

Green ICT @ FMD

Competence centre for ecologically sustainable information and communication technology (ICT)

Our Goals

- Application-oriented research in the field of microelectronics to promote ecologically sustainable development
- Support companies in the implementation of their ecological sustainability goals and realize cost savings

Our range of services

- Know-how transfer in the creation of life cycle inventory models, life cycle assessments and calculations of the CO₂ footprint of products and processes
- Advice on energy savings, material substitution and reducing the carbon footprint of manufacturing processes, components and systems in order to remain competitive in the future
- Provision and plausibility checks of life cycle assessment data sets for the technology areas listed below

Our technology fields

Sensor Edge Cloud Systems

- Advice on system architecture, load profile and selection of components and materials
- Characterization of energy efficiency
- Alternative energy supply concepts
- Quantification and evaluation of the CO₂ balance
- Benchmarks

Communication infrastructures

- Data acquisition of energy consumption
- Utilization of measuring equipment
- Development and testing of algorithms for energy optimization
- Characterization of systems and components
- Digitalization, energy-efficient circuits, modules and front ends

Resource-optimized electronics production

- Quantification of material, resource and energy consumption
- Analysis and advice on the energy efficiency of machines, including CO₂ balancing
- Characterization of test structures
- Tests of alternative chemicals and processes in our cleanrooms

The advantages of working with us

- More than 15 years of experience from national and international cooperation projects in the field of life cycle assessment with the know-how of 11 Fraunhofer and 2 Leibniz institutes
- Confidential and secure handling of your data and the data obtained during the cooperation
- Implementation of your CO₂ reduction targets and fulfillment of customer and legal requirements

Contact us by e-mail to increase your ecological sustainability and develop innovative solutions together!