

# Circular Economy

## Closing the cycle

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Landfilling and incineration do not extract the highest value out of waste. We help you to find which valorisation options have a positive business case. We also support process development to go from waste to a high-value product.

- Re-use and Recycling Feasibility
- Hazard Classification
- Re-use and Recycling Process Development
- End-of-Waste

### Recycling options for your material

Depending on the nature of your material, we characterise it with a set of analyses. What is the composition? Is the material contaminated? Based on the results, we advise which recycling options are possible and commendable. Is re-use possible? Also in the longer term? How much would thermal valorisation yield?

### Recycling process development

After selecting the best recycling option, we elaborate the process to get from waste material to product. We test the process steps at a lab scale. Then we build a small test setup to test and optimise the full process.

### End of Waste

To produce feedstock or product out of a waste material the legal status 'waste' needs to be removed. The new feedstock or products needs to meet the End of Waste criteria, which guarantee that no unacceptable environmental or human risks are associated with the re-use or recycling. We help you to track down and – if possible – break down unnecessary barriers in regulation. This allows marketing of your material as feedstock or product.

### **Decades of experience across many sectors**

ECN performs environmental risk assessments for various sectors, such as waste incineration, construction, mining, nuclear waste, and landfilling. We also advise on and develop methods to enable safe application of (waste) materials, such as contaminant immobilization and removal.

- Waste and Soil
- Circular Economy
- Hazard Classification
- Sustainable Landfilling
- Leaching Test Equipment
- LeachXS

Materials that we have worked with include industrial waste, municipal waste, incinerator bottom ash, fly ash, boiler ash, electric arc furnace slag, steel slag, concrete, cement, mortar, red mud, various filter cakes, and many more.

### **Accredited, high-quality work**

All standardized tests are performed according to relevant norms and under ISO 17025 accreditation. Please contact us to determine which tests are most suitable for your product.

