



# Mobilizing biomass done right

Start at the bottom!

# Possibilities

- Marginal lands
- Increase efficiency
- Use of side streams
- Use aquaculture
- Change diet
- Etc.

# Starting point

- Primary producers
- Soils

# Design criteria

- Benefit primary producers
- Improve soils and prevent marginalization
- Business cases that work
- Sustainability regional application
- INNOVATION done right
- ROBUST feedstock supply
- FLEXIBLE energy system

# Actors

- Regional
  - Rely on CAP
  - and other EU legislation
- Global
  - Intermediars (sidestream products)
  - Reduce complexity

Needed action!

**INTEGRATION**

**CAP and RED**

**Industry and Nutrition**

**policies**

# GOALS

robust

feedstock supply

flexible

energy system

Innovation

DONE RIGHT

AGRI

Forestry  
[Aquaculture]

## SOURCES

MagL



food & feedstock

healthy, fertile soil

good agricultural practices

revitalise soil  
improve soil management  
prevent MagL

convince farmers!  
and families

use MagL for biomass production  
prevent ILUC

MagL EU - 25%

use agricultural land for sustain food + feedst. production

using residues by-products + waste (agr./forestry)

CONSIDER crop rotation system with suitable crops

Products & benefits

Bio CH<sub>4</sub>

set aside land premium

BIOCHAR

reducing extra costs for getting rid of excess manure

## TECHNIQUE

(slow)

biogas

pyrolysis

to digestate

compost  
(cattleman)  
mixed biogas

closing nutrient cycles

saving fertilisers (P, N...)

minimising meat prod.

→ ↓ manure

## POLICIES

incentives

bonus programs (reimbursement) (primary sector)

## CAP RED II

Nutrition policy

CC =

Awarding (no-punishment!)

## LOGISTICS

geographical feasibility of biomass availability

balance different potent. of biomass prod. EU

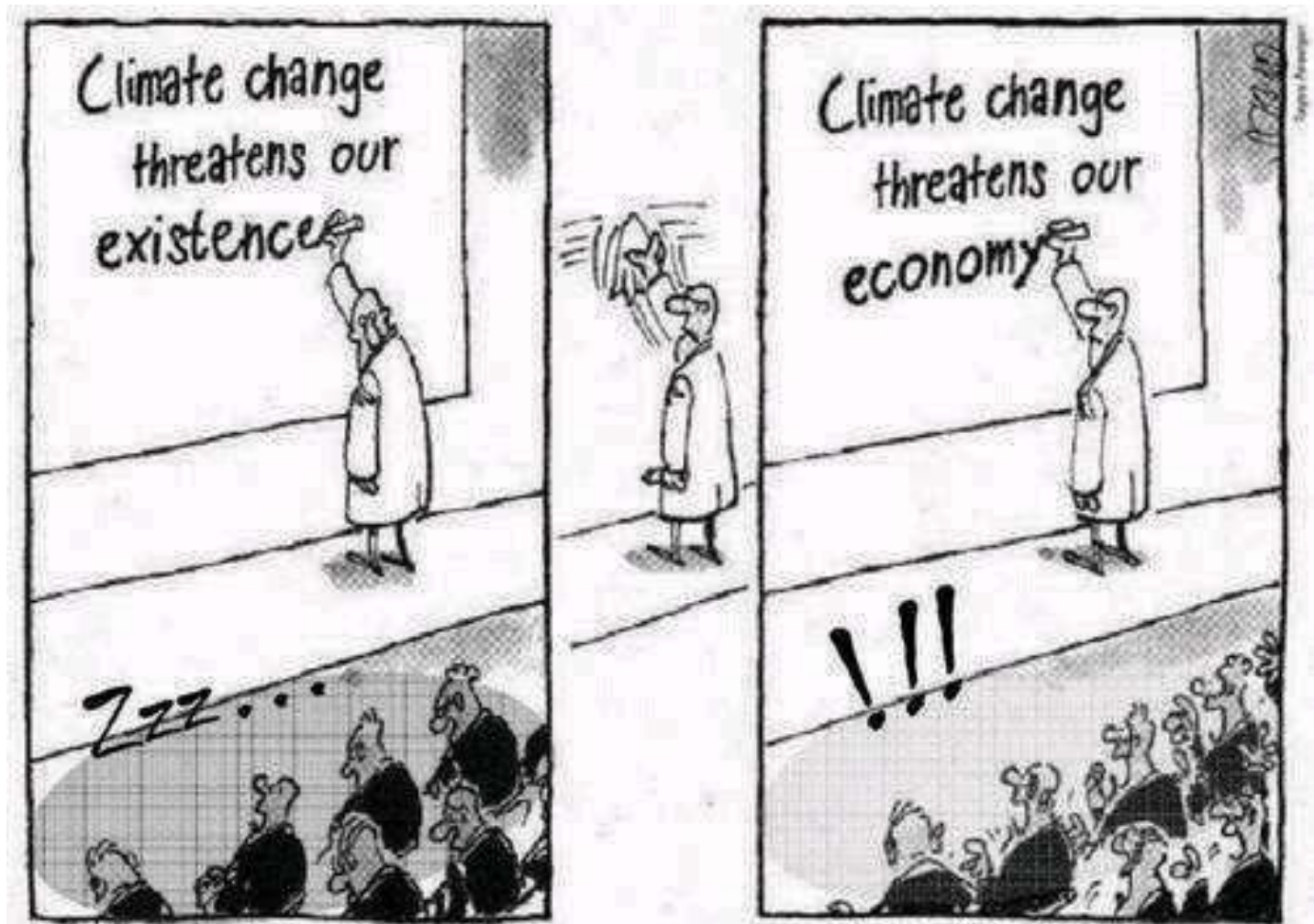
Logistic Centres in the EU

## SOCIO-ECONOMICS

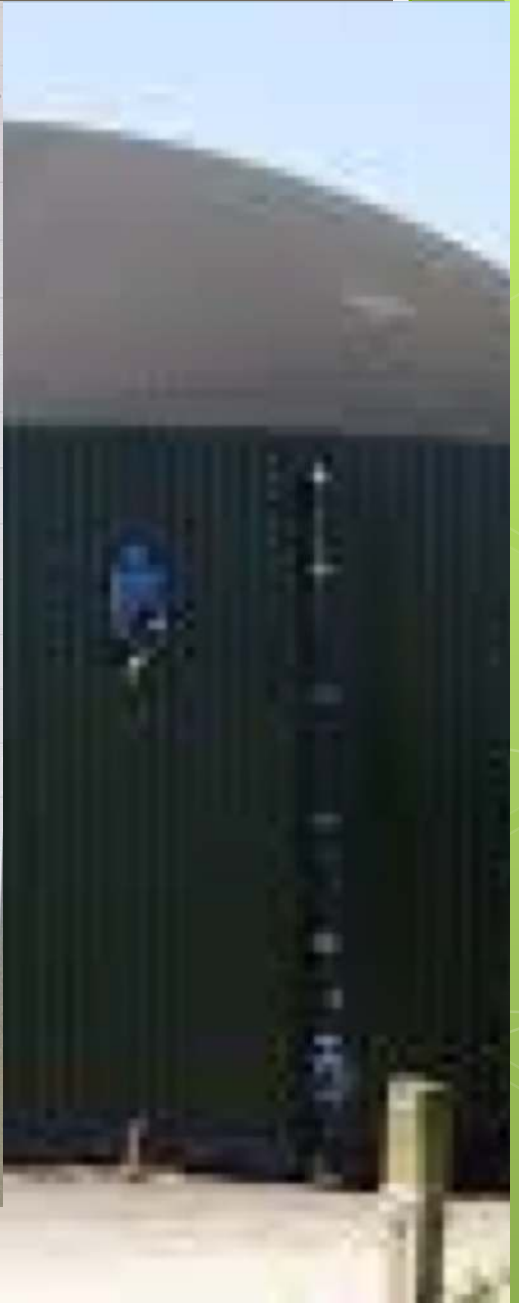
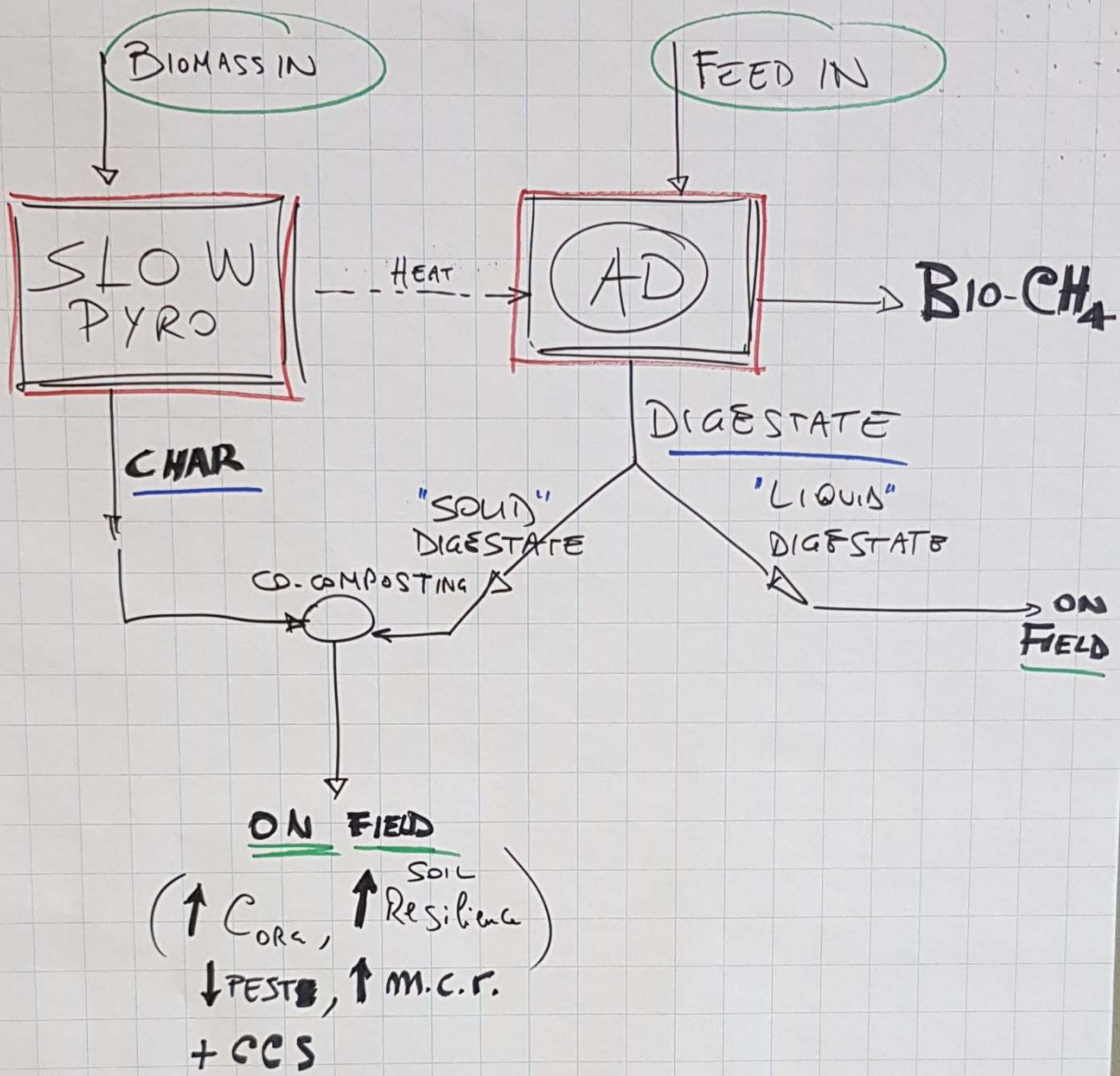
appreciation of primary producer's mitigating pressure (for farmers)  
societal acceptance  
education



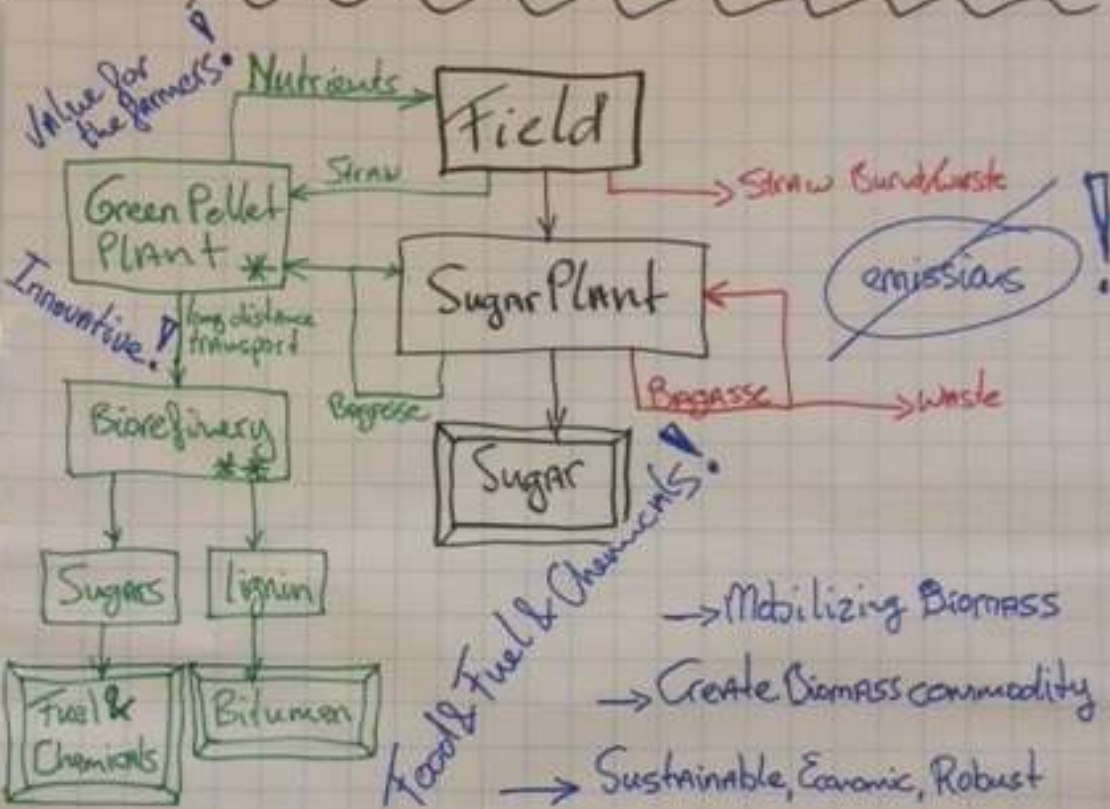
# Lets build cases







# Value Chain SugarCane - done right?



\* Medium scale  
\*\* Large scale

- Mobilizing Biomass
- Create Biomass commodity
- Sustainable, Economic, Robust
- Separate source & Biorefinery/market
- Commodity = many to many relations
- Commodity = high density, low dust, moisture resistant
- Very Very large impact.





A photograph of a rocky, uneven terrain, possibly a construction site or a natural rock formation. The rocks are light-colored, ranging from beige to light brown, and are heavily fractured and layered. The ground is uneven and appears to be composed of loose rocks and soil. The text "BOTTOM LINE" is overlaid in the center of the image in a bold, white, sans-serif font. The background of the entire image is a light green color with a faint geometric pattern of white lines.

**BOTTOM LINE**