























## Municipality of Guldborgsund

- Rural municipality
- Richest soil strong reputation for plant breeding expertise
- DK seed breeding center
- 328 km coastline
- Low business activity
- Shrinking population
- Good transport infrastructure





### Unanimous city counsil mandate

Make a platform to support local development of bio economy through valorizing surplus and waste biomass and bio energy production in order to:

- ✓ create new jobs
- ✓ reduce CO<sub>2</sub> emissions
- √ boost local knowledge and science activities
- ✓ green the businesses

The municipality of Guldborgsund facititates but does not invest



Guldborgsund: strategic focus on bioøkonomi

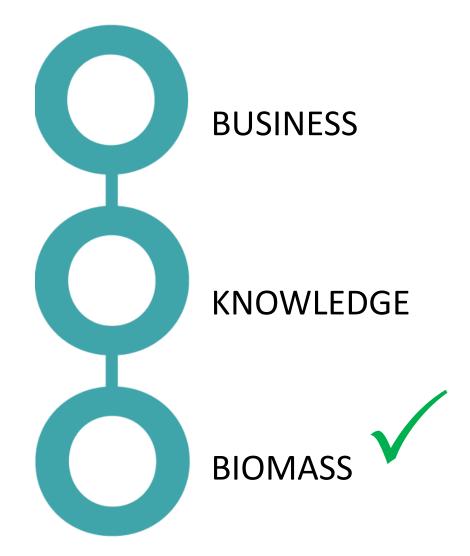
- Basis for new jobs through
- A green economy



#### What actions do we take?

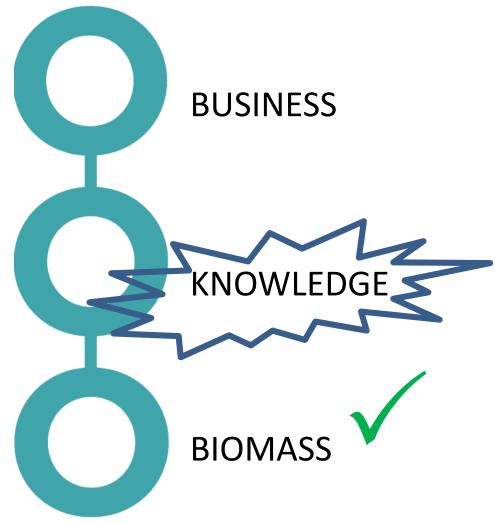












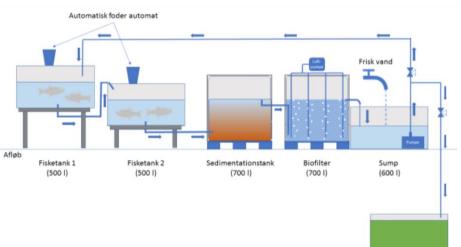


#### InnoAquaTech













Algetank (udenfor) (1000 I)





#### Partnerskaber og samarbejdsaftaler







**European Regional Development Fund** 









CENTER FOR CIRKULÆR

BIOØKONOMI







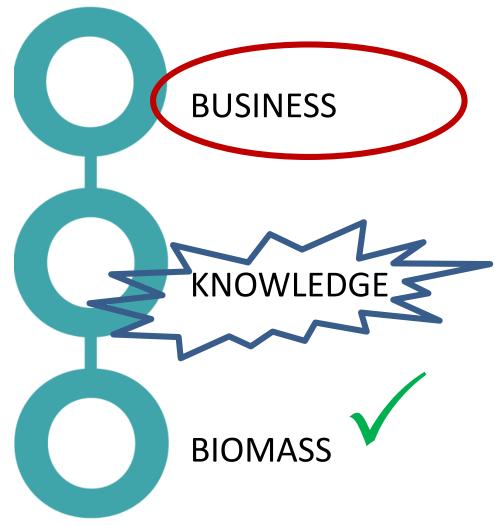
















### Danish Bioeconomy Conference







Examples of local biomass/residual resources to be valorised through Circular Bioeconomy.

We work with green and blue biomass:

- Sugarbeet leaves
- > Straw
- Round goby
- Beach cast
- > Seaweed
- Surplus electricity









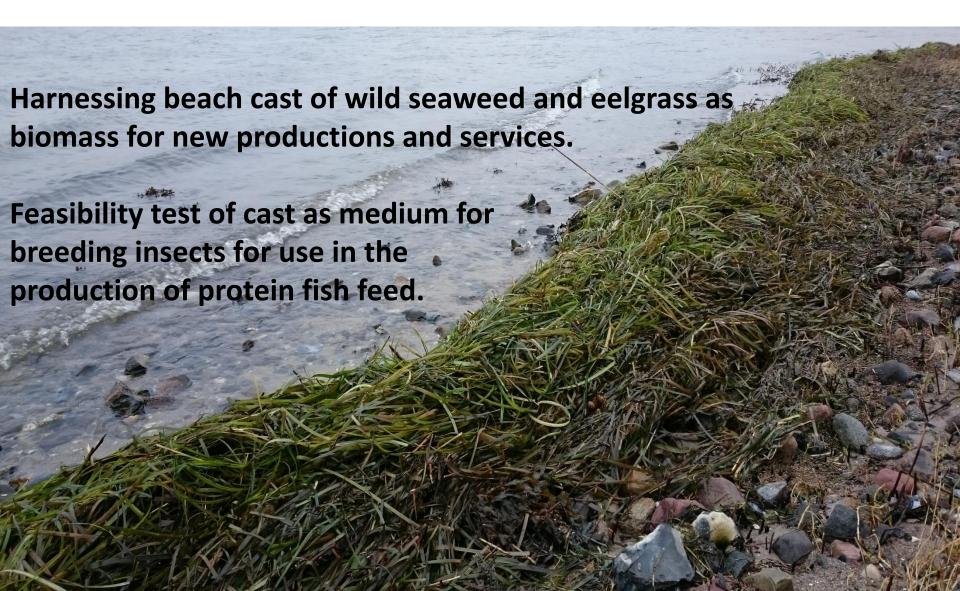








# BIOFISK case



#### **BIOFISK:** beach cast biomass for feed?

- Main idea: instead of paying lots of money to clean and dispose of beach cast, GBS would like to see if it can form a basis for a new feed product, attract production companies and save money!
- Progress since early summer
  - 48 samples from 6 coastal areas in GBS June October
  - 48 samples dried, measured for dry matter, pH, conductivity, sand and ash in DTI labs.
    All samples evaluated regarding content of eel grass, bladder wrack, sea salad, fedtemøj, etc.
  - 9 samples sent to EUROFINS show no challenges regarding heavy metal content
  - Beach cast mixed with a) bio pulp and b) malt mash (25-75%) and fed to BSF larvae: Up to 25% beach cast acceptable for larvae growth rate.
- Needs/challenges 2018:
  - Test and trial of feed mixtures, contact with feed companies
  - Proof-of-concept, business case, beach cast perspectives
  - Documentation re: cultivation of root veg in beach cast (KTH ?)
  - Documentation of micronutrients and probiotic qualities
  - EU restrictions of bio pulp as novel feed content







Visit our homepage: bioguldborgsund.dk



