

# Nottingham Trent University Research & Development Future Factory

## Section 1 About the project

### Summary

Future Factory provides comprehensive support to Small and Medium Enterprises (SMEs) in the East Midlands region to improve both sustainability and business strength. We source academic expertise, student resource and University facilities to help businesses in any sector.

### Project partners

The project is jointly funded by Nottingham Trent University and the ERDF.

## Section 2 The results

### The problem

Many SME businesses lack the finances to obtain external help to improve their sustainability and/or business performance. Future Factory allows free or highly subsidised help to be given to those that need it. Many businesses also don't know that such help is available so we utilise a range of engagement methods such as promoting our work through networks, press releases and direct approaches to business.

### The approach

Future Factory provides support to businesses via a variety of mechanisms including; expert panel events; training workshops; uniting students and SMEs to work on live consultancy projects as part of their modules; providing use of the University's laboratories, workshops and studios; and providing specialised expertise from our academics.

### Our goals

Our aim is to improve the understanding and implementation of sustainability in businesses and across the University itself, particularly in embedding sustainability issues in the curriculum.

### Obstacles and solutions

Obstacle: Ensuring business knew of our services.	Solution: Utilising a range of free publicity – engaging with networks, newsletters, press releases, new media and direct approaches to businesses.
Obstacle: Businesses not seeing sustainability as important.	Solution: Engaging business initially on other topics, then introducing how sustainability was in fact important in their business.
Obstacle: Receiving a very diverse range of enquiries due to our cross-sector approach.	Solution: Recruiting a team that listens and understands the actual nature of the requests so that responses are appropriate to the real issue.



### Profile

- University
- Business support project connecting University resources to SME businesses
- Sustainable design focus

## Performance and results

Thanks to a strong project team, Future Factory exceeded its targets of business support provision. Beyond those, we have also helped embed sustainability into the curriculum as well as holding a large event, "Sustainability Means Business", with key speakers from Speedo, Puma and UKCIP. Examples of our projects include;

- Wind Power Innovations – development of an extremely innovative wind energy harvester that reduces both visually obtrusiveness and harm to wildlife compared to wind turbines. The University provided significant design advice and research support. This was also linked to MSc academic module.
- Enerlux – Future Factory provided an investigation and modelling of a more sustainable replacement to aluminium components used in the installation and mounting of solar PV panels.
- Alkane Energy – a company specializing in capturing energy from disused coal mines, Future Factory helped the company overcome barriers of heat exchange pumps fouling due to mine water chemistry.
- Clear Motivation – A company wishing to develop a drink that contains Omega 3 in order to support healthy consumption. Future Factory organised testing of Omega 3 additives through the University's Green Chemistry team.
- Co-product – A web portal that shows people how to creatively ReUse everyday waste materials to make new desirable objects free of charge - or purchase the items ready-made. Future Factory supported this innovative Community Interest Company to develop their website.
- Charbecue – An SME producing commercial BBQs; their products are more efficient than standard BBQs as they have been designed to use less charcoal. The company requested help with breaking into the domestic market. Our product design students were commissioned to assess the current design & manufacturing processes then make design modifications so that it was suitable for a domestic market.
- Secret Kitchen – Future Factory sourced students to develop branding and sustainable packaging options for this community café's own brand of healthy pick and mix of seeds, nuts and fruits.
- Large Creative – A company specialising in producing exhibition stands for companies wished to understand the environmental impacts of its manufacturing with a view to using the most sustainable materials during construction. Future Factory is researching the environmental footprints and helping the company engage its clients and supply chain on sustainability.

## The future

### Lessons learned

In any University there will be an exceptional breadth of specialisms so it's important to spend time to find the person who best knows the sector – this could be a permanent Academic, Hourly Paid Lecturer or Technician.

Whilst our project was designed as an external facing business support project, we have found it has paid dividends by engaging with and creating opportunities for our students. They can participate on live projects direct with businesses giving them experience beyond the theory of their academic studies.

## Sharing our project

Engagement is a key part of our project, but we spend virtually nothing on it other than time. We work closely with our press team to publicise externally about our project; create case studies; have regular updates on our internal staff bulletins; maintain a high presence on social media and prepare papers and present at conferences.

## What has it meant to your institution to a Green Gown Award finalist?

Our feedback from Green Gown judges was “a good model for the HEI sector”.....“demonstrating a centre playing to its institutional strengths”. We feel the totality of our impact both within the University and across external SMEs is reflected by being a finalist.

## Further information

For information about Future Factory, please see [www.ntu.ac.uk/futurefactory](http://www.ntu.ac.uk/futurefactory) or email [futurefactory@ntu.ac.uk](mailto:futurefactory@ntu.ac.uk)