

From Stylish Gadget to Circular Icon: How Swedish Hardware Companies Navigate the EU's New Requirements

Stockholm is internationally known for its strong startup scene and design-conscious tech companies. But now it's no longer enough for a product to be stylish and functional – it has to be circular "by design". The EU's Green Deal has accelerated the pace, and for Swedish companies developing household electronics (everything from lint removers to smart pet trackers), a new reality awaits.

Here are the three most important areas you, as a hardware entrepreneur, need to keep an eye on.

1. Design for interchangeability: Say goodbye to glue

Swedish design has long been about minimalism and seamless construction. This has often meant built-in, glued-in batteries to save space and create an exclusive feel. That era is now over.

The new rules in brief:

- **The requirement:** All portable batteries (under 5 kg) in consumer products must be removable and replaceable by the end user.
- **Tool:** The replacement should be possible with "common, commercially available tools." No special screws or glued chassis that require a heat gun to open.
- **The challenge:** For companies that build waterproof (IP-rated) products, this poses a major engineering challenge. How do you create a service-friendly battery cover that still keeps moisture and dust out?

2. Labels: To inform

The product should not only function, it should inform. Labeling requirements have become significantly more detailed to facilitate recycling.

The mandatory labeling

Both the product and the battery must bear the symbol for crossed **out trash can**. They must also both be CE marked to clearly show that they comply with all relevant EU laws and directives. The product must also have a clear model designation, serial number and the

manufacturer's name and address. For the battery, the capacity must also be legible on the label.

QR code: The battery's digital ID

From 2027, portable batteries will have a QR code. For household products, it acts as a simplified version of the digital product passport and will provide access to:

- **Technical data:** Capacity, chemistry, manufacturing date and geographical location of the factory.
- **Security:** Information about hazardous substances and fire extinguishing instructions.
- **Durability:** A declaration of conformity (DoC) and recycling information.

Tips: If the product is too small to accommodate all the information, parts of the labeling may be moved to the manual, but the QR code and the trash can are usually prioritized on the hardware itself.

3. Producer responsibility: Who cleans up?

The EU wants to secure access to critical raw materials (such as lithium and cobalt). Therefore, producer responsibility has become a heavy administrative burden. If you place a product on the European market, you are responsible for three streams: Electronics (WEEE), Batteries (EU Battery Regulation) and Packaging (PPWR).

In Sweden you have two ways to go:

1. **Do it yourself:** Register with the Swedish Environmental Protection Agency, apply to handle the collection yourself and pay a deposit that covers costs in the event of a possible bankruptcy.
2. **Join an organization (Recommended):** Most Swedish companies choose to join producer organizations like EI-kretsen (for electronics) or Batterikretsen. For a fee, they take over the practical and legal responsibility for ensuring that your end-of-life products are properly disposed of. You still need to register as a producer with the Swedish Environmental Protection Agency.

After registration and approval with the Swedish Environmental Protection Agency, you are ready to report. How often you need to report depends on the product and volume.

Summary

Meeting these requirements is not just about avoiding fines – it's about future competitiveness. Companies that integrate repair and transparency into their design process early on will not only

have an easier time passing customs, they will also gain the trust of an increasingly environmentally conscious customer base.

Is your next product line ready for 2027?