The winding ways of household batteries – framing waste and recycling practices

On their way from the store to the recycling station, portable batteries take part in a multitude of domestic practices. The journey can be full of detours and stops, and some batteries jump off and never reach the intended destination.

In a research project aiming to understand how Swedish households deal with portable batteries from the event of acquisition to discarding them, we identified a palette of initiatives and doings, as well as meanings, competences, objects and infrastructures encouraging recycling, while others created different kinds of obstacles. Here, we will have a glance at how 'buffering batteries', 'consumer electronic competence', 'discouraging scandals', 'boxes and bags for spent batteries', 'retailers' responsibility', 'deposit and return system', 'popular culture' and a 'school project' enables and/or hinders battery recycling.

Buffering batteries

Storing batteries for future needs is a common practice, many times inherited from the parental home. Since 2018, it has been encouraged by the Swedish Civil Contingencies Agency, who listed batteries in the recommended 72h survival kit. Storing slows the usage and recycling paces down. Unless actively managed, the stored batteries tend to be forgotten and pass the best-before-date without being used, especially in households with limited use of batteries.



Photo: Ulrika Holmberg

Consumer electronics competence

Skills from hobbies and tinkering, involving advanced handling of consumer electronics, work as a springboard to understand portable batteries: what different type of batteries are good at, what they are made of, how to extend their lifetime, their potential risks, and importance of recycling.

Discouraging scandals

In 2019, a battery recycling scandal was on the news I Sweden. Hundreds of metric tons of battery waste had been dumped in the field, in a municipality in Central Sweden. The scandal entered our interviews when discussing the recycling infrastructure. Consumers who had heard about it were truly upset and saw it as demotivating. Their trust in the system was injured.



Photo: Henrik Östensson (sydnarkenytt.se)

Boxes and bags for used batteries

The households are ambivalent to extending the recycling infrastructure into the home with separate boxes or bags for batteries. Adding a new container imply negotiations and rearrangements such as making space and new cleaning routines. The potential of reminding consumers to put batteries in the correct waste stream can easily be counteracted by an unattractive and unpractical design of the bag or box. Large containers also tend to extend the delay for the batteries to reach the recycling station.

Retailers' responsibility

Retailers seem to have opted out from taking an active responsibility in encouraging consumers to recycle their batteries. With only a few exceptions, neither web shops nor brick-and-mortar stores who sell batteries inform customers that they accept spent batteries. Larger chain stores do accept a small bag with a handful of batteries when specifically asked. Reminders to recycle batteries are also missing. It is also uncommon to market any bag or box aimed at battery recycling. To put it another way – the potential for improvement is large. Connecting or integrating points of acquisition into the recycling infrastructure would enable households to engage in battery recycling practices.

Deposit and return system

Much like the return bottles, consumers envision that a refund system would nudge them to recycle their batteries. It would send a signal to households that spent batteries have a purpose: a valuable resource and/or harmful content to take care of. Thus, the meaning of recycling batteries could be strengthened.

Popular culture

Consumers refer to a TV-show they saw as young, when describing how they became recyclers. The TV-show "Tippen" [The Dump] for school children was a summer series about recycling and environmental issues sent 1993 and 1994. The tagline of the show was "nothing disappears, everything remains". Our interviewees remember how the presenters highlighted battery recycling.



Photo: SVT

School project plus

The Battery Hunt is an example of an initiative that pulled together several actors aiming for a pedagogical, creative, and fun program for ten-year-olds. A battery producer applied for funding from the Swedish Environmental Protection Agency and have collaborated with a retail chain, a non-profit recycling organisation for producers of electric and electronic products (El-kretsen/Electrical-circit), and the Keep Sweden Tidy Foundation. Around 7000 school classes have participated since 2014. The program involves close collaboration with teachers. Beside educational material, there are games, social media actions, and a recycling competition. The families are also involved, particularly in collecting and recycling batteries.



Picture: Batterijakten 2019

Glimpses from the research project "More efficient collection of spent batteries with consumer in focus, Phase II" 2017-2020

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