


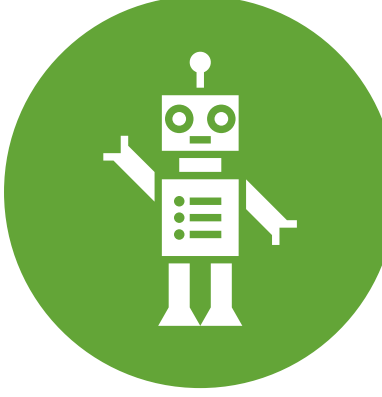




EECONE

European ECOSystem for GreenN Electronics

Challenges and objectives

The **steady growth** in the **production of electronic components and systems** is starkly contrasted by the **slow pace of proper collection and recycling of e-waste**. This imbalance presents a significant **environmental challenge** that we face.

Guided by the **6R principles** (top right), we address 10 use cases:

	Automotive ECUs and Inverters		Consumer Electronics membrane switches, remote controls, home appliances
	Point-of-Care sensors		Data Centers and ICT user equipment
	Aeronautical structural components		Agriculture Green soil probe

Consortium of **over 50 partners cross-European and cross-industry** demonstrate how to apply the 6R principles for the **objectives**:

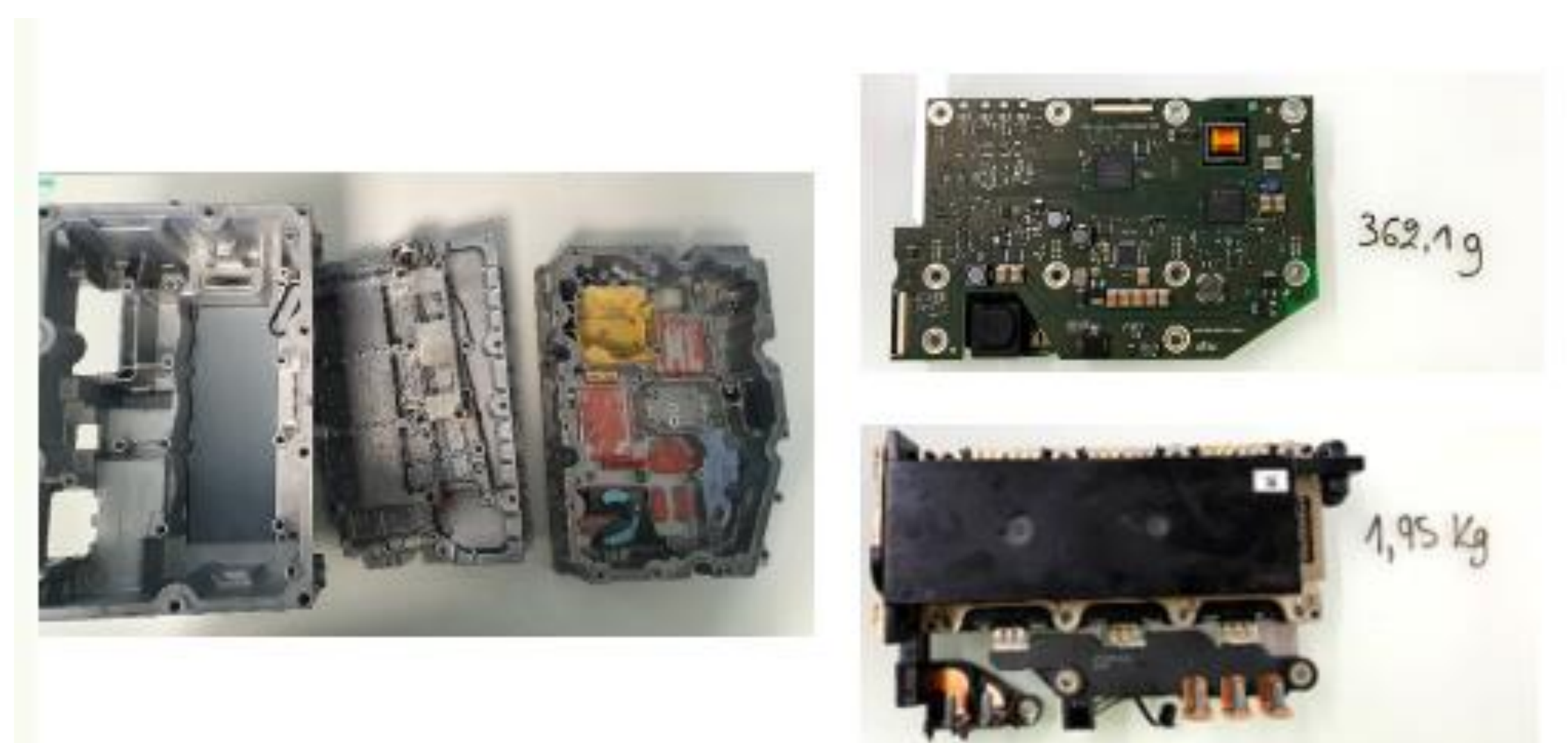
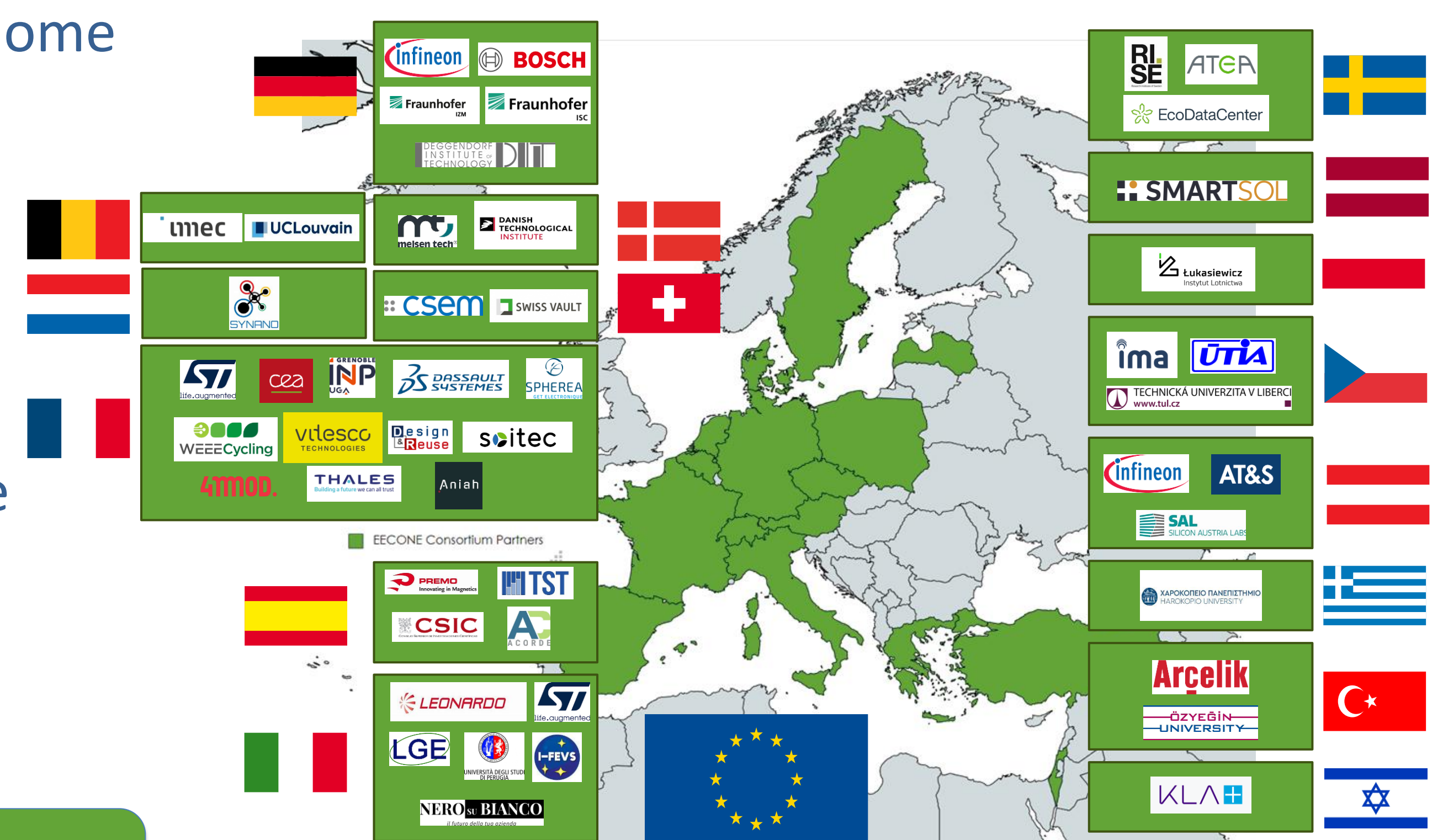
Build consciousness	Make green ECS	Showcase green solutions	Define green ECS
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Technical goals

- Introduction of **additive eco-friendly PCB** manufacturing and **semiconductor re-use and re-work**
- **Eco-designed power electronics** for automotive, assessment of **recyclability**
- **Low footprint structural health sensor for aeronautical systems for predictive analysis**
- **Less hazardous battery, battery-free solutions and modular design for green IoT**

Expected impact

- **Define green ECS**
 - at least 80% of metrics for **6R assessment implemented**
 - at least 80% of a **design process coverage** ready for 6R assessment
- **Make green ECS**
 - **Product eco-design:** Identifying the limitations in the repair and recycling processes
 - **Repairing and reusing:** 60% repair rate by design
 - **Recycling e-waste:** 80% recycling rate by design
- Sustainable PCB manufacturing using **conductive inks** and **substrates** developed with **low environmental impact** and easily **recyclable** materials
- **LCA improvement by 10%** compared to current electronics



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Highlights

- Mapping of raw materials and waste quantification
- Eco-design metrics definition: preliminary version
- LCA of consortium meeting



Link to website