



Green Biorefinery

Technical, economic and ecological optimisation of value chains
by the introduction and efficient use of sustainable raw material

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Agrotechnology and Food Innovations
Wageningen UR

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Project partners

**Ökoenergie
Utzenaich GmbH**
(biogas)

Bumaga B.V.
(pulp & paper)

**OÖ Bioraffinerie
GmbH**
(biorefinery pilot plant)

**A&F - Agrotechnology a.
Food innovations B.V.**
(R&D)

**Ökoplan Energie-
dienstleistungen GmbH**
energy services

**JOANNEUM RESEARCH
Forschungsges mbH**
(R&D), coordinator

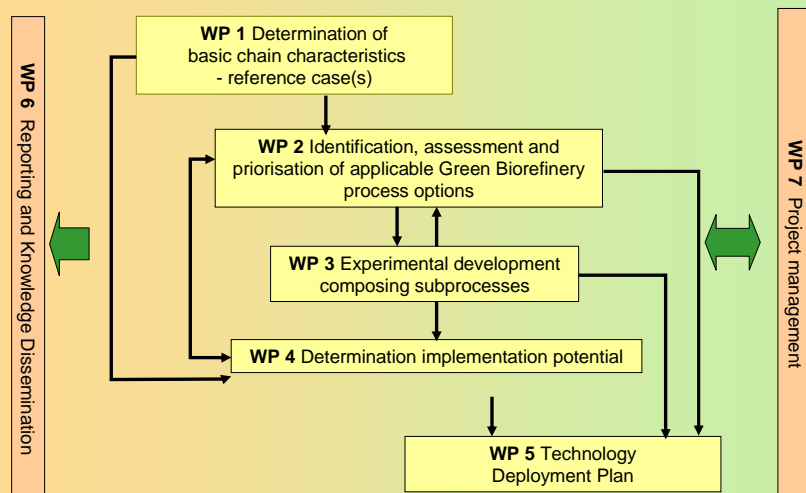
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Objectives

- **Assessment of biorefinery potentials**
for different feedstock (grass, maize and agro waste)
processes and products
- **Focused R&D, process development**
utilisation of maize, juice utilisation, fibres in pulp & paper ...
- **Compiling a strategy for green biorefinery**
- **Dissemination of results and encouraging implementation**

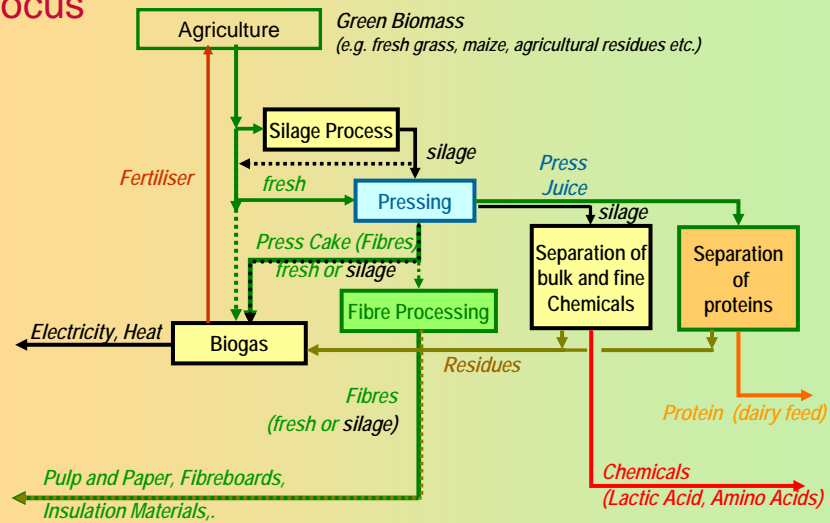
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Method / work plan



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Focus



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Current project status

- **Defining reference case**
finished
- **Process option evaluation**
in progress
- **Experimental work**
just starting
planning of experiments and infrastructure

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Expected results

Answers to puzzling questions

- **If and how grass/ maize fibres can be utilised by the pulp and paper sector**
- **Improving technology**
concrete results for new or improved processes
- **Updated technical and economical performance of investigated pathways**
- **Strategy for green biorefinery**
(focus for applied R&D, technology deployment plan; supporting implementation);

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Introduction of the speaker

Edwin Keijsers; MSc PdEng

Chemical process engineer,
12 years R&D record.



Actual focus of work

Utilisation of renewable resources for
production of fibre based materials;
biorefinery concepts;
process design.

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