



Case study  
 Industrial Sector: Printed Circuits  
 Boards/Electronics  
**SMR Polska** (Poland)



The company SMR Polska Sp. z o.o. specializes in recycling of nonferrous metals. It is middle size company operates mainly on the European market. Representatives of company: Marcin Szwech, Artur Adamski and Michal Kotarba had the opportunity to take part in the discussion with a representative of ITR concerning Life Cycle Assessment of products as well as in the mentoring concerning the “LCA to go” tool for Electronics and PCB sectors.

During the mentoring, the backgrounds of the LCA to go project were explained as well as practical possibilities of the tool offering by the “LCA to go” project were showed. The tool’s modules for electronics and PCB sectors were presented. During practical tests the basic version of the “LCA to go” tool for PCB sector was used for environmental analyses of the various PCBs variants as well as the tool module for electronic sector was utilized to analyse of typical computers. The information concerning end-of-life phase of analysed products were especially interesting for SMR Polska – the presence of elements and their amount in various PCBs and electronics products.

Mr Szwech said: “We found the tool practical. Contact with the tool improved understanding of the products life cycle. Its results may be useful for our business. The tool might help us to undertake new recycling operations in the area of electronics products and PCBs”.

**PRODUCT INFO**

|                        |             |
|------------------------|-------------|
| Mark of the PCB        | Plytka ENIG |
| Type of PCB            | Rigid       |
| Number of layers       | 4           |
| Type of finish coating | ENIG        |

**TOTAL RESULTS on KEPIs DETAILED RESULTS**

| Indicator                         | Units | For 1 PCB | For 100 PCBs |
|-----------------------------------|-------|-----------|--------------|
| Possible materials for recycling: |       |           |              |
| Cu                                | g     | 125.4400  | 12544.00     |
| Au                                | g     | 0.1159    | 11.59        |
| Ni                                | g     | 2.6700    | 267.00       |
| Sn                                | g     | 0.0000    | 0.00         |
| Ag                                | g     | 0.0000    | 0.00         |
| Glass                             | g     | 394.2675  | 39426.75     |
| Resin                             | g     | 273.9825  | 27398.25     |

Fig.1. Some results from case study.