Development of slow pyrolysis solutions to valorize biomasses is vigorous. Range of potential applications for biochar and pyrolysis liquids have been proposed. Luke offers scientific based services to study, test and optimize pyrolysis process and derived end-products according to the specific needs of customers.

**Our services for slow pyrolysis:**

- Test facility for pyrolysis of various biomasses
  - Wood, straw, manure, sewage sludge, etc.
- Quality analysis of the end-products
- Application tests
  - Biochars as soil amendment, water holding capacity
  - Development of growing media and filtration agents
  - Fertilization value of biochars derived from manure
  - Use of pyrolysis liquids in plant protection
  - Range of other test facilities
- Development of designed biochar based on scientific knowledge
- Evaluation of feasibility of pyrolysis concept
Why to cooperate with Luke?

- We combine strong scientific expertise, innovativeness and practical scale test facilities to support your pyrolysis solution
- Solutions for all end-products: biochar, liquid and gas fractions
- Existing national and international networks
- Long-term expertise in the field
- Broad understanding on feasibility of pyrolysis concept
- Competence in agro, forest and aqua sectors and their symbiosis and ambition to incorporate pyrolysis technology to these value chains

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Luke provides expert services and solutions in the area of circular economy and bio economy. Our core competence is valorization of biomass waste and side-streams for high value products. Optimization of nutrient cycles as a part of the entire valorization chain plays an essential role as well. Our services encompass environmentally sound refining, fractionation and extraction technologies for valorization of biomass as well as protein recovery and processing into high value products. For food and forest industry we offer comprehensive value-added utilization of by-products. Assessment of biomass potential availability and assessment of sustainability are also examples of our high-quality services.