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Circular economy: the European CIRC-UTTS project on the end-of-life reuse of electrical components in the automotive and domestic appliances sector is underway

Milan, 4 February 2023 – The **European CIRC-UTTS project** (Circular Integration of independent Reverse supply Chains for the smart reUse of IndusTrially relevant Semiconductors), which develops digital solutions for the design, production and end-of-life management of electronic components.

In fact, **CIRC-UTTS** intends to develop new technologies for designing, disassembling and efficiently and sustainably reusing disused electronic components inside new products, but it also intends to define new business models to improve data sharing and standardisation among the industrial leaders involved in the supply chains.

In particular, the advantages of the digital circular economy will be demonstrated through 4 pilot projects:

- Development of environmentally friendly electronic panels to be incorporated into inverters and battery management systems in electric cars
- Development of new-generation tyre sensors
- Development of environmentally friendly flexible processing boards
- Classification and storage of obsolete printed circuits of various pieces of electrical and electronic equipment

In this way, CIRC-UTTS will provide material support to businesses in the automotive and mass-produced electronics sector, demonstrating the benefits that can be obtained from the application of the circular economy paradigm both from the perspective of both the business and supply chain and from the technological and sustainability perspective, through the adoption of Industry 4.0 technologies in the processes through which disused electronic components are managed and in the design of new products.

The three-year CIRC-UTS project is a Research and Innovation action co-financed by the European Commission under its **Horizon Europe** programme, and is coordinated by professors **Paolo Rosa and Sergio Terzi** from the Politecnico di Milano's Department of Management Engineering and has a total budget of around € 6 million.

The project, coordinated by the Politecnico di Milano, has support from the following partners:

the OFFIS German research centre,
the Austrian systems and automation engineering society SAT,
the Swiss-Italian professional university SUPSI,
the Spanish tech business association INNOVALIA,
the Dutch research centre TNO,
the software development company TXT E-Tech Srl,
il research centre Fiat CRF,
the German mechatronic component manufacturer Robert BOSCH GmbH,
the German electronics materials producer ALPHA assembly solutions Germany GmbH,
the French mechatronics component producer CONTINENTAL automotive France SAS,
the Italian domestic appliance producer WHIRLPOOL corporation,
the Dutch consultancy firm Material Recycling and Sustainability B.V,
the German consultancy firm BESU solutions GmbH,
the vehicle demolition company Pollini Lorenzo e Figli Srl,
the Dutch flexible electronics producer start-up TRACXON BV,
the Italian waste collection consortium RAEE ERION,
the German standardisation institution DIN EV,
the Politecnico di Milano's competence centre MADE,
and the Hungarian chamber of commerce PBKIK.

To find out more, visit www.circuitsproject.eu

The CIRC-UTS project has received funding from the European Union Horizon Europe research and innovation programme under Grant Agreement No. 101091490