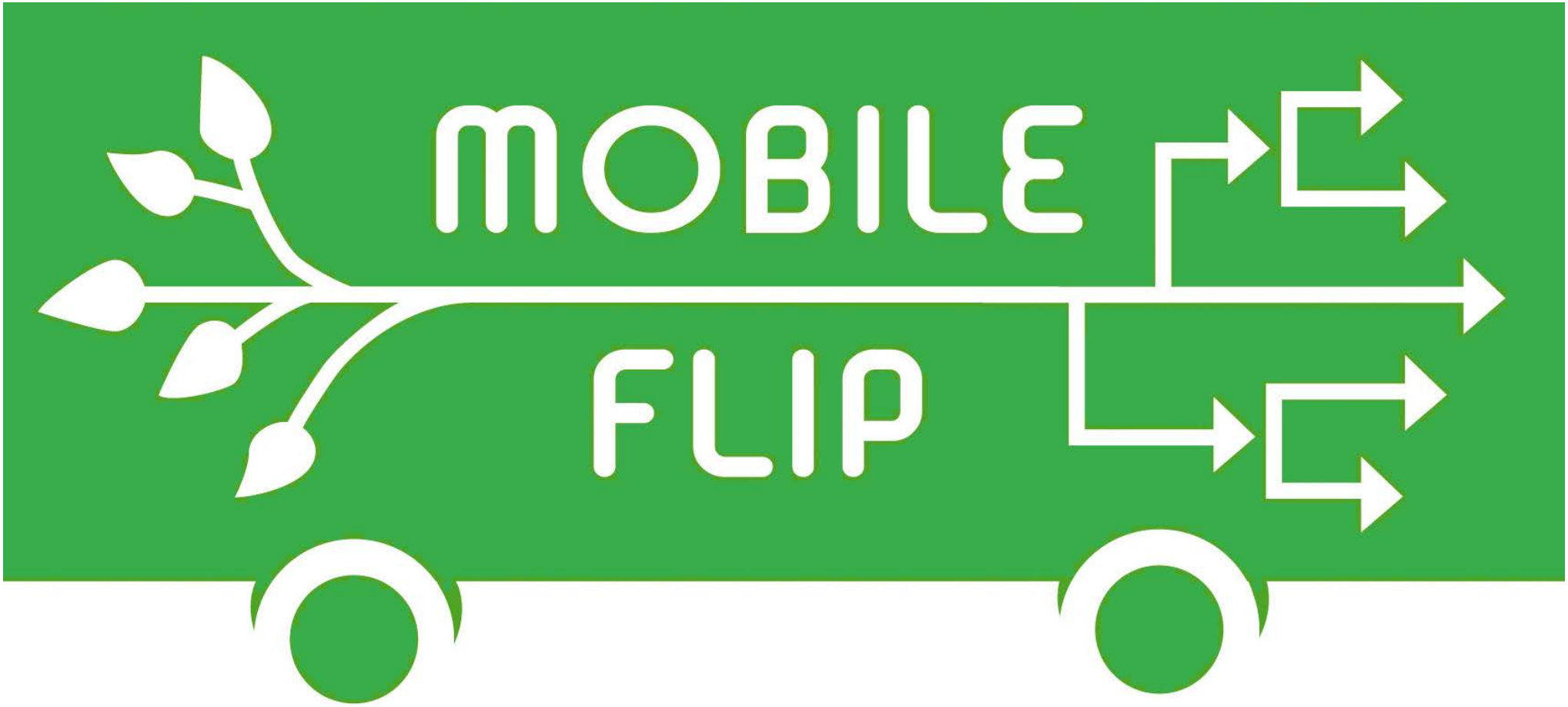


SPIRE
Sustainable Process Industry through Resource and Energy Efficiency

European Commission

Mobile and Flexible Industrial Processing of Biomass, MOBILE FLIP

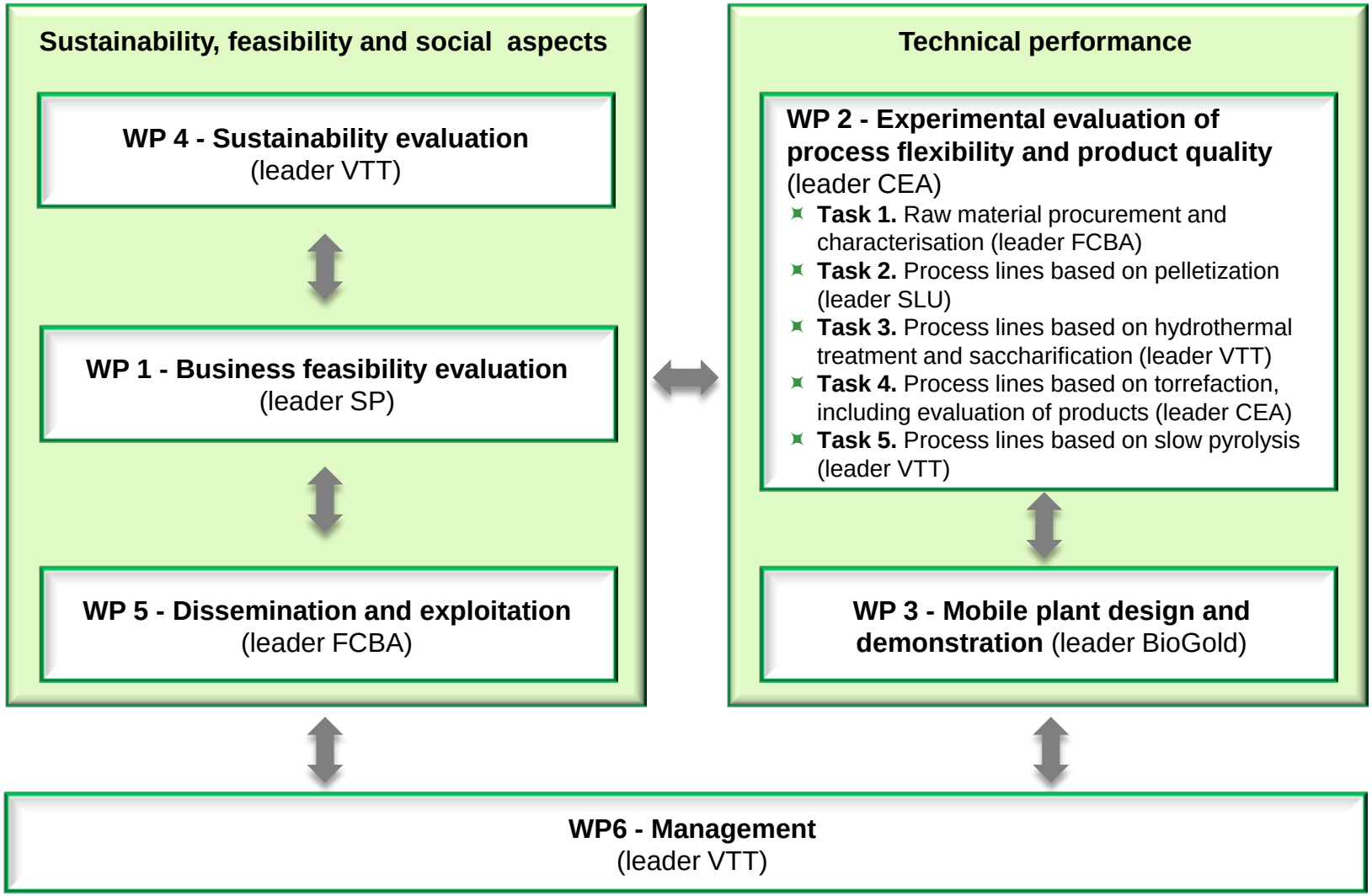
Background

- Novel solutions need to be developed for sustainable process industries utilizing renewable resources in a sustainable manner.
- Forestry, agricultural and industrial wastes are potential future resources, but they are typically fragmented and only seasonally available.
- Mobile Flip brings together the industry, SMEs and RTOs, to generate new and emerging solutions for the environmental, social, and economic challenges, more specifically the growing demand for sustainable and innovative use of biomass raw materials.

Main objectives

- Develop technologies for simple and robust processes that are applicable to small scale. The specific aims of the project are to demonstrate at least three of the following technologies as a mobile unit
  - biomass pre-treatment steps (comminution, drying, fractioning)
  - hydrothermal treatment and saccharification
  - hydrothermal carbonization
  - torrefaction
  - slow pyrolysis
  - feasible compaction technologies for solid products (pelletizing and briquetting)

Approach


Sustainability, feasibility and social aspects
WP 4 - Sustainability evaluation
(leader VTT)
WP 1 - Business feasibility evaluation
(leader SP)
WP 5 - Dissemination and exploitation
(leader FCBA)
Technical performance
WP 2 - Experimental evaluation of process flexibility and product quality
(leader CEA)
Task 1. Raw material procurement and characterisation (leader FCBA)
Task 2. Process lines based on pelletization (leader SLU)
Task 3. Process lines based on hydrothermal treatment and saccharification (leader VTT)
Task 4. Process lines based on torrefaction, including evaluation of products (leader CEA)
Task 5. Process lines based on slow pyrolysis (leader VTT)
WP 3 - Mobile plant design and demonstration (leader BioGold)
WP6 - Management
(leader VTT)

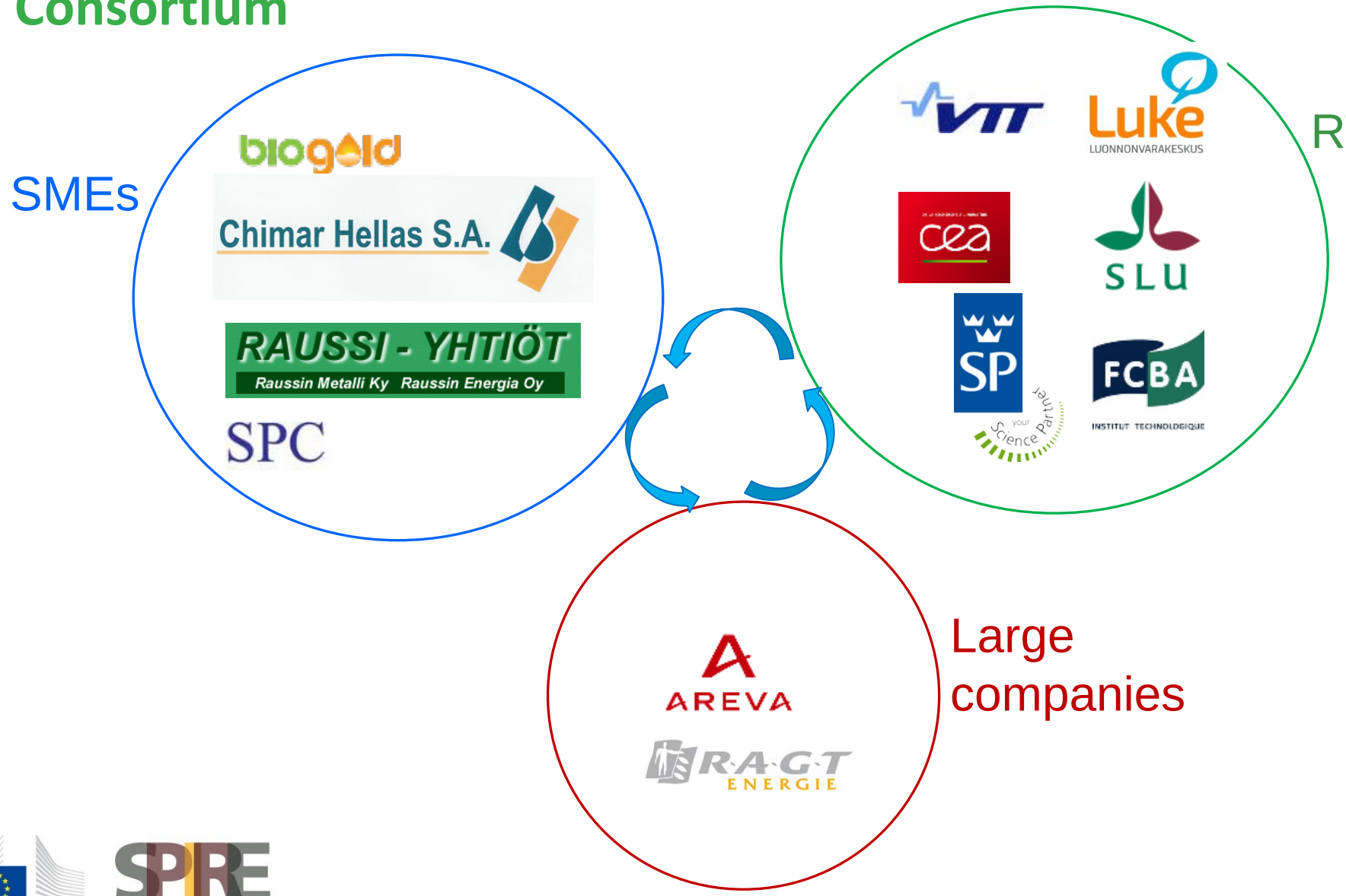
Mobile Flip in figures

- Budget: 9.77 million euros
- Resources: 762 Personmonths
- Duration: 4 years (2015 – 2018)
- Partners: 2 large companies, 4 SMEs and 6 research institutes & universities
- From 5 EU member countries
- Programme SPIRE-02-2014 Adaptable industrial processes allowing the use of renewables as flexible feedstock for chemical and energy applications
- Contacts Coordinator: tarja.tamminen@vtt.fi

European Commission

Sustainable Process Industry through Resource and Energy Efficiency

Consortium


SMEs
biogold
Chimar Hellas S.A.
RAUSSI - YHTIÖT
Raussin Metalli Ky Raussin Energia Oy
SPC
RTOs
VTT
Luke
LUONNONVARAKESKUS
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Thank you for your attention!