

Measuring Battery Collection Performance

Information Sheet

Tracking the progress and effectiveness of used battery collection is a key indicator in evaluating the success of B-cycle and the diversion of batteries from landfills. In addition to measuring the volume of batteries collected, it is essential to assess the ratio of batteries collected against the quantity of batteries circulating in the marketplace.

Currently, two widely accepted measurement methods are used to evaluate battery collection performance. Both calculate an annual collection ratio, but they compare collected batteries against different market metrics. These metrics are:

- + Placed on the Market (PoM)
- + Available for Recycling (AfR)

While both are valuable, they represent different outcomes and vary based on battery chemistry, application, and market trends.

Placed on Market (PoM)

PoM refers to the total number of batteries sold or imported for consumer use in various products and applications.

This is a straightforward measure but does not account for the differing life cycles of various battery types. It simply reflects the volume of batteries entering the market, without considering their chemistry, application, or lifecycle.

Available for Recycling (AfR)

AfR, on the other hand, factors in the life cycle of the battery, identifying those that have entered the marketplace, have been used, and then reached their end of life.

AfR offers a more precise measure of collection performance, as it compares the volumes of batteries collected against those that have reached end of life and are now available for recycling.

Although more complex, AfR provides a clearer picture of battery collection effectiveness by considering the differing life cycles of various battery chemistries. This metric allows for a more accurate calculation of how many batteries are truly available for recycling at any given time.

For example, an alkaline single-use battery might have a life span of about 12 months, meaning it would be available for recycling within the same year it is placed on the market. In contrast, a rechargeable lithium-ion battery may last between 5 and 10 years, meaning it wouldn't be included in collection ratio calculations until it reaches the end of its life.

As the battery market shifts towards lithium based rechargeable batteries the number of batteries placed on the market will rise. However, in the short term, we may see a decline in the volume of batteries available for recycling due to the longer average life cycle of these newer batteries.

The BSC remains committed to ongoing market research to ensure an up-to-date understanding of market trends. Both PoM and AfR will continue to be reported to provide a comprehensive view of battery collection performance.

For more information

Go to bcycle.com.au or contact us at contact@bcycle.com.au