### **BEACON Project and Vanguard Initiative**



BioComposites Centre Established for 30 years Focussed on applied research related to biomass Funding from competitive bids and commercial 25 full time members of staff





#### **Distribution of Companies and Organisations**



# **Pressurised Lignocellulsoic Refining**



- Temperature/ pressure- 4,6,8,10 bar
- Refiner Plate Gap- 4µm
- Refine for 15 min period at each pressure (6.5-7.3 Kg DM obtained at each pressure)























PBS-starch-palm fibres composite sheet has also been successfully produced.





The trial was successful at demonstrating the performance of the sheet extrusion equipment with up to 20% palm fibres in bioplastic formulation





Objectives

- To develop a continuous steam-based pre-treatment process (over 40 kg/h, up to 4 dry ton bagasse in total)
- Residual SCB fibre used to produce water filtration systems by adapting BU patent GB2398518A



### BIOREVIEW





#### BIOWILL An Integrated Zero Waste Biorefinery using Willow

10 partner collaboration- Belgium, France, Ireland, UK



