

THYME Project

Teesside, Hull and York Mobilising Bioeconomy Knowledge Exchange

Introduction

The fast-growing bioeconomy represents a major economic opportunity for the UK and particularly for the North of England, which has world-class bioeconomy assets. This project will build on these regional assets to drive increased productivity of SMEs and large companies operating in the circular bioeconomy across Yorkshire, Humberside and the Tees Valley. The THYME Project will establish a new and highly innovative collaboration between the universities of York, Hull and Teesside that will become an exemplar for good practice in Knowledge Exchange between HEIs and industry, attracting trade and inward investment into sustainable bio-based industries and our HEIs.

Project themes

THYME will focus on three areas:

- (1) **Transforming** bio-based waste into new products. There is an opportunity for the region to become a world leader in the conversion of bio-based waste to higher value chemicals with multibillion pound markets.
- (2) **Converting** industrial sites by re-purposing them for bio-based manufacturing. The Project will explore opportunities to re-purpose sites associated with to the Humberside and Teesside chemical industry clusters for processing bio-based raw materials and manufacturing high value biologics.
- (3) **Growing** the productivity of the region's bioeconomy as a whole by bringing together research and commercialisation capabilities within the three universities. The opportunities for increasing productivity are extensive and include reducing waste; adding value to by-products, automating manufacturing processes; and adapting feedstocks.



Project delivery

The project will be delivered via five main areas of activity:

- i. Proof-of-concept and challenge-fund based projects combining expertise from at least two of the university partners.
- ii. Secondments between the institutions to develop change agents who understand and promote exchange and collaboration.
- iii. A toolkit for bioeconomy partnerships, with best practice guides, template research and IP agreements, outreach materials and case studies.
- iv. A programme of workshops, boot camps and resources to encourage entrepreneurship and innovation best practice
- v. A series of cluster development activities to drive collaboration and sharing of ideas, expertise and experience through special interest groups, pitch fests and networking events.

Project partners

The University of York brings expertise in green chemistry; plant sciences and scale-up, which their subsidiary, the Biorenewables Development Centre, combines in a business-facing open-access centre.

The University of Hull brings expertise in economic, political and legal aspects of the bioeconomy with a focus on social science themes including policy and engaging with industry on waste management.

Teesside University brings expertise in bioprocess engineering, biomimetics, sustainable technology for carbon mitigation, environmental protection, sustainable energy modelling, artificial intelligence (AI) and machine learning.

The industry steering group will be led by Steve Bagshaw, CEO of Fujifilm Diosynth Biotechnologies.

The four economic development organisations are: the Leeds City Region Enterprise Partnership, the Humberside Local Enterprise Partnership (LEP), the York, North Yorks and East Riding LEP and the Tees Valley Combined Authority.

The three relevant regional cluster organisations are BioVale (Yorkshire), HCF (Humberside) and NEPIC (Teesside). Together they connect to over 500 businesses, the Northern Powerhouse Investment Fund and a group of 30 specialist investors.

