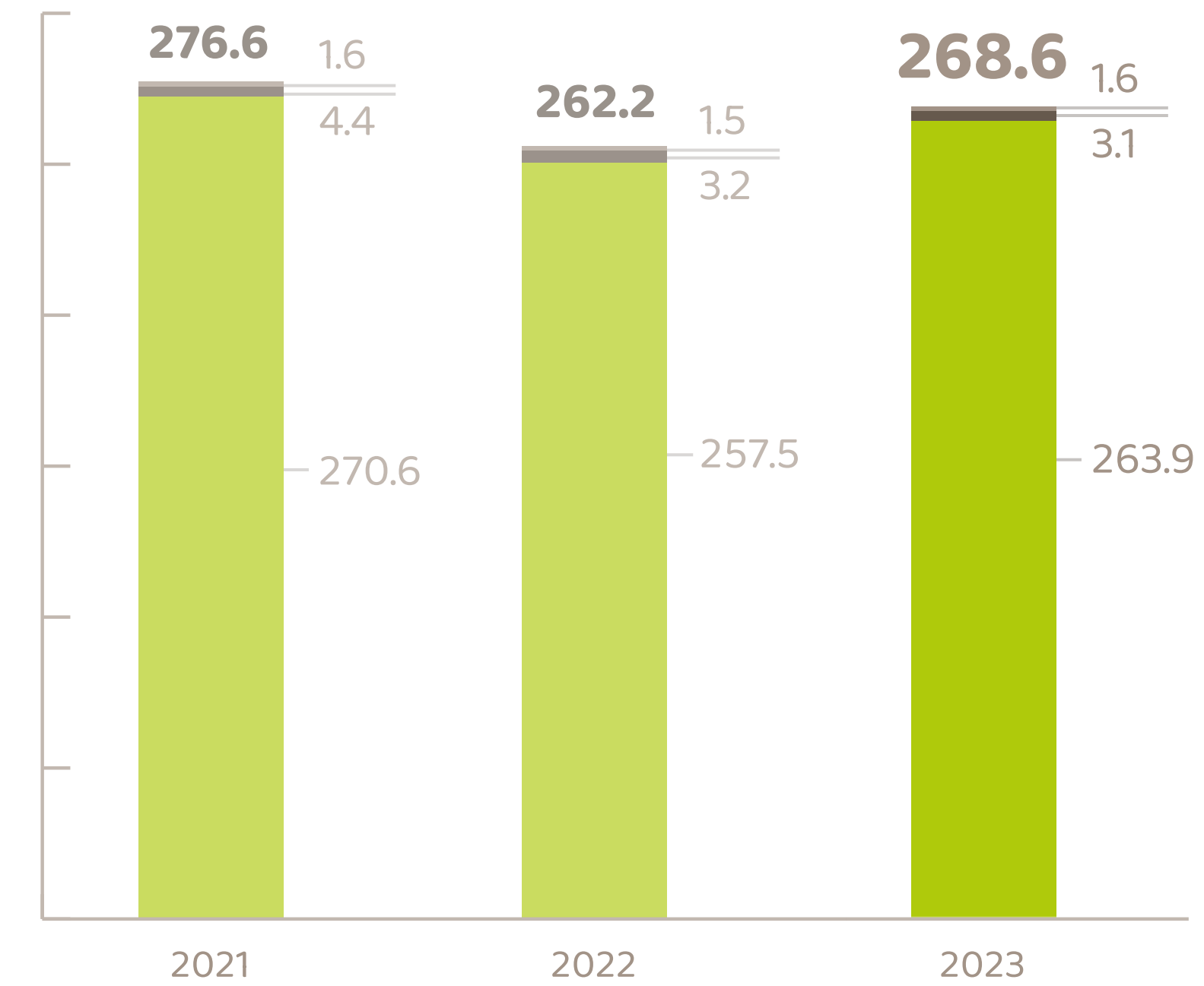
*Note when using the figures: the figures are sometimes rounded to the unit. This may cause discrepancies between the totals displayed and the sum of the individual digits.

Portable - Industrial - Automotive

Weight (in tonnes)*



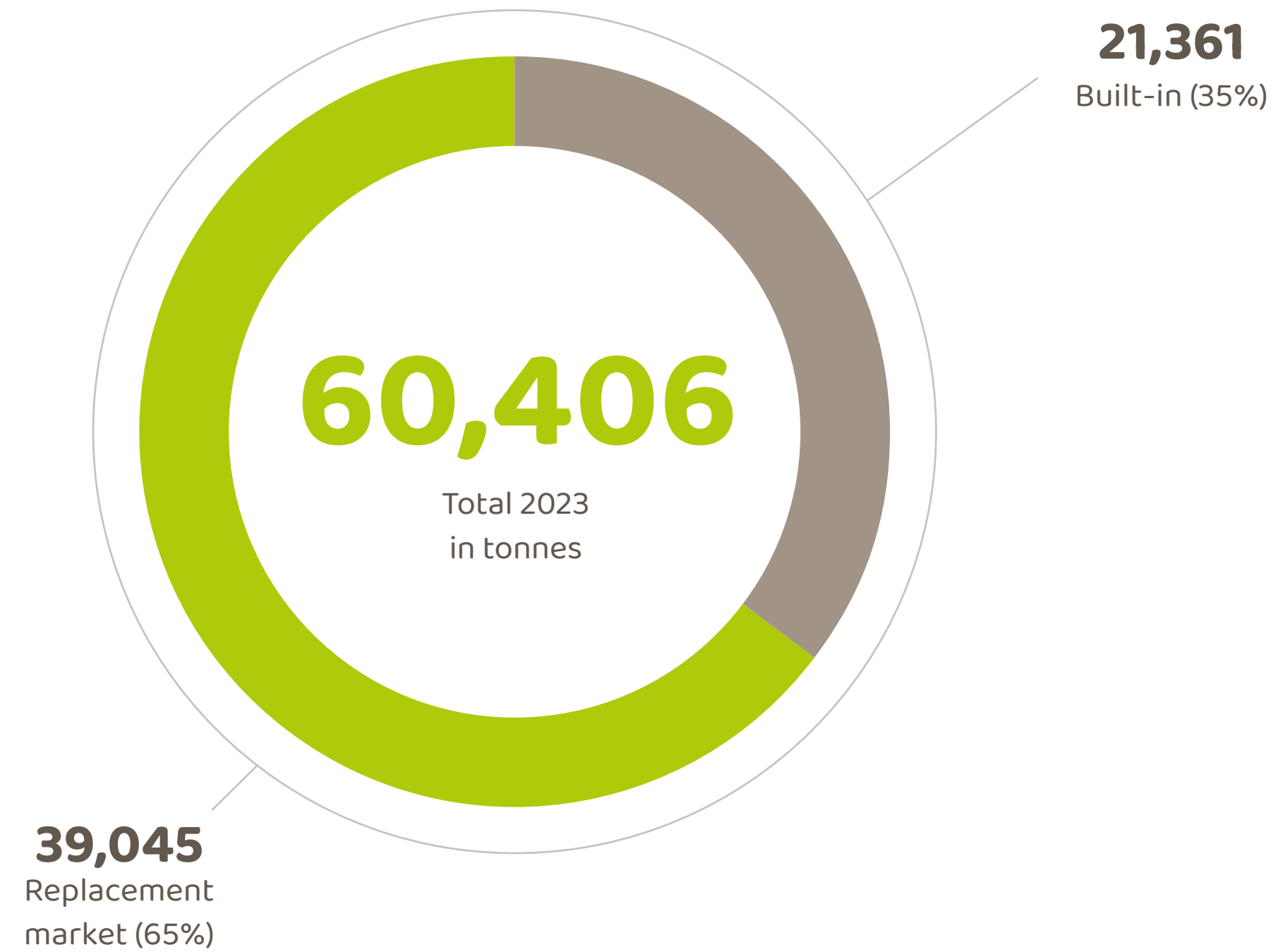
Number (in millions)*



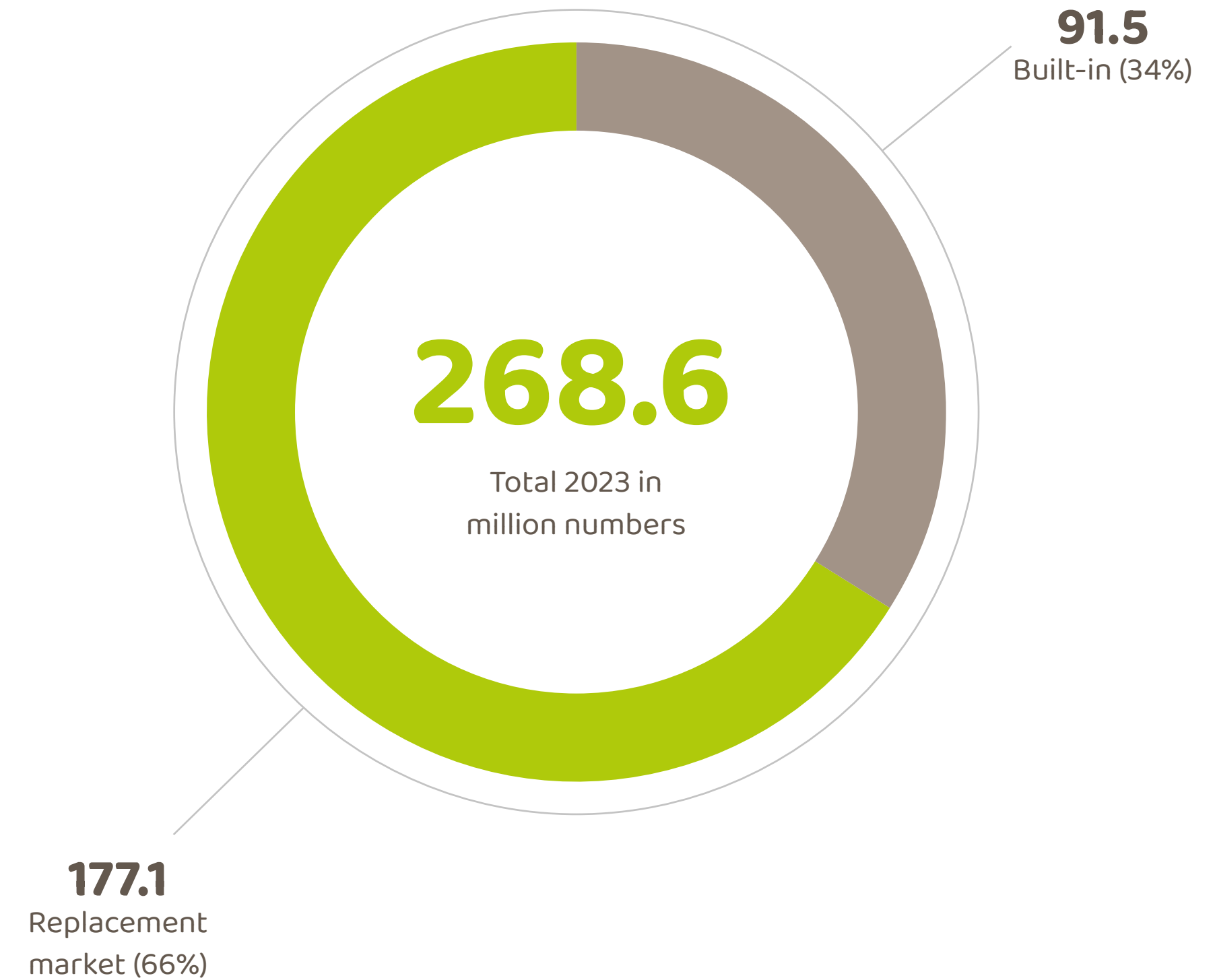
*Note when using the figures: the figures are sometimes rounded to the unit. This may cause discrepancies between the totals displayed and the sum of the individual digits.

Built-in versus replacement market

Weight (in tonnes)*



Number (in millions)*



*Note when using the figures: the figures are sometimes rounded to the unit. This may cause discrepancies between the totals displayed and the sum of the individual digits..



Conclusion

In 2023, the number of batteries put on the market was 268,591,166 units. This is an increase of 6,420,569 batteries (+2%) compared to 2022. This increase was primarily caused by an increase in lithium rechargeable (+36%), lead (+4) and alkaline (+2%), but was weakened by a decrease in nickel-cadmium (-16%), zinc-carbon (-14%) and nickel hydride (-9%).

In 2023, 60,406 tonnes of batteries were put on the market. The total weight put on the market in 2023 has increased by 587 tonnes compared to 2022. This corresponds to an increase of 1%. This increase is due to the rise in sales of general rechargeable and primary batteries.

Within non-rechargeable batteries, there is a drop in zinc-carbon (-16%) and silver oxide (-7%) batteries. Alkaline, zinc-air and primary lithium batteries increase by 6%, 82% and 8% respectively. For general rechargeable batteries, we

notice an increase in the weight of nickel-cadmium (+497%), nickel-metal hydride (+178%), lithium rechargeable batteries (+2%) and lead batteries (+6%). There was a decrease in the weight of propulsion car batteries (-48%) on the market compared to 2022. Finally, there was a 10% decrease in the weight of bicycle batteries put on the market and a 24% increase in the weight of ESS batteries put on the market.

The weight of portable batteries put on the market increases by 150 tonnes or 2%. The largest absolute increases are for alkaline batteries, general lithium rechargeable, lead and lithium primary batteries.

The weight of industrial batteries decreased by 1,114 tonnes, or 4%, compared to 2022. The weight of automotive batteries increased by 1,552 tonnes, or 6%, compared to 2022.



Collection results

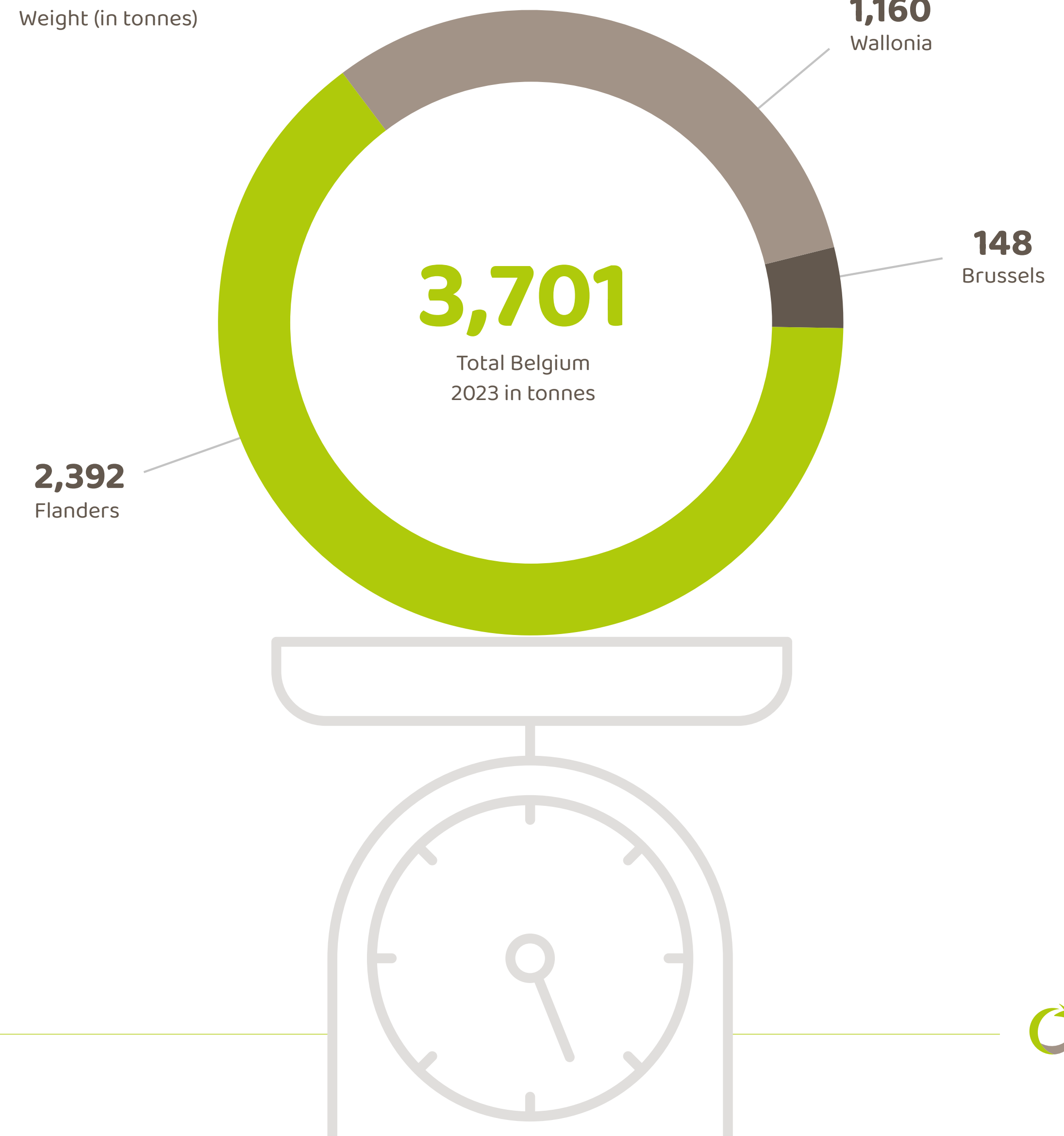
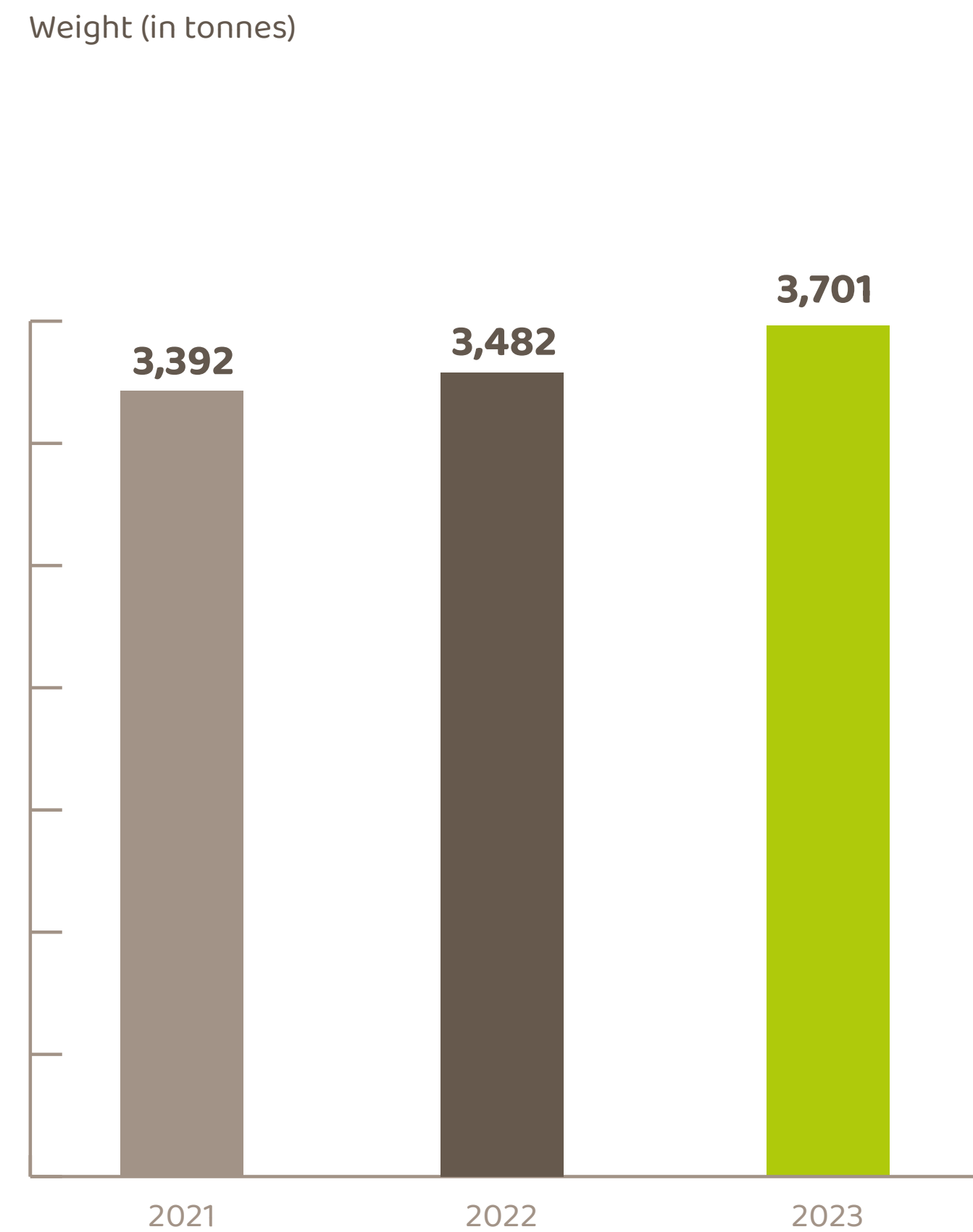
Total collection result



This is the weight of approx. 5,200 polar bears. Or 1/5 of the total population of polar bears on Earth.

*Note on the use of figures: the figures shown are sometimes rounded to the nearest unit. This may cause discrepancies between the totals shown and the sum of the individual figures.

Collection results portable batteries in terms of weight



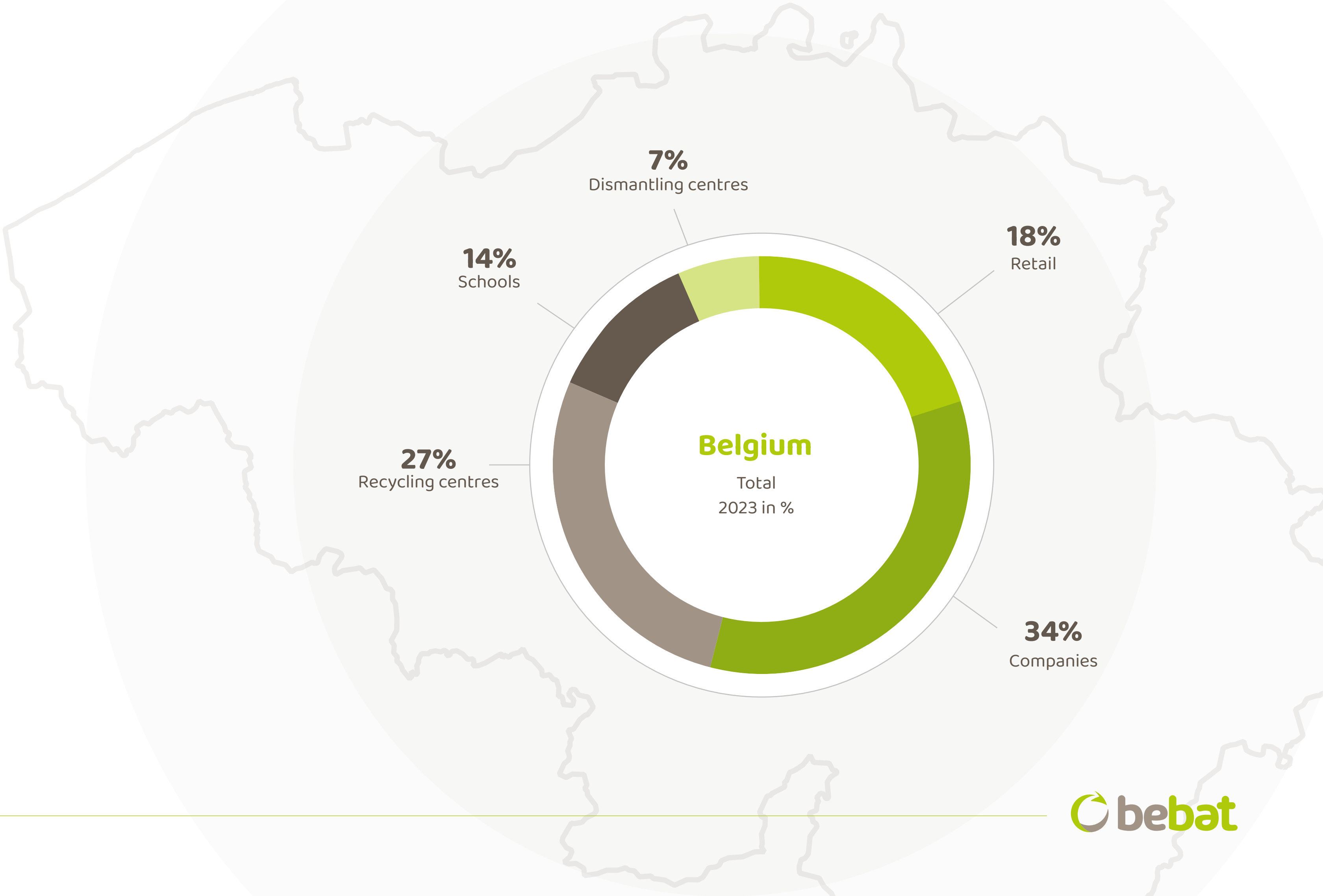
*Note on the use of figures: the figures shown are sometimes rounded to the nearest unit. This may cause discrepancies between the totals shown and the sum of the individual figures.

Overall collection results per collection channel in % - Belgium

In 2023, the total of batteries collected in Belgium increased by 5%, or 190 tonnes.

This is mainly due to increased collection in schools.

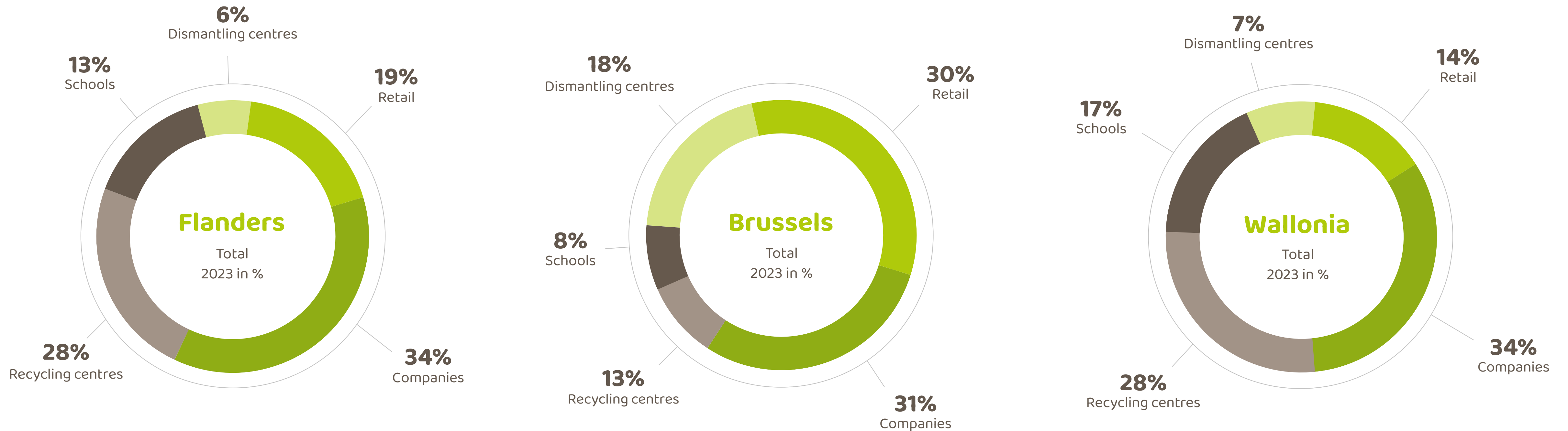
The 5% increase in 2023 for all regions combined across channels is in line with the efforts and initiatives we kept undertaking throughout 2023 to maximise collection rates.

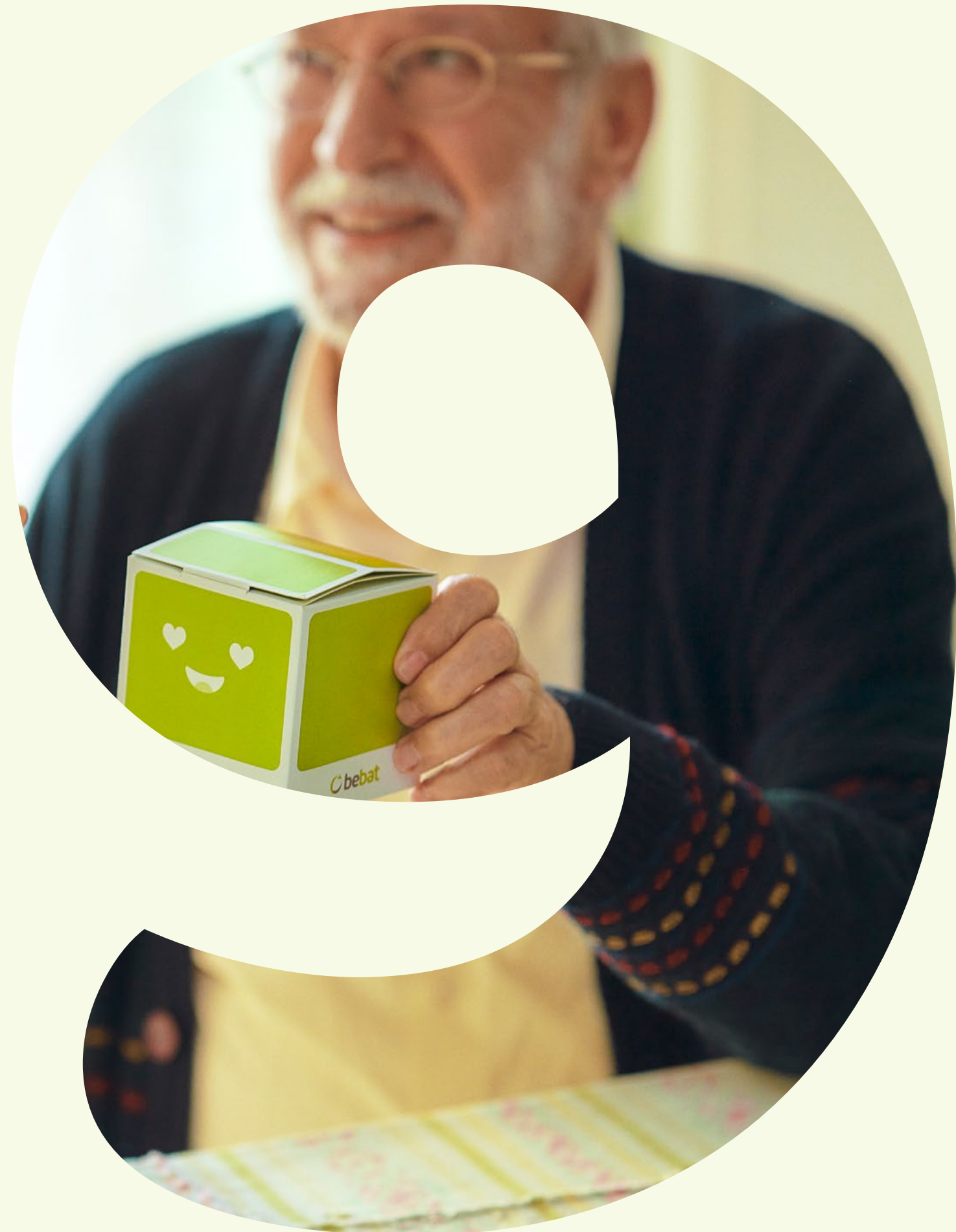


Overall collection results per collection channel in % - Region

The figures below represent the collection results for each collection channel and by region.

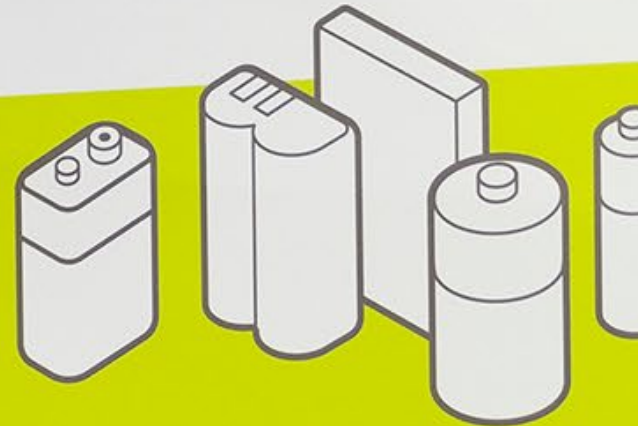
In Flanders, companies continued to be the most important collection channel (34%), followed by recycling centres (28%) and retailers (19%). In Wallonia, companies (34%), recycling centres (28%) and schools (17%) were also major collectors in 2023. In Brussels, the primary collection channels were companies (31%), retail (30%) and dismantling centres (18%).





Collection rate

RecyclePunt.
Point de Recyclage



Batterijen
Piles et batteries

Meer info? www.bebat.be Plus d'infos? www.bebat.be

Geen
Vuilnis!

Pas de
déchets!



Te groot? Beschadigd?

Trop grandes?
Endommagées?

Déposez vos piles et batteries usagées à la réception ou rapportez-les dans un parc de recyclage.

Aanbeveling voor gebruikte batterijen en voor de afgifte van gebruikte batterijen en voor de afgifte van gebruikte batterijen en voor de afgifte van gebruikte batterijen.

60.3%

Collection rate 2023 Belgium

According to the official calculation method used in Belgium, the collection rate achieved by Bebat in 2023 is 60.3%. However, this absolutely does not mean that the remaining 39.7% of batteries ends up in the environment.

In 2023, the collection rate increases by 1.3% to 60.3%. This is primarily due to the increase in the quantity of collected portable batteries, which amounted to 186 tonnes. In recent years, we have noted significant growth in lithium rechargeable batteries put on market. These have a much longer life span than the reference period of three years used to calculate the collection rate. Bebat expects that the weight of rechargeable lithium batteries will continue to significantly increase even more in the coming years. It is clear that the current method of calculating the collection rate is no longer adequate and that the introduction of a collection rate calculation methodology based on what is available for collection is absolutely necessary.

With a collection rate of 60.3%, Bebat easily meets the statutory target for Belgium and exceeds the European target of 45% for 2023. Thanks to these results, Bebat retains its top rankings, both in Europe and in the rest of the world.



This means that on average, all Belgians visited a collection point once during the year!

>90%

Percentage recycling efficiency

As the legal calculation method does not paint a realistic picture of the actual collection efficiency, Bebat frequently has household waste streams tested for the presence of batteries.

Several studies have shown household waste to contain just 1 battery per 100 kg of waste. This means that Bebat collects more than 90% of the batteries that consumers want to dispose of.

12,400,000

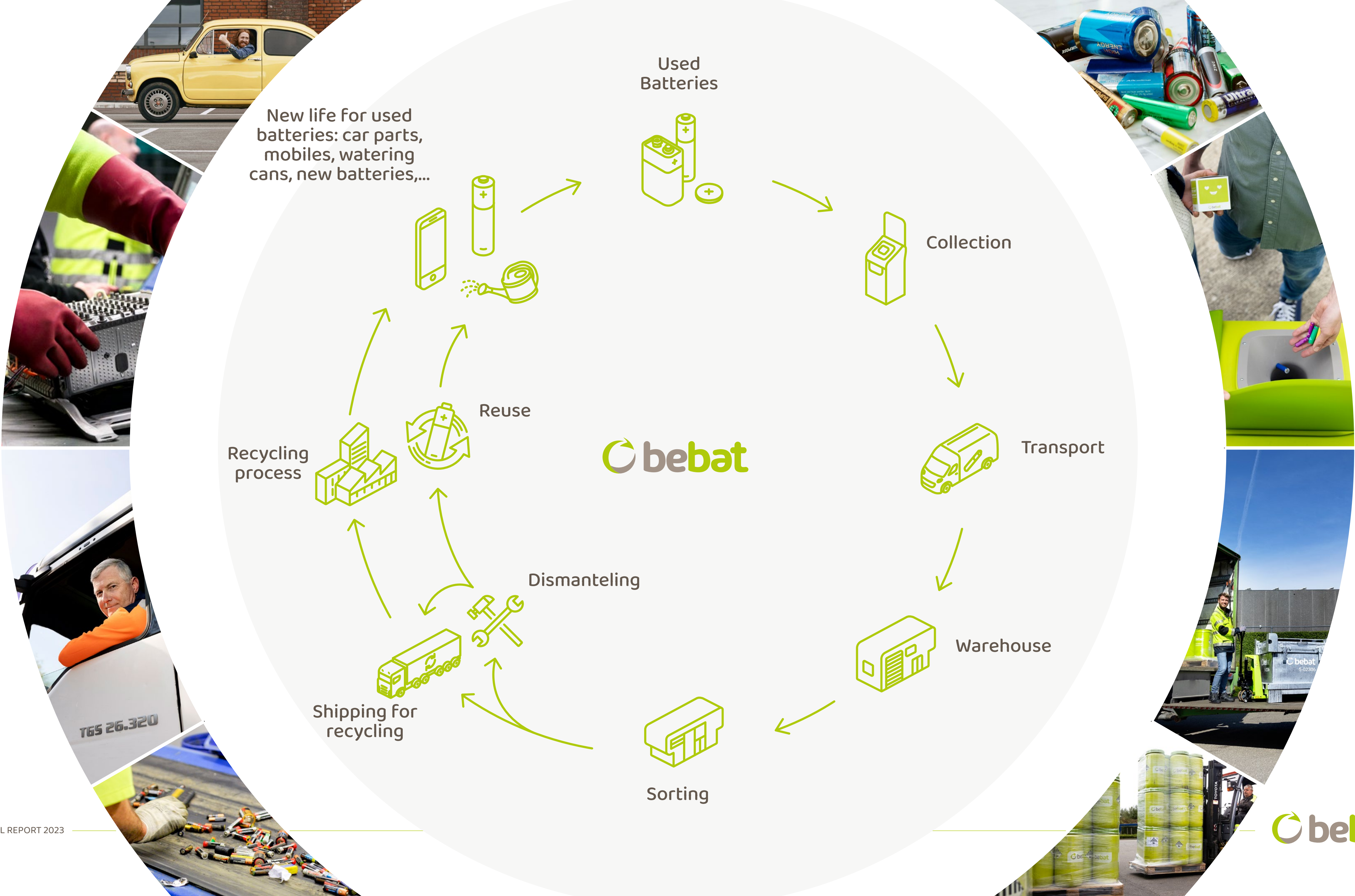
Number of consumer movements

Appliances are becoming increasingly smaller, resulting in increasingly lighter batteries and a continuously lower average weight of the batteries collected by Bebat.

To collect the same amount of weight, consumers must return more batteries and, consequently, visit the collection points more often. In 2023, we generated more than 12,400,000 consumer movements.

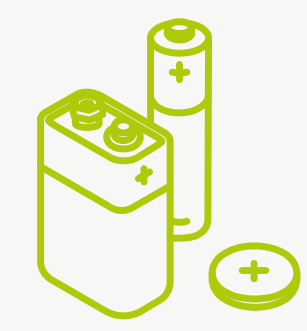


**A new life
for used
batteries**

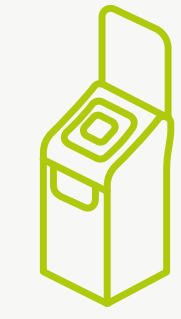


New life for used batteries: car parts, mobiles, watering cans, new batteries,...

Used Batteries



Collection



Transport



Warehouse



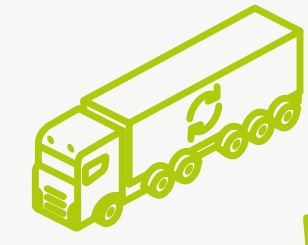
Sorting



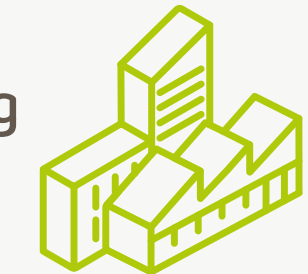
Dismanteling



Shipping for recycling

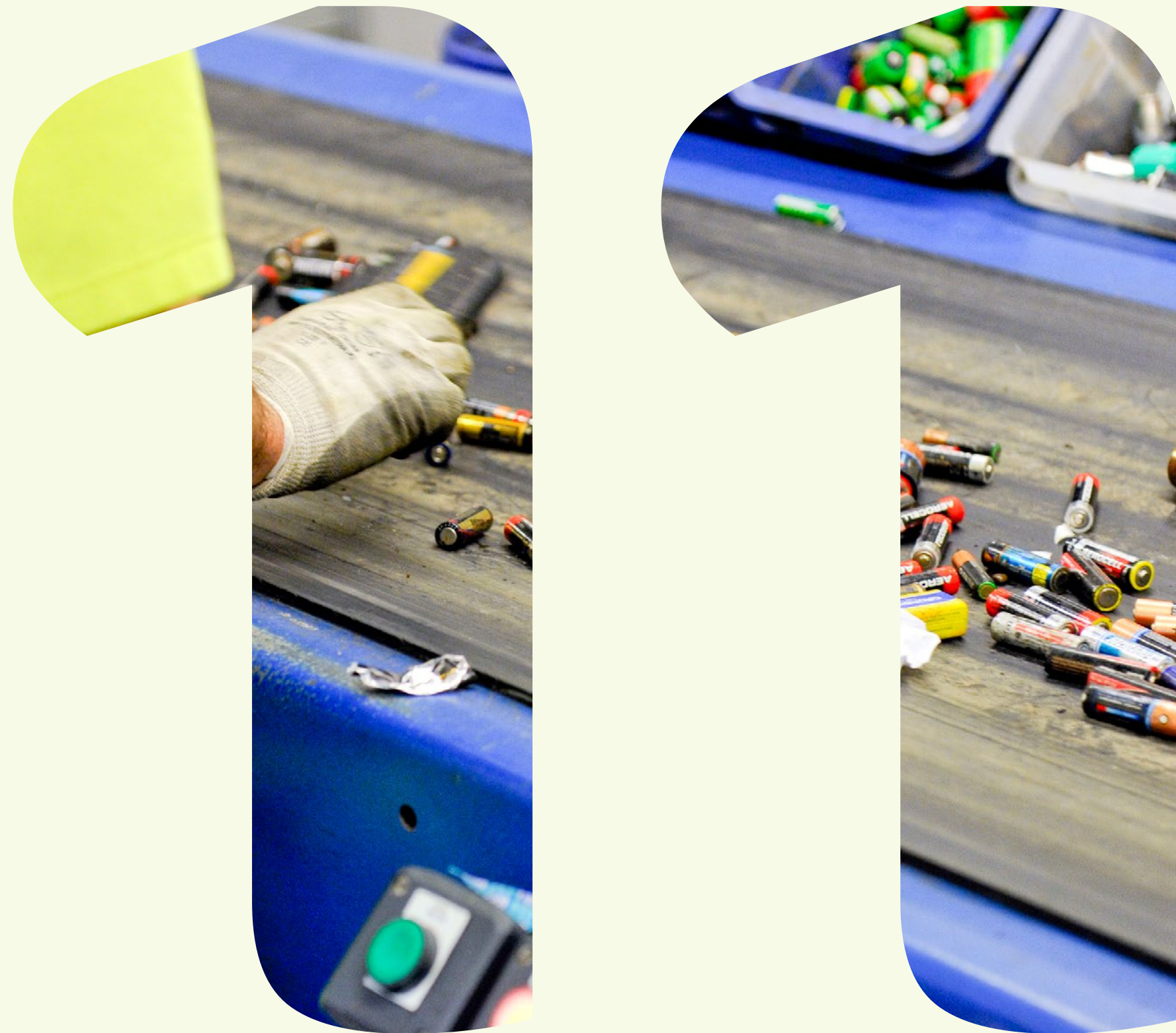


Recycling process



Reuse

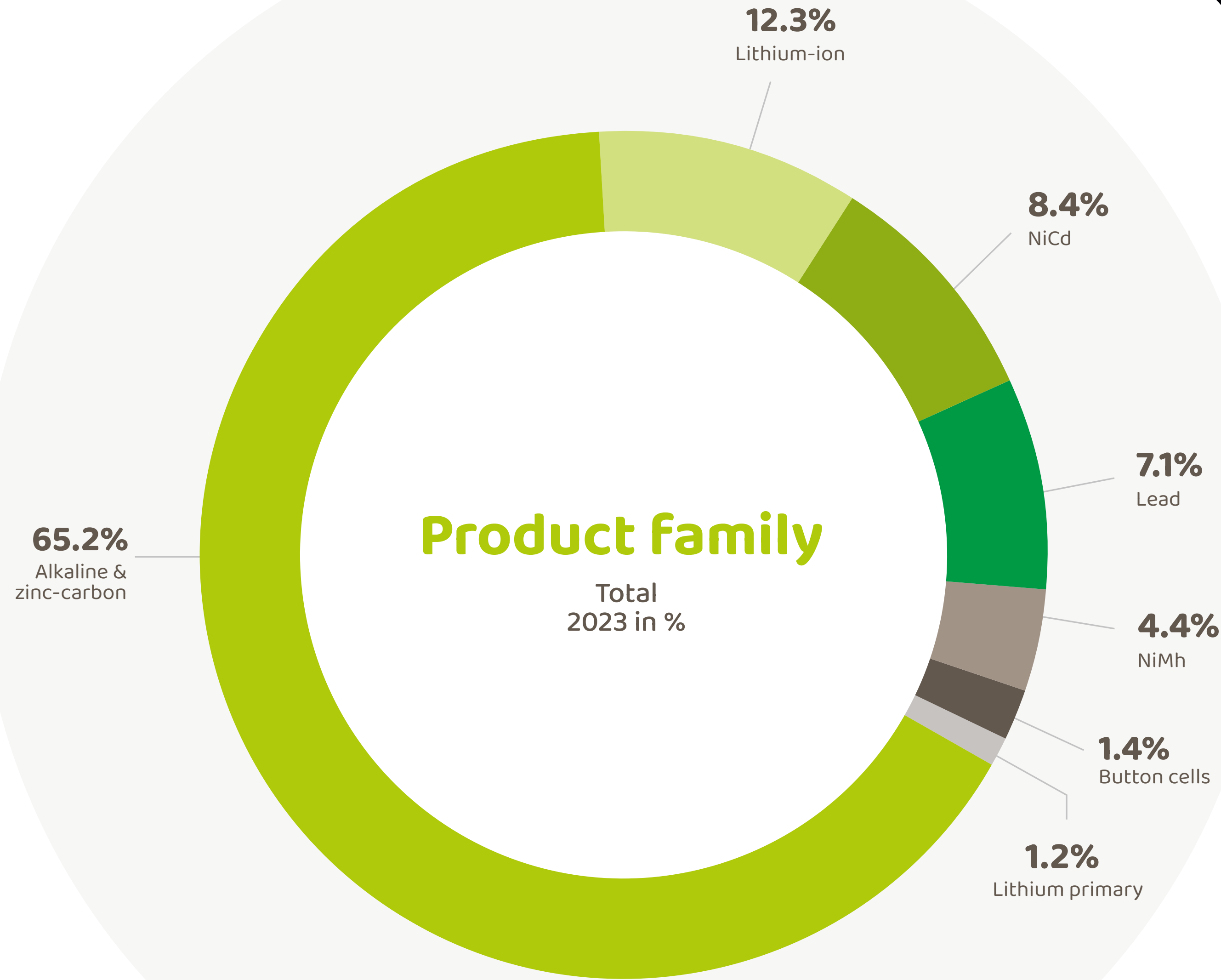




**What
do we
sort?**

Sorted streams in %

WHAT DO WE SORT?





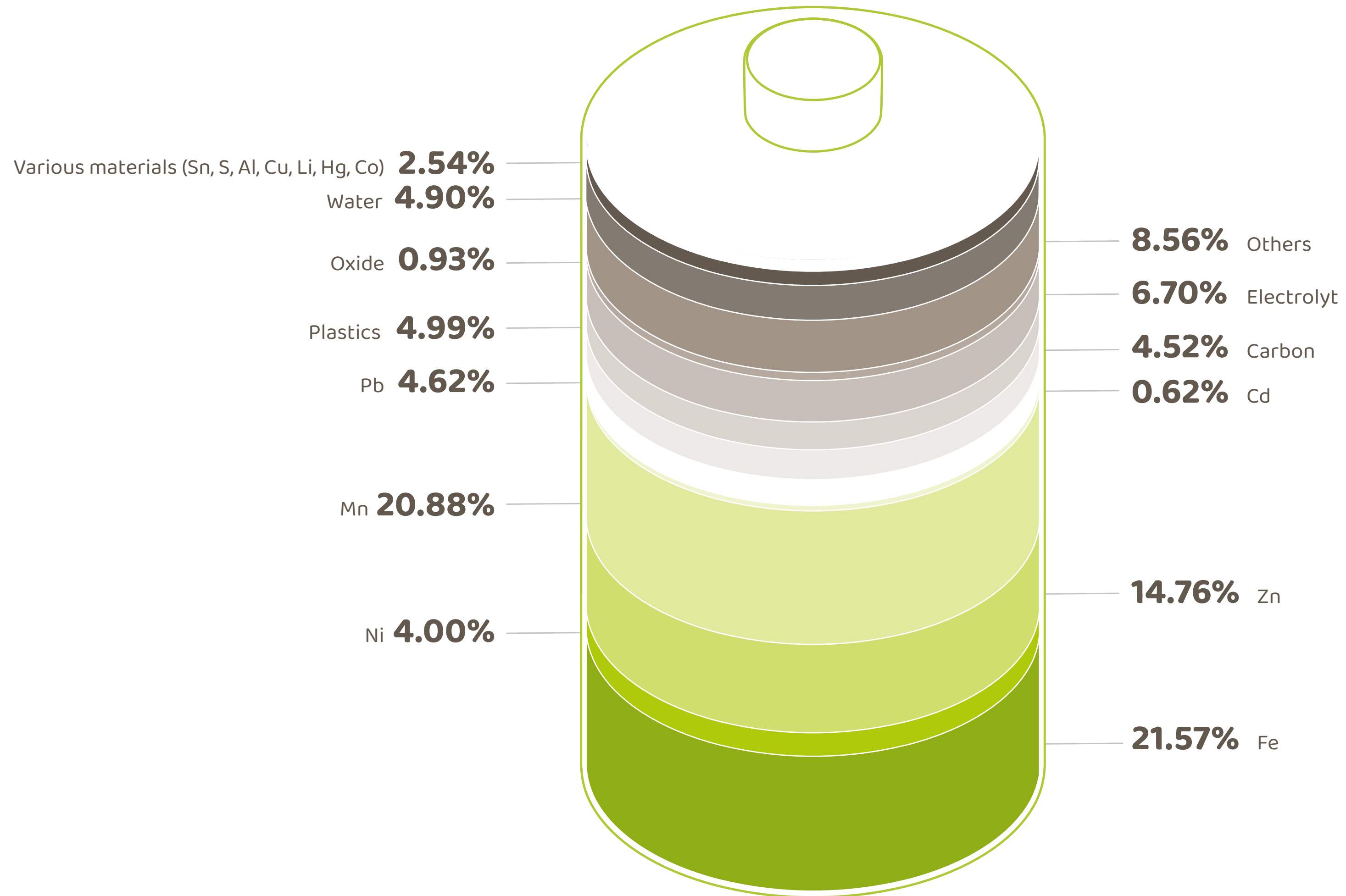
Processing plants





Recovering metals

Which materials can potentially be recovered?



 **Too strong!**



Recovered materials

What can we manufacture with the recovered materials?

RECOVERED MATERIALS





The average
Belgian and
batteries



23 batteries

On average, a Belgian buys 23 batteries per year. This amounts to 527 grams(*).

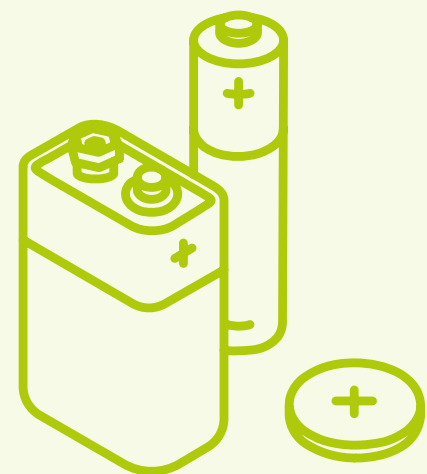
15 batteries are bought separately in the store. The other 8 are already in a device.



2 to 3 / year

The number of times a year the average Belgian brings their batteries to a Bebat collection point.

Some 70% of Belgians use the boxes that Bebat makes available for use.



131 batteries

A typical family has an average of 131 batteries in their home.

58 separate batteries and 73 in devices, of which 30 are used.



87%

of Belgians claim to return their batteries to a Bebat collection point.

On average, Belgians store 65% of their used batteries and return them to a collection point regularly.

97%

are familiar with the Bebat system.

91%

know the Bebat brand as opposed to just 51% in 2010.

75%

consider Bebat a role model in the environmental sector.

Bebat 2023 declarations of batteries put on the market.

N.I.S. official population figures 01/01/2023

IVOX battery study 2022

Various household waste analyses 2011-2021

(*) Portable batteries only, not including industrial batteries

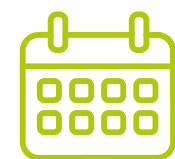


Marketing campaigns

Campaigns in the spotlight

People-centered

In 2023, we launched our new TV ad with the theme of 'people-centred'. We opted for a more emotive message to show that bringing in batteries is good not only for nature, but for all of us. In this ad, we also launched our new 'battery icon', with which we aim to visually indicate that batteries really can be everywhere in our lives, and of all types: small or big, known or unknown, visible or non-visible.



Period

- June 2023
- September 2023
- November - December 2023



Media

- TV
- Online video
- Radio
- Online audio
- Social media





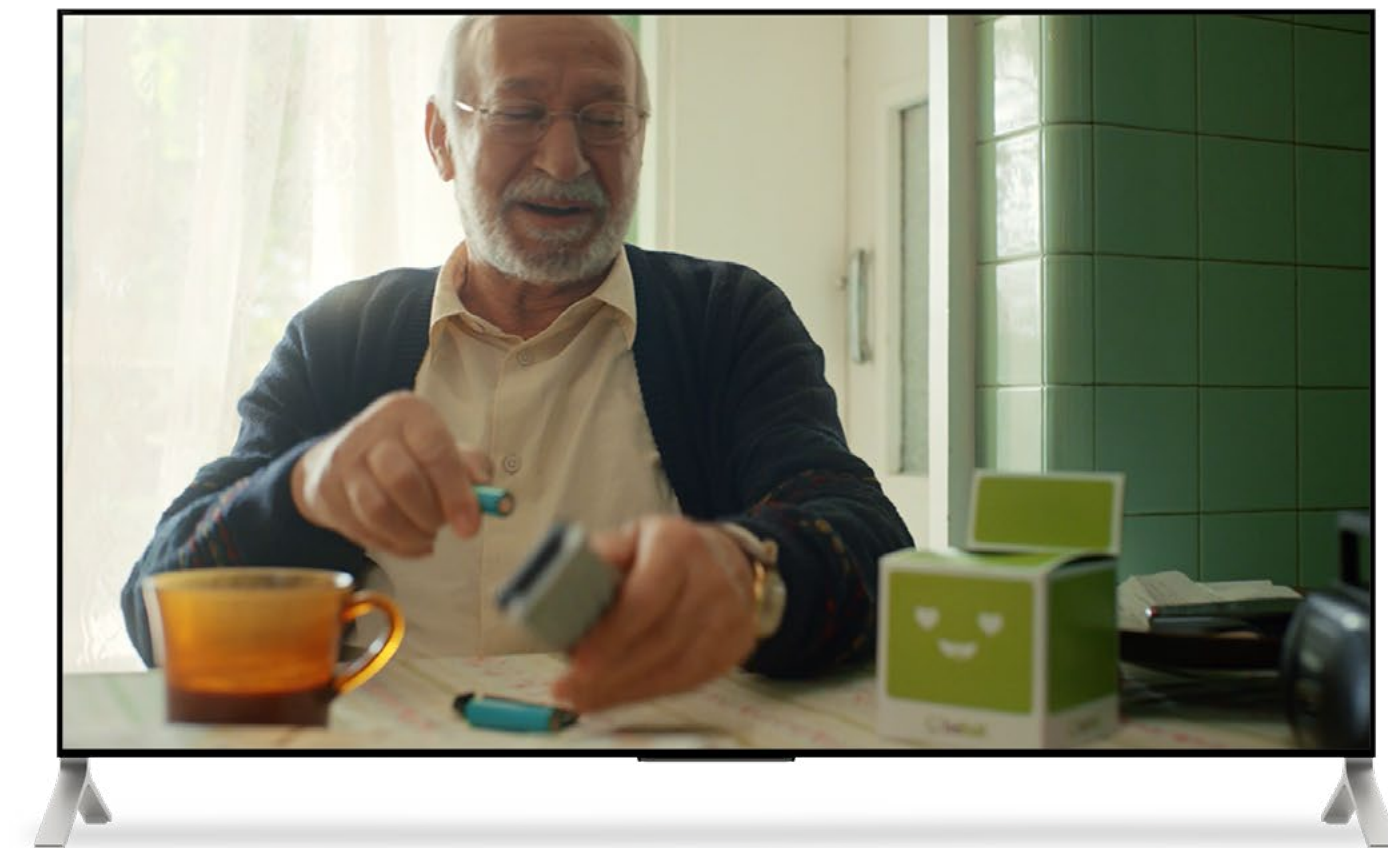
Results Flanders

- TV
 - Wave 1: 3,645,181 people reached
 - Wave 2: 3,666,051 people reached
 - Wave 3: 3,829,387 people reached
- Online video
 - Wave 1: 6,255,861 impressions
 - Wave 2: 5,885,270 impressions
 - Wave 3: 5,989,296 impressions
- Radio
 - Wave 1: 4,480,947 people reached
 - Wave 2: 4,515,527 people reached
 - Wave 3: 4,666,274 people reached
- Online audio
 - Wave 1: 1,392,828 impressions
 - Wave 2: 1,287,447 impressions
 - Wave 3: 1,366,335 impressions
- Social media
 - Wave 1: 291,567 people reached
 - Wave 2: 2,313,156 people reached
 - Wave 3: 2,038,153 people reached



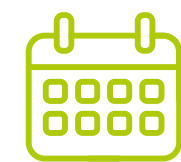
Results Wallonia

- TV
 - Wave 1: 2,543,263 people reached
 - Wave 2: 2,620,321 people reached
 - Wave 3: 2,633,931 people reached
- Online video
 - Wave 1: 4,293,079 impressions
 - Wave 2: 4,224,941 impressions
 - Wave 3: 3,985,908 impressions
- Radio
 - Wave 1: 2,864,767 people reached
 - Wave 2: 2,899,822 people reached
 - Wave 3: 2,942,971 people reached
- Online audio
 - Wave 1: 1,409,921 impressions
 - Wave 2: 1,357,873 impressions
 - Wave 3: 1,367,587 impressions
- Social media
 - Wave 1: 285,311 people reached
 - Wave 2: 1,573,625 people reached
 - Wave 3: 1,609,493 people reached



Schools action: Plopsa

In 2023, we launched a new school competition. The motto: 'Collect used batteries with your class or school and win a free day at Plopsa!'. With this action, we challenged all Belgian schools to collect used batteries to win a day at a Plopsa theme park for the whole class or school. Cherry on the cake: a performance by K3 at Plopsaland De Panne or a Jurassic Day at Plopsa Co.



Period

January - June 2023



Media

- Website
- Social media
- E-mails



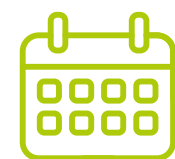
Results

- 48,234 pupils and 5,096 supervisors registered.
- 151 winning schools, accounting for a total of 15,025 winners.
- 115,000 kg of batteries collected by participating schools.
- During the months of February, March and April 2023, 33.9% more was collected in the schools channel than during the same period in 2022. And the month of March hit all records, with a whopping 96% more batteries collected.



Bring in your used batteries this summer

During the summer, we are often so busy with the holidays that we don't think about recycling our used batteries. Bebat wants to do something about that. The challenge: how to raise awareness of recycling used batteries even in this period? We highlighted batteries in a playful way, in a summer setting. With "Bring in your used batteries this summer", we called on Belgians to look for their used batteries as well as to recycle them. We displayed 3 different campaign images, with 3 different battery types: the battery of a drill, an AA battery and a 9V battery. This way, we also highlighted the diversity of different types of batteries.



Period

July - August 2023



Media

- Out-of-home advertising
- Radio
- Online audio
- Online video
- Online display
- Social media





Results Flanders

- Radio & online audio
Radio: 4,553,131 people reached
Online audio: 816,356 impressions
- Online video
5,944,523 impressions
5,218,866 views
- Online display
4,500,535 impressions
725,391 people reached
- Social media
7,852,072 impressions
628,225 views



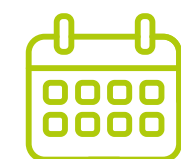
Results Wallonia

- Radio & online audio
Radio: 3,053,182 people reached
Online audio: 733,870 impressions
- Online video
4,573,553 impressions
3,995,274 views
- Online display
2,520,426 impressions
574,784 people reached
- Social media
5,148,040 impressions
415,662 views



Schools action: Playground furniture

In 2021 and 2022, all our old plastic collection barrels were replaced by new, metal ones. The plastic barrels were given a new life as recycled plastic planks. This was used to create new playground furniture, which schools could win by working together to collect as many used batteries as possible and as quickly as possible.



Period

September – December 2023



Media

- Website
- Social media
- Email



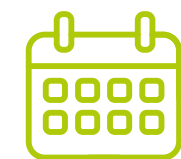
Results

- 809 registrations
- 100 winning schools
- Furniture won:
 - 88 canvas benches,
 - 18 tumble bars,
 - 4 flower box benches,
 - 14 picnic tables,
 - 4 obstacle courses.
- Collection in October, November and December 2023, accounting for an increase of 606% over the same period in 2022, in the schools channel.



Used batteries, recycle them all

In 2023, we organised another major collection campaign in Flanders (together with the OVAM) and in Wallonia. The theme of this campaign: "Used batteries, recycle them all". We showed that we are constantly using batteries in our lives, but they are not always visible, for example because they are built into a device. We reminded people to bring in all used batteries - including non-visible ones - for recycling at a Bebat collection point. The campaign also drew additional attention to the amount and range of batteries in our daily lives.



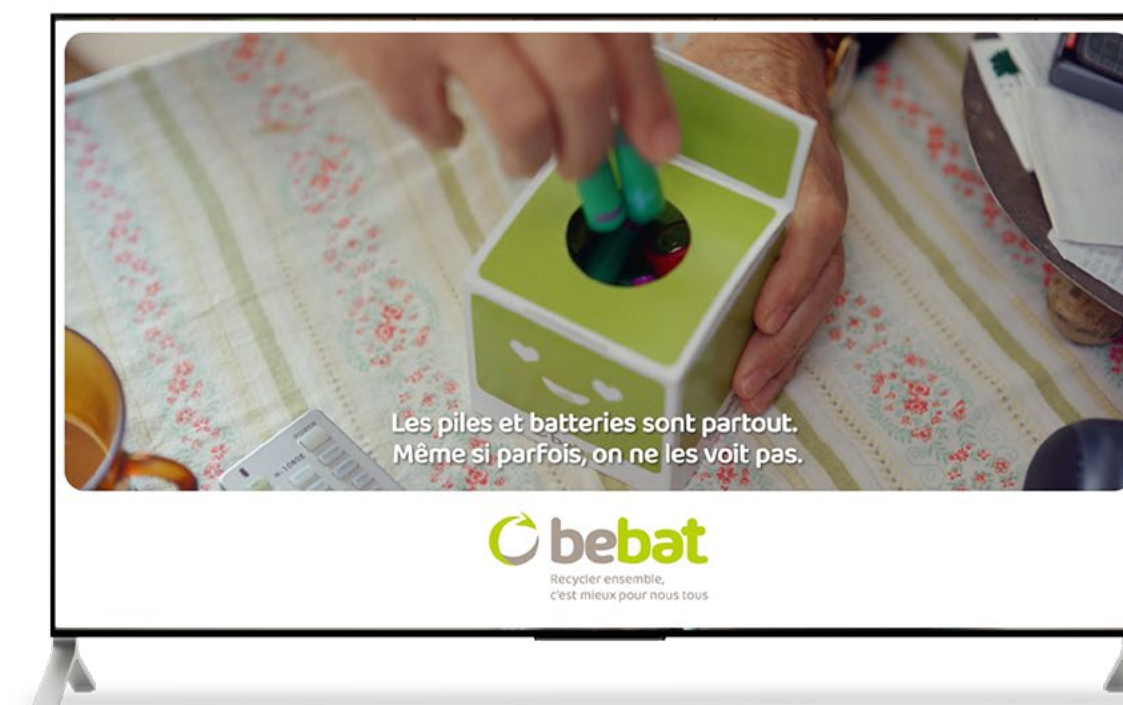
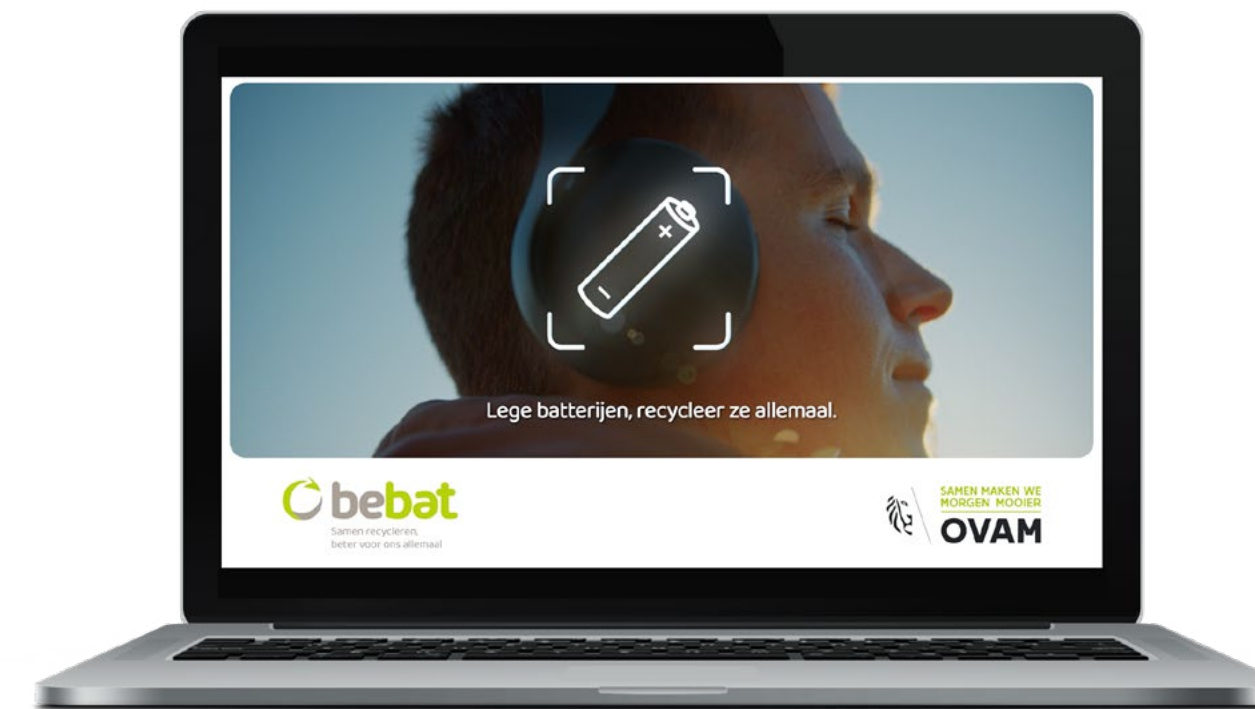
Period

October – November 2023



Media

- TV
- Out-of-home advertising
- Radio
- Online audio
- Online video
- Online display
- Social media
- Direct mailing





Results Flanders

- TV
3,180,919 people reached
- Online video
5,858,169 impressions
- Radio
4,547,579 people reached
- Online audio
755,278 impressions
- Social media
11,249,079 impressions
- Online display
7,044,210 impressions



Results Wallonia

- TV
2,428,967 people reached
- Online video
3,523,543 impressions
- Radio
2,984,189 people reached
- Online audio
760,426 impressions
- Social media
6,878,574 impressions
- Online display
4,728,284 impressions



Batteries are everywhere, but how do you handle them correctly?

In cooperation with the OVAM and the Wallonia fund, we developed a sensitization campaign in autumn 2023 with the slogan "Batteries are everywhere, but how do you handle them correctly?". We created 6 informative videos with tips on how best to handle all types of batteries. The videos were distributed through various communication media and, in Flanders, there was also a native collaboration with DPG Media and Ads&Data.



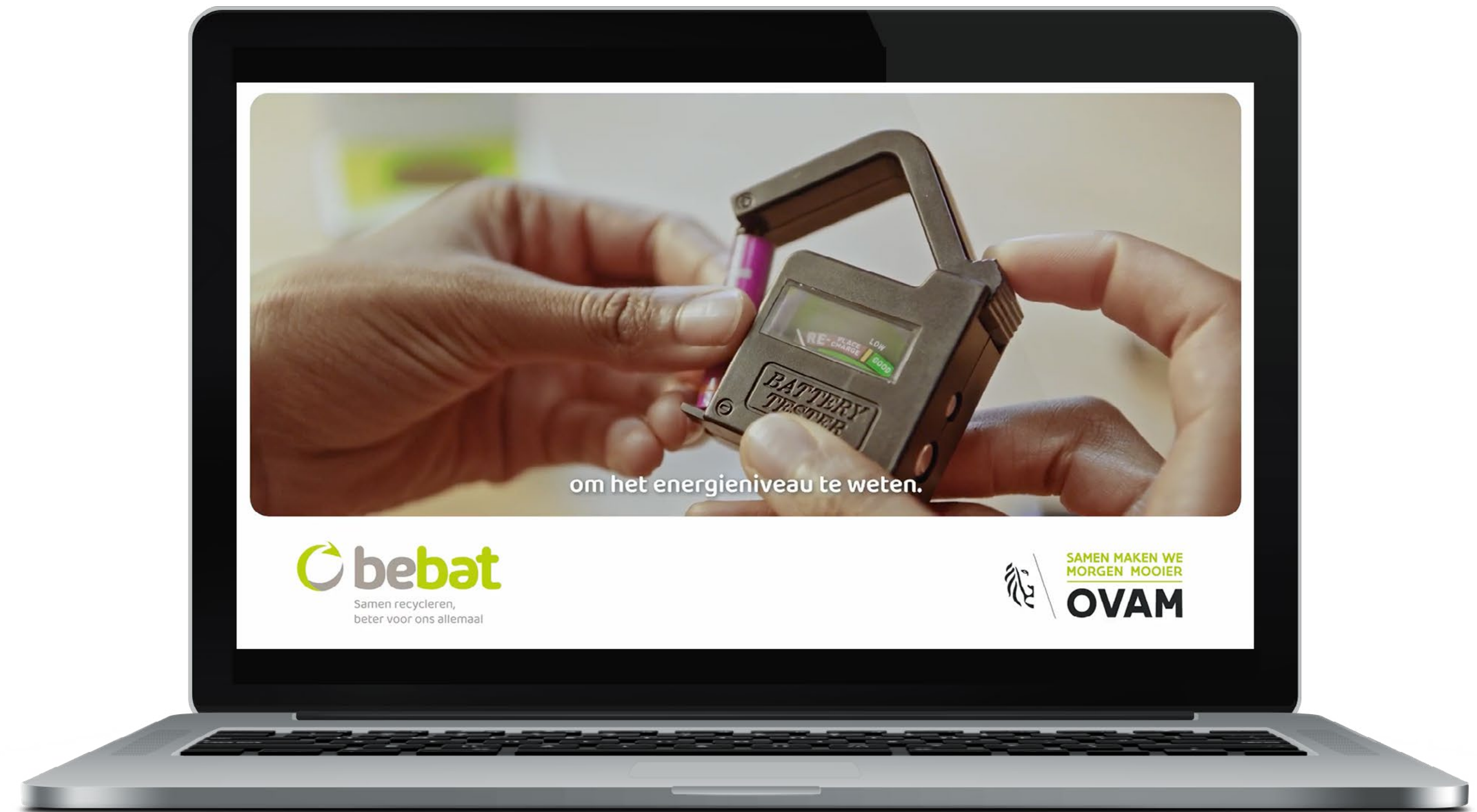
Period

November – December 2023



Media

- TV
- Online video
- Native ads (in Flanders only)
- Online display
- Social media





Results Flanders

- TV
3,744,017 people reached
- Online video
5,792,143 impressions
- Native ads
6 articles with over 58,000 page views
- Online display
1,942,260 impressions
- Social media
Meta: 2,952,219 impressions
TikTok: 2,508,612 impressions



Results Wallonia

- TV
2,432,161 people reached
- Online video
4,190,289 impressions
- Online display
1,367,720 impressions
- Social media
Meta: 1,354,948 impressions
TikTok: 2,943,326 impressions



The routine

Together with the OVAM and the Wallonia fund, we are aiming to make Flemings and Walloons aware that they really do have a lot of used batteries in their homes. We want to regularly encourage them to bring in their used batteries. For this, we worked out a campaign called "The Routine". This concept was a straightforward one: don't forget your batteries during any of your usual routines. We used different target groups here, such as movers, do-it-yourselfers and supermarket visitors.



Period

- May – June 2023
- August – September 2023



Media

- Out-of-home advertising
- Online video
- Online display
- Social media





Results Flanders

- Movers
 - Wave 1:
 - Online video: 808,875 views
 - Online display: 3,373,230 impressions
 - Social media: 832,206 impressions
 - Wave 2:
 - Online video: 1,327,171 impressions
 - Online display: 3,683,408 impressions
 - Social media: 845,295 impressions
- DIYers
 - Wave 1:
 - Out-of-home: 438,284 impressions
 - Online video: 345,025 views
 - Online display: 2,574,702 impressions
 - Social media: 1,360,000 impressions
 - Wave 2:
 - Out-of-home: 477,776 impressions
 - Online video: 734,204 impressions
 - Online display: 2,559,074 impressions
 - Social media: 673,431 impressions
- Retail
 - Wave 1:
 - Out-of-home: 305,049 impressions
 - Online display: 837,258 impressions
 - Wave 2: no commitment



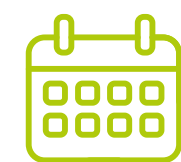
Results Wallonia

- Movers
 - Wave 1:
 - Online video: 189,008 views
 - Online display: 986,472 impressions
 - Social media: 401,414 impressions
 - Wave 2:
 - Online video: 427,727 impressions
 - Online display: 915,374 impressions
 - Social media: 386,090 impressions
- DIYers
 - Wave 1:
 - Out-of-home: 349,958 impressions
 - Online video: 351,482 views
 - Online display: 1,453,713 impressions
 - Social media: 352,611 impressions
 - Wave 2:
 - Out-of-home: 358,972 impressions
 - Online video: 734,204 impressions
 - Online display: 2,559,074 impressions
 - Social media: 673,431 impressions
- Retail
 - Wave 1:
 - Out-of-home: 273,763 impressions
 - Online display: 360,502 impressions
 - Wave 2: no commitment



De Grote Sinterklaasshow

In 2023, Bebat and Recupel entered into a collaboration with Studio 100 as part of "De Grote Sinterklaasshow". The partnership with Studio 100 was made up of several elements. This included an activation at the Sportpaleis, where visitors could hand in their used batteries and/or old electronics and receive an ecological flower pot and flower seeds in exchange. In addition, "De Grote Sinterklaasshow" itself was also entirely dedicated to recycling, more specifically the recycling of used batteries and old electronics. And finally, we also developed a number of videos featuring Studio 100 characters, giving tips on collecting and recycling used batteries and old electronics.



Period

December 2023



Media

- Awareness-raising videos and appeal videos
- Activation on site
- Integration into shows



Results

- 60,000 visitors
- Collection: 1,666 kg of used batteries collected





Recycling together,
better for all of us