RECYCLING & VALORIZATION: A panorama of waste optimization opportunities

Key activities

- Avoid physical products through digitization (e.g. book to e-book)
- Minimize material use (e.g. reduce packaging)
- Eco-design
- Maintain to maximize life time
- Re-use (2nd hand, remanufacture, …)

Material recycling
- Anaerobic digestion/composting
- Extraction of biochemical feedstock
- Energy extraction through Incineration, pyrolysis, gasification
Positive trend on recycling ratios for all materials with progress still to be achieved in Plastics

Interesting example of win-win competition between Energetic Valorization and Recycling in Germany

Efficient combination of both recycling and valorization is likely to lead to better Energy Recovery and more efficient Life Cycle in the overall waste stream management

RECYCLING & VALORIZATION: A comparison of the recycling industry economics between Germany, France and the United Kingdom

- Very contrasted situation within the EU: Germany seems to enjoy healthier recycling business sector while France and the UK looks more challenging on average.

- Key success factors can lead to a virtuous circle for the Recycling & Valorization industry including:
  - Solid framework of big regional and national players with strong push for innovation
  - Well-organized and coherent regulatory framework to limit cross-border shipment of valuable waste and optimize waste stream allocation between Valorization and Recycling