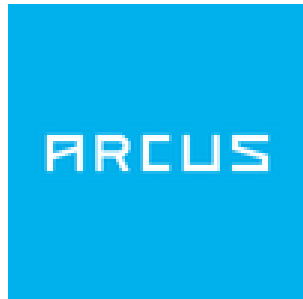


Client Reference

ARCUS Greencycling



“We approached thinkstep [now Sphera] to carry out a screening analysis of our innovative recycling process for plastic waste in comparison to incineration and mechanical recycling. Building on their expertise, thinkstep [now Sphera] delivered on time a comprehensive, yet cost competitive screening assessment of the CO2-footprint and energy demand. The indicative results of the comparison can now be used in discussions with law makers to integrate our new technology within the existing frameworks and guidelines.”

Daniel Odenthal, Markus Klatte, Founder ARCUS Greencycling Technologies

Goal

- Get an overview of the performance of different set-up options of the ARCUS pyrolysis technology in comparison to incineration and mechanical recycling
- Generate indications for law makers of the technologies’ anticipated environmental profile

Solution

- Modelling of the different technologies for plastic waste processing in thinkstep's [now Sphera’s] Life Cycle Assessment Software GaBi
- Screening analysis of the CO2-footprint and the primary energy demand and their hotspots

Benefit

- Indication of the competitiveness of the technology compared to incineration and mechanical recycling
- Possibility of forecasting changes in the impacts by improving process parameters for large scale deployment of the ARCUS technology

