



*A strategic research platform at LU*

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Why?

- We (as a society) face **enormous research challenges** relating to **energy, climate and sustainability**. To address these challenges we need the **interaction** of a broad research base.
- **Lund university is a leading research actor** in the field of biofuels, particularly biological conversion, and systems analysis.



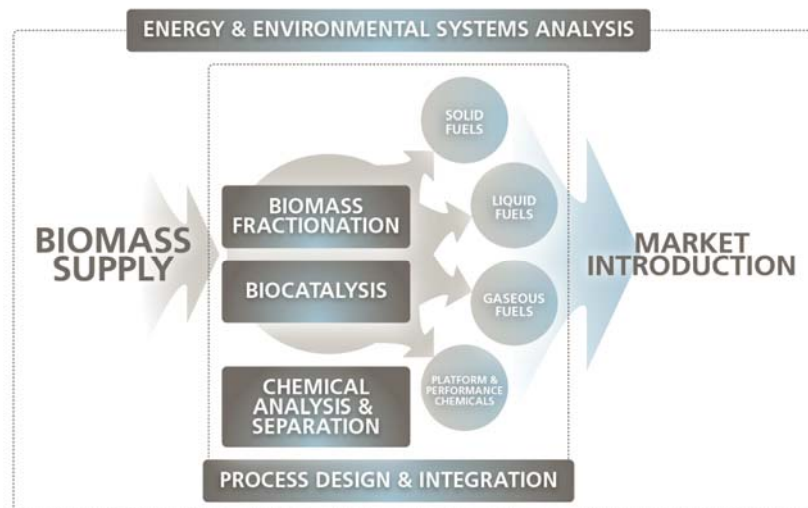
## LU BIOFUELS Mission

- To drive forwards **sustainable solutions** for the production of **biofuels and bio-products from renewable bio-resources**.
- To **support industries** to become cost competitive and sustainable on the global market.
- To be a natural hub for **cross-disciplinary knowledge** and education.

The research focus is on **biological conversion**, where LU already has a leading position.



## LU BIOFUELS





## Major challenges

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- Biomass fractionation
- Process intensification and process integration
- Regulation and control of biocatalysts
- System studies

*Each one requires substantial efforts from several disciplines*



## Initial partners

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- Applied Microbiology
- Biochemistry
- Biotechnology
- Cell and Organism Biology
- Chemical Engineering
- Economic History
- Environmental and Energy Systems Studies (IMES)
- International Institute for Industrial Environmental Economics (IIIEE)



We have the competence, the experimental facilities,...



..and a huge international collaboration network

#### Europe

- IFP och INRA, France
- VTT, Finland
- ETH, Zurich
- University of Frankfurt, Germany
- Vienna University of Technology
- Univ. Milano, Italy
- Techn. Univ of Budapest

#### U.S. & Canada

- NREL
- University of Florida
- Georgia Tech
- UBC, Canada

#### Brazil

- CTC
- CTBE
- National Inst. of Technology
- UFRJ
- UFPR

#### China

- Tsinghua University
- Guangxi University
- Beijing Forestry University

#### India

- IIT in Chennai, Mumbai and Delhi

#### South Africa

- Stellenbosch University



***We will***

- **Create new research synergies**
- **Increase visibility** of LU research
- Obtain **structural support** to this field at LU
- Arrange **seminars, workshops and conferences**
- Develop **courses** for graduate students and others

[www.lubiofuels.org](http://www.lubiofuels.org)