

Scotland's Net Zero Accelerator - Towards Net Zero



The Decarbonisation Opportunity

This ambitious project looks to harness the power of biology to deliver 'greener' manufacturing processes and climate friendly products. It will fast-track the growth of a vibrant cluster of innovative businesses in Scotland's Central Belt, creating new skilled jobs and substantial economic growth for the region and nation.

The global climate emergency demands that we reduce our dependence on material derived from fossil fuels. The UK needs a green recovery from the COVID-19 pandemic, and following Brexit, needs to secure vital local supply chains from innovation through to manufacturing. Kick-starting Scotland's transition from an economy largely reliant on fossil fuels to one bio-based will propel the nation towards realising Net-Zero by 2045.

The Grangemouth industrial cluster is Scotland's largest chemicals manufacturing site and a major CO₂ producer. It has ambitious plans to become a Green port and seize the opportunity to build a reputation as a world-class campus for bio-based manufacturing. It must also reskill existing local expertise in chemical production towards 'greener' manufacturing.

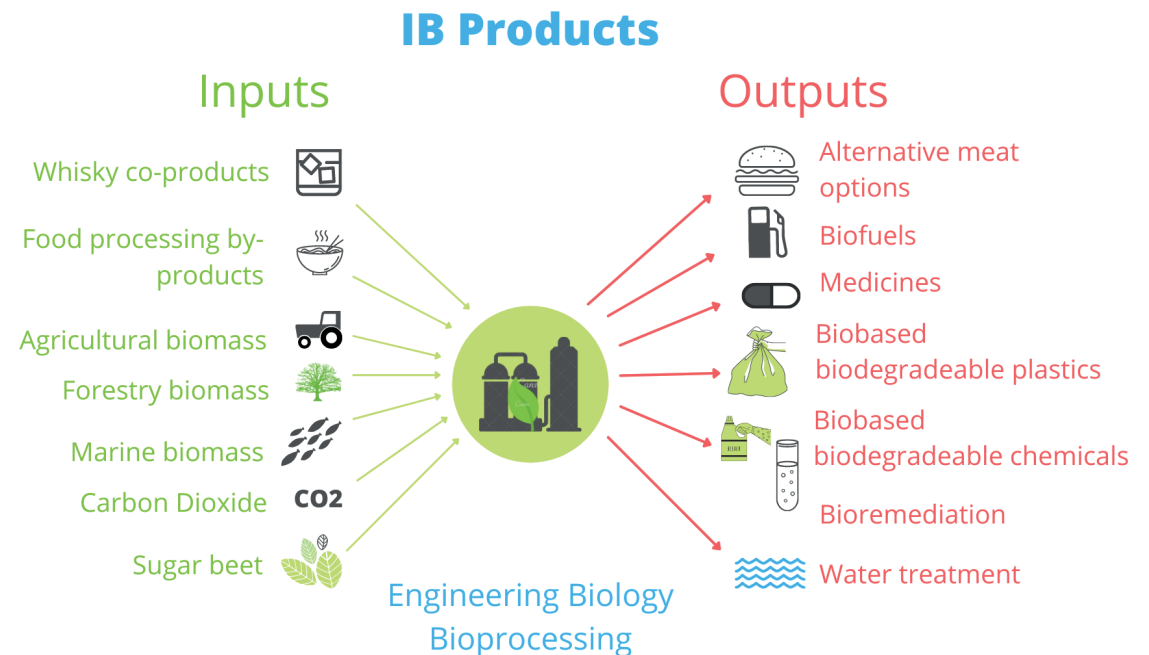
What is Industrial Biotechnology?

Industrial Biotechnology uses plant-based and waste resources (aka biomass), and bio-based processes to create chemicals, materials, consumer products, novel foods and feed and medicines. It offers green and sustainable alternatives to fossil fuels to produce a wide range of products and energy.

Project Partners

This programme is led by Scotland's Industrial Biotechnology Innovation Centre in partnership with GSK, Calachem, Ingenza, Celtic Renewables, Forth Valley College and Scotland's world leading universities and research institutes.

Supporters thus far include Ineos, Petroineos, Calachem and Forth Ports, over 50 industrial biotechnology companies, local authorities, Scottish Government and its agencies.



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The Net Zero Accelerator Project

The project will create a smarter, greener, and more inclusive, resilient space at the heart of Scotland, for biobased research, development and manufacturing. The Net Zero Accelerator incorporates:

A 'one-stop-shop' offering 'green' product development via cell engineering and bioprocess research and development through to pilot scale-up (**Engineering Biology Centre**).

Bespoke specialist support needed to help companies at all stages identify and validate new market opportunities and to access investment (**Business Support Unit**).

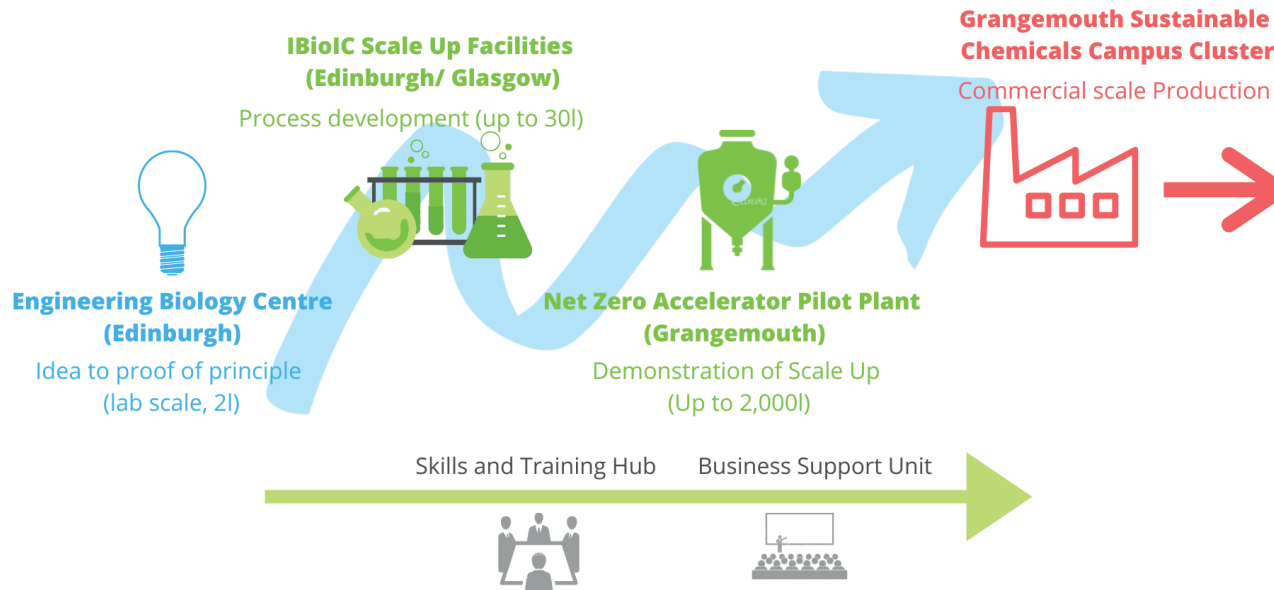
Innovative vocational training to create an inclusive workforce with skills to meet the future needs of the growing sector (**Skills and Training Hub**).

Benefits to Scotland by 2045

If supported, by 2045 the project will have directly:

- At minimum, supported creation of **125** new start-up companies
- Generated more than **700** new jobs from a combination of new businesses, existing company expansion and inward investment
- Helped train at least **50** Modern Apprenticeships and over **80** students qualified in IB at HNC or above
- Contributed over **~£500m** additional net GVA once complete, a return of **£24 per £1** of public investment and potential 'payback' within 3 years

The Net Zero Accelerator



This opportunity is only possible in Scotland's Central Belt where there is a unique combination of exceptional assets.

Investment today is vital if we are to fully integrate these capabilities and deploy them for industry, and local and national economic growth.