



Case study Industrial Sector: Electronics/Printed Circuits Boards

NOVAMEDIA[®]

Novamedia innovision Sp. z o.o. (Poland)



The Novamedia innovision from Kalisz in Poland specializes in production of electronics products for transport vehicles and others application. It is middle size enterprise and operates mainly on European market.

Mr Mariusz Razik, Piotr Przesmycki and Krzysztof Mroz from Novamedia had the opportunity to take part in discussion and mentoring organized by ITR concerning Life Cycle Assessment of products for PCB and Electronics sectors and to check practical possibility of the tool offering by the “LCA to go” project.

The “LCA to go” tool for PCB sector was used for the product assessment marked uCPU2. It was chosen the standard version of the tool. The different versions of coatings on the PCB as well as different transport profiles were analysed. Moreover the possibility “LCA to go” tool for Electronics sector was discussed and tested based on the components used in laptop to show the whole LCA assessment procedure of electronic product.

Mr Razik said: *“The contact with the tool improved my understanding of the product life cycle. The results and information about CO2 emissions and energy consumption could be used to improve the environmental efficiency of our products. Generally the navigation of the tool is easy and does not take too much time and the results from the tool could be useful for our business and marketing”.*



Organisation: Novamedia
 Author: Piotr Przesmycki
 Name of the product: Copy of uCPU2
 Version of the product: 3R01
 Description of the product:

PRODUCT INFO - Copy of uCPU2

Mark of the PCB	uCPU2
Type of PCB	Rigid
Number of layers	4
Type of finish coating	Sn

PRODUCT INFO - uCPU2

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Type of PCB	Rigid
Number of layers	4
Type of finish coating	ENIG

Comparison

Indicator	Units	Copy of uCPU2	uCPU2	Result of comparison [%]
Water consumption	m ³	0.0568	0.0590	3.89 %
Energy consumption Ec (Ec = Ecm+Ecp)	kWh	6.7339	7.4132	10.09 %
Ecm - Energy consumed during materials production for PCB	kWh	2.7531	3.0228	9.79 %
Ecp - Energy consumed during production processes of the PCB	kWh	3.9808	4.3904	10.29 %
Total sludge and waste emitted	kg	0.1291	0.1388	7.49 %
Carbon footprint - CF	kg CO2 eq	5.4319	5.0731	-6.61 %
CF of materials	kg CO2 eq	2.0506	2.0595	0.43 %
CF of production processes	kg CO2 eq	2.9650	2.9913	0.88 %
CF of gas emissions to air	kg CO2 eq	0.0100	0.0100	0.00 %
CF of transport	kg CO2 eq	0.4062	0.0123	-96.98 %

Fig.1. The comparison of two PCB design options and two transport profiles for the uCPU2 product - some results from case study.