



# **MOOV – DECISION SUPPORT FOR NETWORK DESIGN CASE ANALYSIS OF THE IDEA ALGAE VALUE CHAIN**

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## **MOOV - A VALUE CHAIN OPTIMIZATION SERVICE**

- MOOV FINDS THE BEST CONFIGURATION FOR ANY VALUE CHAIN
- WHILE MEETING SPECIFIC VALUE CHAIN REQUIREMENTS AND AMBITIONS
- WHILE TRACKING ALL KEY CHAIN CHARACTERISTICS SUCH AS QUANTITY, QUALITY, LOCATION, PLANNING & COSTS

#### MOOV WAS APPLIED TO IDENTIFY THE MOST PROMISING ALGAE VALUE CHAIN CONFIGURATION MOOV FOLLOWS A 3-STEP APPROACH: DEFINE – DESIGN – DELIVER

### **DEFINE** — DEFINING THE VALUE CHAIN ACTIVITIES AND ALL ITS CHARACTERISTICS

AND CHARACTERISTICS RELEVANT FOR THE ALGAE SUPPLY CHAIN WHERE ASSESSED BY MOOV ALL ACTIVITIES



**DESIGN –** DESIGNING DIFFERENT SUPPLY CHAIN CONFIGURATIONS BASED ON KEY CHARACTERISTICS

• THE IMPACT/EFFECT OF THE FOLLOWING CHARACTERISTICS WERE INVESTIGATED FOR THE REGIONS FLANDERS AND BAYERN



**DELIVER — IDENTIFYINGB COST EFFECTS OF VARYING CHARACTERISTICS ON ALGAE PRODUCTION** [€/KG D.M. ALGAE]





Total production cost effect

Comparable total production costs. Higher heating cost in Bayern due to colder temperature (green).

Transport cost effect

Higher transport costs in Bayern due to a lower density of greenhouses.

Economy of scale effects for higher biorefinery capacities.

Biorefinery capacity cost effect

Centrifuge location cost effect

Mobile centrifuge has higher cost due to oversizing to match the largest cultivator.

