

GREAT*PROJECT*

A business support project, part-funded by
the European Regional Development Fund,
and led by Grimsby Institute

Victoria Dunn

GREAT Project aims

- Knowledge transfer
- Green growth - £8M gross value added
- Jobs created and safeguarded
- New business start ups
- **THROUGH funded 1:1 support, workshops, events, demonstration equipment at GIFHE**

Why is Grimsby Institute leading GREAT?

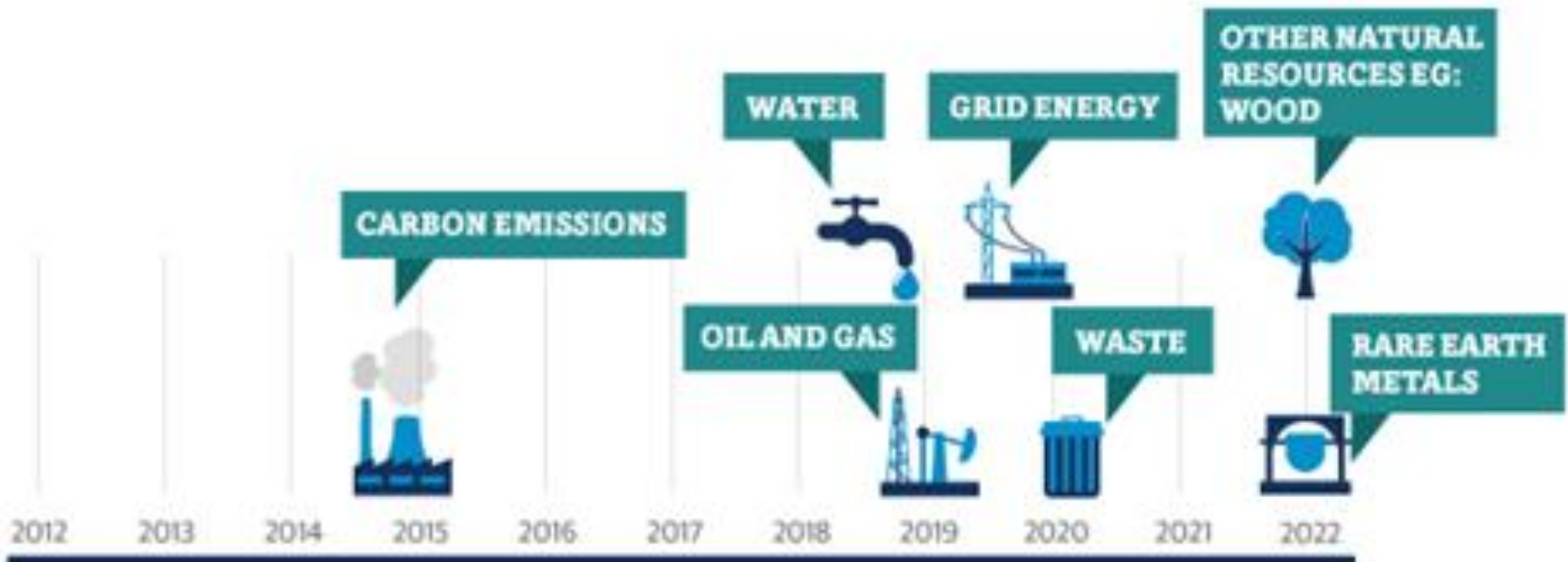
“To deliver accessible high quality education and training to our communities”

- Link to Higher Education research and FRPERC
- To workforce training
- To our delivery partner at HCF-CATCH



Three Drivers **– Three Local business assisted**

Number of years before these environmental areas become
of critical importance to business operations:



- <http://www.carbontrust.com/about-us/press/2012/12/businesses-sleepwalking-into-a-resource-crunch>

THE HUMBER: UK'S ENERGY ESTUARY

Our Energy WE ARE A VITAL ENERGY PROVIDER IN THE UK

We import **1/3** of the UK's coal and a significant amount of biomass

Which fuels our power stations to produce **17%** of the UK's electricity

We land **1/5** of the UK's natural gas

We refine **1/3** of the UK's fuel

13 of the world's largest wind farms are on our doorstep and will attract £750 billion investment

We are **No 1** in the UK for biofuel production

Hold on to your hats! Our region's 20+ onshore wind farms provide power for over 200,000 UK homes.

Conscientious carbon capture! CO₂ emissions from the energy-intensive industries around the Humber will be captured, safely transported, then stored in depleted gas fields in the North Sea.

More than just a pinch of salt! At SSE at Ailwick you'll find gas-storage caverns a mile underground. The caverns are hollowed out of a huge salt-deposit stretching from here to Denmark.

Our brand-new biomass plant from REAL VENTURES will produce green energy for thousands of homes. We're building another one just like it at Immingham.

Is there life on Mars? At the UNIVERSITY OF HULL, our maritime expertise isn't just driving brilliant solutions for logistics, law, offshore wind, wave and tidal energy. We're also researching water flows on Mars.

What a load of rubbish! Our new ENERGY WORKS plant converts household waste to power 25,000 homes.

At EGGBOROUGH power station we're getting in on the biomass act by burning biomass alongside coal.

At DRAX, we are the UK's largest single producer of electricity. We are transforming into a predominantly biomass-fueled plant - bringing new opportunities for engineering, demand for more energy crops and attracting investment to bring in biomass from overseas.

THE CITY OF HULL

WORLD TRADE CENTRE HULL & HUMBER

A big hello to the 1 million ferry passengers coming through the PORT OF HULL every year!

PORT OF HULL

GREEN PORT HULL allocated for wind turbine manufacturers and their supply chain.

PHILLIPS 66 produces enough petrol every day for an average family car to make two round trips to the moon and is the world's major supplier of high-grade petroleum coke.

TOTAL is the UK's third largest oil refinery.

Our ECO-STRAW-FIRED power station brings together two of our region's most important skills - energy production and arable farming. It's set to be one of the biggest biomass plants in the world.

TRENT PORTS

THE HUMBER'S unique combination of estuary depth and tidal flow make it a brilliant location for pioneering development of tidal stream energy generation. Plus, it looks beautiful in the sunshine.

PORT OF GOOLE

At GOOLE, we're the UK's most inland port making us a key distribution centre, attracting investments from Tesco, Guardian Glass and E-Boyer. We also handle big, abnormal loads such as turbines for onshore wind farms.

Biomass? At SSE Ferrybridge, we've been doing it for a decade. Now the rest of the country just needs to catch up!

Our Location and Connectivity

Not only do we face Northern Europe, we are midway between London and Edinburgh, making us a critical transport and logistics hub.



4 hour drive gives you access to

75% of UK manufacturing

40m people

320m customers accessible across mainland Europe within 24 hours

HUMBERSIDE INTERNATIONAL AIRPORT is the UK's 2nd busiest heliport, serving offshore industries.

ABLE MARINE ENERGY PARK allocated for wind turbine manufacturers and their supply chain.

GREENENERGY UK's largest supplier of bio-diesel.

Did you know that moving freight by rail produces 70% less CO₂ than the equivalent journey by road? At Immingham, we handle around a quarter of all UK rail freight journeys.

PORT OF IMMINGHAM

PORT OF GRIMSBY

CENTRICA, SIEMENS, RES OFFSHORE, E.ON and DONG ENERGY have already invested in operations and maintenance bases for offshore windfarms in the North Sea.

CONOCOPHILLIPS at Theddlethorpe connects directly to the North Sea. Gas fields and brings in 10% of the UK's gas requirement every single day.

Our Ports WE ARE THE UK'S BUSIEST PORT COMPLEX

and there's space to grow... We have the UK's largest deep water port-side development sites - all within an Enterprise Zone.

At VIVERO FUELS we use locally grown wheat to produce around 1/3 of the UK's bioethanol for petrol. We also produce protein-rich animal feed to keep 20% of the UK's dairy herd fed and contented.

At Centrica and Perenco we pipe in gas direct from the North Sea to Eastington and Dimlington - on a cold day up to 30% of the gas used in the UK passes through here.

ROUGH is the UK's biggest gas storage facility meeting approx 10% of UK's peak day demand. The storage is built into the continental shelf, 9,000 feet under the bed of the North Sea.

Our marine engineers have already invested £30m in offshore support vessels.

And here's another way we help keep the UK's lights on... 1/3 of the UK's coal and new biomass comes in through the Humber to fuel our power stations.

£7.6bn (land counting) invested in Offshore Wind Farms off the Humber already.

We import more of the UK's software than any other port - so the UK's builders can keep building homes.

Check out our hidden connections... Langede, the world's longest undersea gas pipeline, is bringing in up to 20% of the UK's gas demand from Norway.

Got a new motor? Chances are it came in via Humber Port. We're the busiest car trading port in the UK.



Grimsby
Institute

University Centre
Grimsby

GREATPROJECT



EUROPEAN UNION
Investing in Your Future
European Regional
Development Fund 2007-13

A Metal Manufacturer - Hull

- GREAT Project analysed gas and electricity usage of existing furnace
- Suggested new induction furnace, signposted to RGF grant
- When implemented, will save 28T CO₂ /year
- 3.7 year payback time
- 3 jobs safeguarded

A Metal and Plastic Component Manufacturer (Hull)

- GREAT advisor did an environmental review, and helped the company to write their Environmental Policy
- The company is working towards ISO 14001 in order to win more work
- Has now employed someone to develop their environmental & quality systems

- Developed strategy to reach new oil, gas, renewables customers.
- Managing Director realised that new equipment which is more efficient and productive was a necessity to aid growth.
- Signposted the company to capital funding to contribute to cost of equipment.
- Project will create 2 jobs.

Great Coates Motors

- ASHP and 35kW solar PV for £51k
- Savings, RHI and FiTs pay off investment after 7 years – after that it's all profit
- Mayne Heating – has toured facilities at the Institute, developing into renewables.
- Local good news publicity for three businesses involved.

Businessman cuts utility bills and CO2 after ploughing £50k into solar panels and heat pump Garage urges others to go green

nnaird
sng.co.uk
mkinnaid

Business owner has ploughed £50,000 into a greener business.

Great Coates Motors, based on South Humberside Industrial Estate, has cut its utility costs by 10% and saved over a tonne of CO2 by having solar panels and a heat pump installed three

months ago. Mr McCartney, the firm's director, wants other businesses in the area to follow suit.

A bank loan to pay for 35kw solar panels on the roof, as well as a heat pump, which takes heat from the atmosphere.

The project cost £51,000 plus VAT. Mr McCartney insists the investment is worthwhile, as he will save £1,000 in utility bills each year – a payback period is just seven

months. Looking at plans to install a car charge point for the future.

"We think we are the first in this area to retro fit solar panels and an air source heat pump in the two,

years. It means our heating is now free and when the loan is repaid we are going to be considerably

cheaper. We looked at the figures for electricity and prices are only



BIG SAVINGS: Left, pictured by a monitor showing how much energy is being saved are, from left, Tony Swinburn, construction and renewables adviser for the Great project; Dr Victoria Dunn, Great project director; Allan McCartney, Great Coates Motors' managing director; Matthew Harries, business development manager for Wil-Lec; and Darren Mayne, from Mayne Gas Heating Ltd. Above, the new solar panels on the garage's roof.

going to go one way, and that's not down.

"I hope this will reflect well on us as a business. The staff are all behind us.

"We just have to hope for lots of sunshine now for the solar panels!"

Allan was helped through the research and installation stage by the Grimsby Institute Great (Green Renewable Environment and Asso-

ciated Technologies) project which is helping help small and medium-sized businesses in the Humber area to expand into the emerging renewables industry.

Great construction and renewables adviser Tony Swinburn said more similar moves by local businesses "can help Grimsby flourish again".

"Allan has really bought into the green philosophy," he said.

"There is a lot of waste energy going out into the atmosphere and the more businesses that can get on board with something like this the better."

Local firms Mayne Gas Heating Ltd and Wil-Lec Group helped with the installation.

Darren Mayne, from Mayne Gas Heating, explained that the pump acted "like refrigeration in reverse",

taking hot air from the atmosphere and turning it into heating.

Now Allan and his staff can keep a close eye on the business's energy usage, with a monitor in the reception area revealing exactly how much juice is being used.

ON THE WEB: Do you support the green energy drive? Have your say at www.grimsbytelegraph.co.uk

GREAT, you have a project - and
you want to work with us..
(it's free)

- Talk to me over lunch
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