



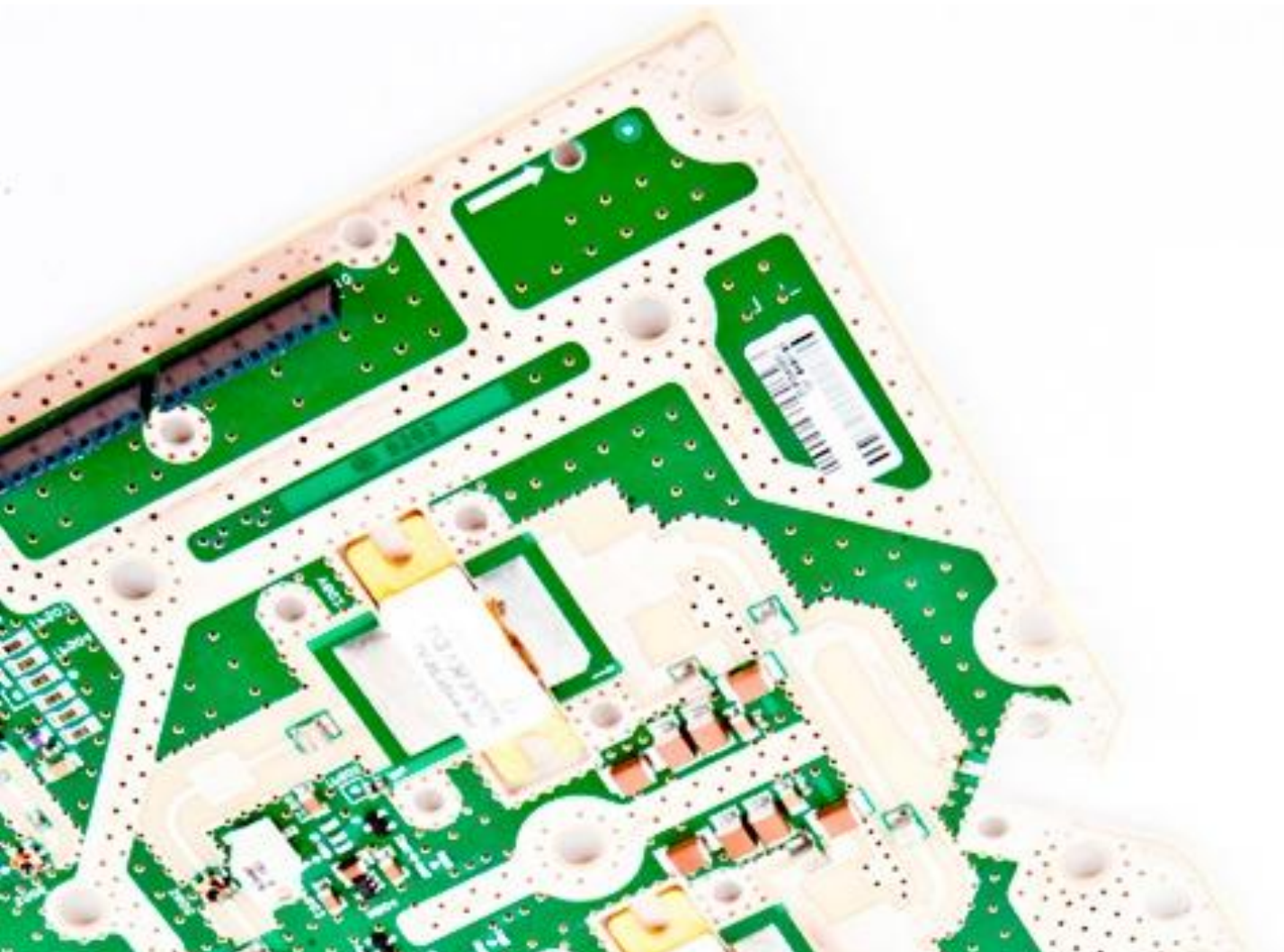
GREEN REPAIR AND RECYCLING PROCESSES

in professional electronic industries

This document wraps up the reasons for adopting green repair and recycling practices in professional electronic and robotic industries. Green after sales service processes have an important role in reputation management and in resource efficiency.

Green after sales processes as a competitive edge

Professional electronic industries – like telecommunications, industrial automation and engineering – are closely connected with valuable natural resources. Material efficiency plays a key role in productivity throughout the life cycle of the products. Efficient use of raw materials in repair processes and recycling in the end of the product's life cycle are an integral part of productivity. They also belong to today's sustainability requirements and build the reputation of the whole industry.



1. About green repair processes

When an electronic product or device is not functioning properly or is broken, the options are repair or disposal. Of these options, repair is the green solution: there is no need to invest in a new product. Often the most sustainable solution is to manage repair at component level.

When repair is done at component level, the need to use new materials is minimized. Instead of swapping modules for example, component level repair reduces waste of material. The actual failure can be located just in the software – or the product requires just minor correction, with very little amount of new material (or no material at all) needed.

When lean processes are implemented in after sales services, repair becomes even greener: all unnecessary steps are identified and eliminated. The less material and resources are used in repair, the more greener the activity becomes.

2. About green recycling processes

Many materials used in demanding electronic devices are scarce and thus expensive. Some common examples are metals: e.g. gold, silver and aluminium. When the product's life cycle is about to end, professionally managed recycling ensures that all materials are handled correctly. A responsible recycling partner separates pricy metals properly for reuse, for the benefit of the owners of the disposed devices.

The materials with value at recycling markets are separated, and they are delivered to reuse. Other materials are delivered to controlled disposal. Both hazardous and non-hazardous materials have to be handled according to local legislation, taking care of their environmental impacts.

Responsible recycling is one of the key elements of green operations. Recycling processes need to be transparent in order to prevent unpleasant surprises in terms of cost efficiency and reputation.



3. Why to adopt green repair and recycling processes

In today's world green operations can create a clear competitive edge. Successful businesses strive to reduce their carbon footprint and emissions, and have a transparent way to measure and prove their actions. Growing businesses need strategic partners with green competences in order to manage their after sales services in a sustainable way.

In turn, investments in sustainability delivers cost savings and secures the reuse of valuable raw materials. Time, money and materials are used in the most economical way. This shows on the bottom line, too.

4. How to create and maintain green repair and recycling processes

Lean principles are a good and practical guide to create sustainable processes:

- Identify current processes that are related to material efficiency
- Analyze material waste and unnecessary actions or procedures
- Create new processes which require minimal efforts and create minimum of waste (without compromising the determined service level)
- Secure that all reusable materials are handled, processed and recycled efficiently
- Secure that all remaining waste is handed to disposal in a controlled way



5. Partner with after sales services with green competences

TDR focuses on providing unique advantages for brand owners in the demanding electronics and robotics industries. The technology neutral approach provides flexibility, efficiency and reliability of repair, testing and spare parts handling. This includes lean and green processes.

The focus on increasing the products' lifetime with faster turnaround time and lower cost of repair provide strong customer benefits in today's severe competition.

TDR GROUP

Mannerheimintie 12 B, 5th floor
FI-00100 Helsinki
FINLAND
Tel: +358 925 166 259
Fax: +372 6645 429
Email: info@tdr.fi

[Contact TDR to learn more](#)

