



# Valorization of biomass by chemistry

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# Our perspective

## The AllEnvi Alliance



The questions we've addressed :

Chemistry from biomass: potential, prospects and limitations?

What contribution is expected from academic research?

# Biomass limitations

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From an industrial point of view, biomass has complex characteristics

- Cost
- Availability
- Variability
- Specificity

Biomasses are not real commodities

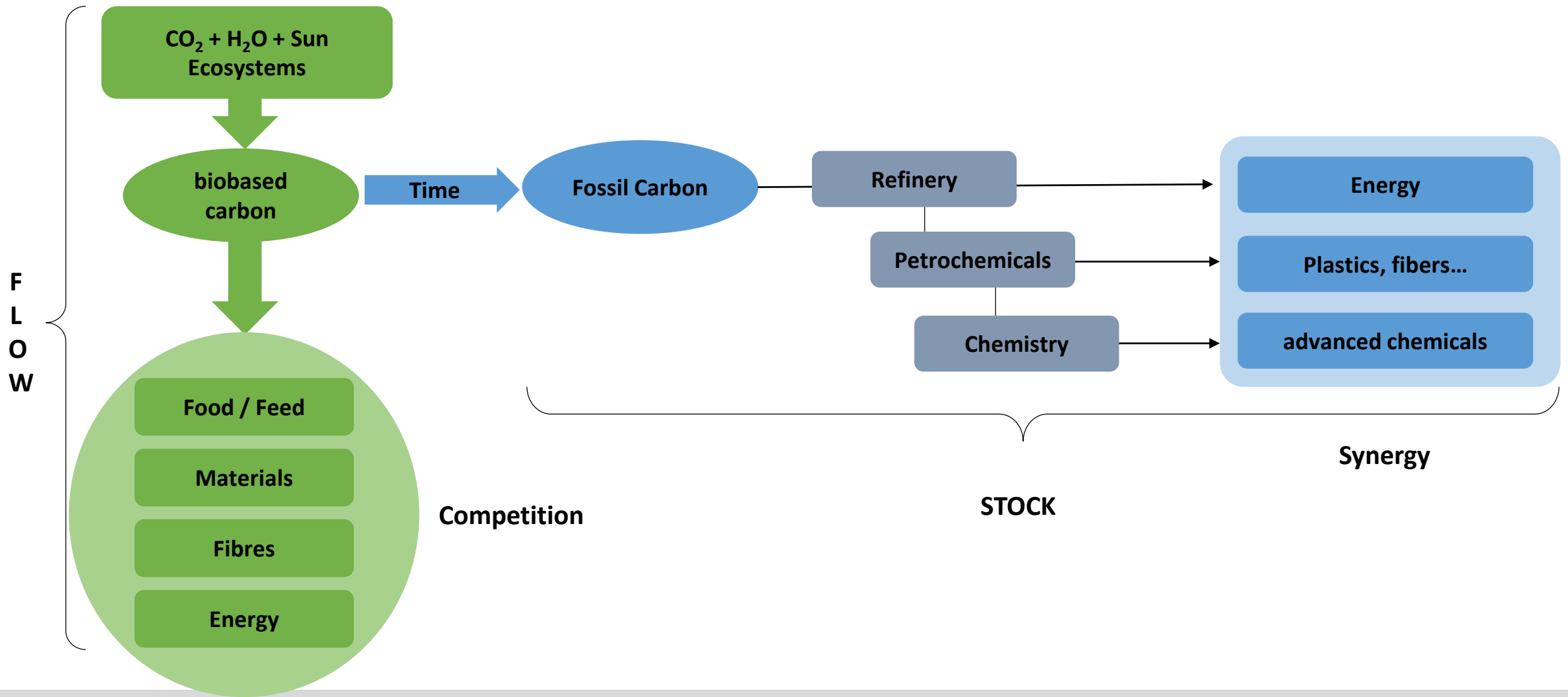
Secondary factors: Sustainability and conflicts of uses (resources and lands)

# Keys findings

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1. Biomass productions are well established, well balanced sectors and available surpluses are rare. Emerging uses must be carefully integrated into existing sectors
2. Food sectors are politically sensitives and must keep priority over resources allocations (productions and soils)

# Flows vs Stocks



# Performances requirements for bio-based chemistry

Old balance

Technical & Economic



New balance

Technical & Economic + Environmental



# Requirements for the emergence of a bio-based chemistry

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- A new organic chemistry
- Usable and targeted feedstocks
- Carefully targeted application markets
- A multisectoral integration strategy, including energy as the last resort