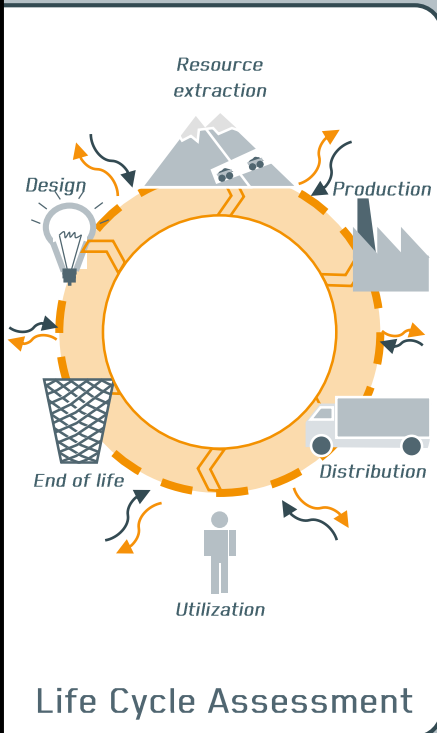


LIFE CYCLE ASSESSMENT AND RECYCLING PLATFORM



Software

GaBi - Thinkstep

umberto® - ifu Hamburg GmbH

Databases

GaBi Professional

GaBi specific databases on materials

ecoinvent 3.3

Standards

ISO 14040-14044

ISO 14020-14025

NF EN 15804

TECHNICAL SERVICES

- **Life Cycle Assessment (LCA):** preparation of LCA for products, processes and services according to ISO 14040 and 14044 standards
- **Life Cycle Inventory (LCI):** identification and quantification of material and energy flows for products, processes and services according to ISO 14040 and 14044 standards. Specific skills: systemic modelling for production processes, enhanced knowledge for End-of-Life recycling
- **Environmental Product Declaration (EPD):** for transparent, comparable and verified communication on the environmental impacts of a product throughout its entire life cycle
- **Material Flow Accounting & Material Flow Analysis (MFA):** identification and quantification of material and energy flows on production sites for material utilization optimization or at regional, national or international scale to assess resource availability
- **Waste characterization:** End-of-Life product dismantling, residues sorting and characterizing to assess recycling rates



PLATFORM AVAILABILITY

- Multi-partner research projects with public co-funding
- Research studies/services
- Training

Example of waste characterization to assess product and material recycling rates: End-of-Life Vehicles were dismantled and shredded; shredded fractions were weighted and sorted, their metallic content assessed to calculate overall recycling rates as well as metallic specific recovery rates. Pictures below show examples of sorted and analyzed fractions.



Fines - glass-rich fraction



Copper elements



Heavy residues



Steel scrap



Light residues

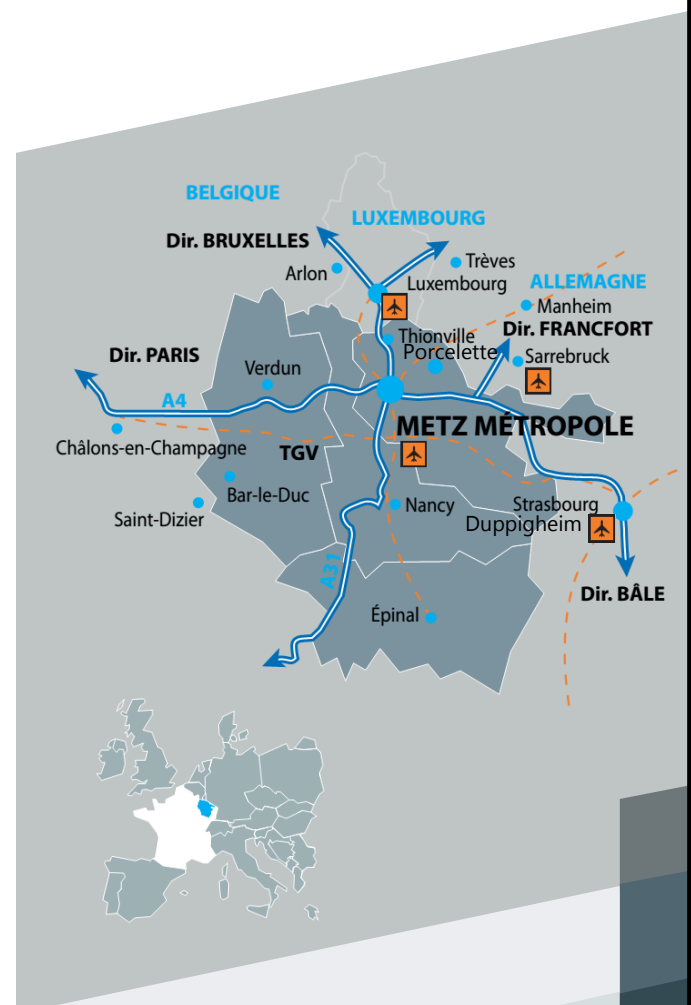
ABOUT IRT M2P

IRT M2P is a mutualized research center bringing together skills of industrial and public research, based on public-private co-investment and partnerships. IRT M2P accelerates innovation and growth for industrial companies, develops key technologies (shared amongst major industrial sectors) and provides technological platforms for industrial companies (processing of metallic materials, life cycle assessment and recycling, mechanical surface treatment, surface treatment and coating, thermal and thermochemical treatments, composites, forging, mechanical processes for multi-material assembly).

CONTACT M2P

Gaël FICK
gael.fick@irt-m2p.fr

Headquarters
IRT M2P
4, rue Augustin Fresnel
57070 Metz Technopôle
France
Tél. : +33 3 72 39 50 85



Find other projects and platforms on our website :