Plymouth Economic Strategy - Sustainable Growth

Introduction

The Plymouth Economic Strategy (PES) was approved and adopted by Plymouth Growth Board and Cabinet in March 2024. This strategic document (developed through consultation with the city's key stakeholders in the business community public and VCSE sectors), identified 4 key pillars (with skills as an underlying pillar) designed to focus development on actionable areas. Within this process, Sustainable Growth was highlighted as a priority within the development of the city and was designated as one of the 4 pillars of the PES.

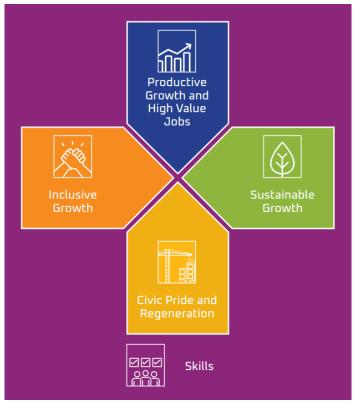


Figure 1: Illustration of Plymouth Economic Strategy structure.

Each Pillar has a dedicated leadership and support structure. Sustainable Growth has:

Leads

- Cabinet Cllr. Tom Briars-Delve
- **PGB** Richard Stevens
- **PCC** Amanda Ratsey

Support

- **PGB** Helen Wylde-Archibald
- PCC Kat Deeney & John Green

Sustainable Growth

In the PES, Sustainable Growth is defined as follows:

"Sustainable growth is growth which does not negatively impact the environment, promotes social inclusion, well-being and helps to drive a green economic revolution. Plymouth has an economic strength in the "blue" sectors, the city has strong businesses within this sector, many of which are at the forefront of economic development. Sustainable growth (which does not negatively affect the environment) will be a priority. For Plymouth, this means developing our blue economy and focusing on the progression within marine focused industries."

This pillar builds on the existing specialisms with the "blue" sectors of the city and works to position Plymouth at the forefront of the green revolution by developing these blue economies in alignment with sustainability conscious decisions whilst protecting growth. Marine Autonomy and Floating Offshore Wind are some keys examples of sectors which hold vastly positive externalities for the UK and are areas which benefit from the expertise in Plymouth; applying a focused effort to the development such sectors not only hold potential opportunities for the workers in Plymouth by supporting high-value job creation but can also help ensure longevity in and supports a forward-thinking approach to Plymouth's growth.

A Plan for Action

To deliver economic growth, we have identified six 'elements' through which resources will flow:

- 1. Attracting new investment into the city in green jobs, specifically around new and emerging energy production and storage
- 2. Business support, helping businesses adapt to climate change and move to net zero emission
- 3. Decarbonise the current economy, including retrofitting the existing commercial building stock and opportunities
- 4. Restorative Actions which improve sustainability
- 5. Commitment to supporting sustainable travel and living, including public transport provision.
- 6. Skills and Workforce Development needs for a more sustainable economy.

These elements were chosen to best reflect the approach desired by engaged parties and include a wide range of focuses to address the intended scope of Sustainable Growth.

Current Projects

Through the development of the Delivery Plan for the PES, 10 of the projects were judged to align primarily with Sustainable Growth. We have recently reviewed this list of projects to test their alignment with each of the elements. This has resulted in the table below:

Table 1: PES Sustainable Growth Projects and their alignment with PES elements

Project Name	PES Element Alignment
Investing in shore power/net zero	1,2,3
infrastructure	
Supporting port operations	2
Supporting Floating Offshore Wind (FLOW)	I
Investing in our under-utilised sites*	
Retaining our fishing industry	2, 3, 4
Plymouth Heat Network – Heart of the City	I
Centre	
Plymouth Heat Network – North of the City	I
Adopting new modes of construction	3
Accelerating efforts to deliver a green estate	3
Enabling Plymouth climate adaptation	4

^{*}This specifically refers to our waterfront sites — there is a wider argument around making best use of brownfield sites

The leadership group is revisiting this list, by going back to the data, checking progress and looking to the future.

Case Studies

I. Citybus investment in electric buses

As part of a major £31.87 million joint investment in Plymouth's public transport, 50 zero-emission electric double-decker buses are to be rolled out in the city before the end of the year. £19.6million of this investment funding will be provided by Plymouth Citybus and is further supported by a £10.34 million grant from the Government's Zero Emission Bus Regional Area (ZEBRA) 2 Fund and contributions from Plymouth City Council and Cornwall Council totalling £1.94 million. These new electric buses operating on the 21/A, 42 and 50/51 routes in Plymouth, with six buses serving Cornwall's Rame Peninsula on route 70. With estimated carbon emissions reductions of around 79,914 tonnes over their lifetimes, alongside reductions in NOx (nitric oxide and nitrogen dioxide) emissions by 28 tonnes and PM (particulate matter) 2.5 emissions by a tonne, this investment marks a significant step towards cleaner, greener public transport within the city and reinforces the city's commitment to innovation and sustainability. By replacing half of its fleet with these new green technologies, Plymouth Citybus has shown significant support for the climate change ambitions in the Council's Net Zero Action Plan and also demonstrates the scale of projects needed to make effective differences within the Sustainable Growth of the city.

2. Floating Offshore Wind

As mentioned previously in this report, development in the blue economic holds significant opportunity for Plymouth to progress in sustainable growth. Plymouth is positioned as a key hub for the Floating Offshore Wind (FLOW) sector and offers strategic port facilities, deep-water access and strong regional collaboration that could

help accelerate the development within this sector. Not only has Plymouth City Council has held a conference to discuss the opportunities for the city and wider region in FLOW development, but the Council has also continued to support the development of the marine and maritime economy through several partnerships focused in developing port facilities and capability for marine autonomy. One example of this is the Future Autonomous at Sea Technologies (FAST) Cluster within Plymouth, this cluster brings 40+ collaborative organisations together, accelerating marine autonomous systems via surface vehicles, subsurface platforms, remote operations, and Smart Sound Plymouth. Additionally, as the National Centre for Marine Autonomy, Plymouth has continued to develop its relationships with partners to ensure continued growth opportunities within this blue-green sector.

Revisiting the Data

Recent data from various national and regional sources reveal a mixed but encouraging picture of Plymouth's economy that can be used to inform the PES Sustainable Growth Pillar work. In this report, key data sources will be evaluated and conclusions drawn to explore what this data can tell us about Plymouth's ability to grow green-job numbers and thus, help protect against environmental harm whilst continuing to grow the economy

One key dataset that is useful to evaluate when exploring Plymouth's sustainable economic growth development is the ONS Estimates of Green Jobs. This data provides detail on the emissions by sector nationally and can be used as an important tool when considering how best to approach the decarbonisation of Plymouth's economy. The report highlights a national shift in employment towards lower-emission sectors and shows similar pattens within Plymouth estimates. Within 2023, nearly half (46.0%) of all UK full-time equivalent (FTE) jobs were described as working in firms within the 10 lowest residence-based emission levels industries. These 10 industries collectively accounting for 4.4% of total emissions.; averaging around 1.4 tonnes of greenhouse gas emissions per FTE employee in 2023, compared to an average of 77.6 tonnes per FTE across all industries. Some examples of the industries considered in the lowest emissions industries include: Arts, entertainment and recreation; Financial and insurance activities; Education; and Public administration and defence.

The most recent Business Register and Employment Survey results for Plymouth, these 10-lowest emissions industries accounted for roughly 45.0% of all employees in 2024. Similarly, the top 5 highest emission industries accounted for roughly 17.6% of FTEs within the city (2024); this is primarily driven by high employment in the manufacturing sector within the city. While Plymouth is currently behind UK averages for proportion of employment in the low-emissions sectors, the number of the low-emission employment (using the categories above) have increased by roughly 2,750 between 2015-2023 (roughly 660 more than the highest emitting industries). Thus, continuing to grow Plymouth's employment in lower-emission industries would not only help increase the city's sustainable economic growth by being conscious of lower-emission industry growth, but will also position Plymouth competitively in the expanding green economy.

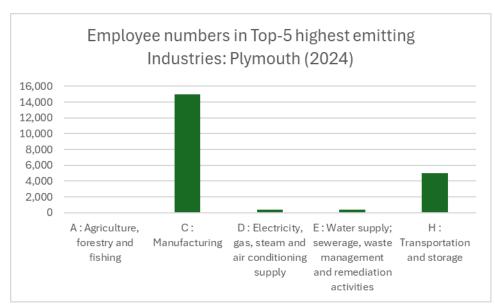


Figure 2: Graph to show the Employee count in the 5 highest-emitting industries based on those highlighted in the ONS Estimates on Green Jobs report (BRES, 2024).

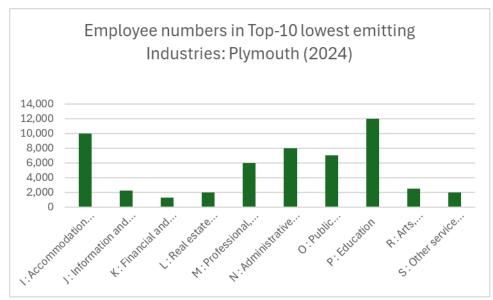


Figure 3: Graph to show the Employee count in the 10 lowest-emitting industries based on those highlighted in the ONS Estimates on Green Jobs report (BRES, 2024).

Complementing this research, data published by New Horizon Economics on Energy Used to Generate £1Million GVA (2015-2023) underscore the link between energy consumption and economic growth. This article looks to compare the amount of energy required to generate £1Million of Gross Value Added (GVA) across local authorities and thus explores the impact of energy productivity across the UK. Different areas of the UK see various levels of energy productivity and correlations can be drawn between these energy-productivity levels and economy sector composition. For example, areas such as Pembrokeshire, North Lincolnshire and Neath Port Talbot are highlighted as the most energy-intensive local authorities in 2023 due to the high levels of heavy industry-related economic sectors (e.g. oil and gas terminals and steelmaking). Consequently, these areas need high levels of energy to produce £1Million GVA. Alternatively, areas such as the City

of London, Manchester and Bristol were all listed as low energy-intensive areas due to their reliance on service-dominated economies such as finance, business services and government/knowledge roles; resulting in low energy demand to GVA ratios.

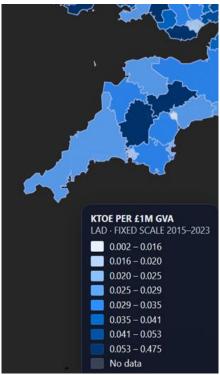


Figure 4: Screenshot from New Horizon Economics on Energy Used to Generate £1 Million GVA (2015-2023) to show Plymouth's energy productivity compared to local area.

As you can see in the heat-map above, Plymouth is shown to have high energy productivity (i.e. lower levels of energy needed to produce £1Million of GVA); particularly when compared to UK averages and surrounding local authorities. This is likely due to the high proportion of public sector roles (government/knowledge roles are reported to be some of the lowest energy demanding economies. While exact levels of energy-demanded varies across time, Plymouth has retained a higher energy productivity level relative to other neighbouring local authorities in the South-West since 2015.

The growth in Green-jobs both nationally and locally show that Plymouth is on a positive path towards sustainable economy growth. The city is continuing to make progress in economic growth while focusing efforts in lower-emission and innovative sectors. Plymouth can continue to align strategic economic growth priorities with the green transition through the continuation of efforts to decarbonise our current economy and increasing employment in sectors such as low-carbon technology development, marine autonomy and offshore renewables. In doing so, the city can support the development of a cleaner, more resilient local economy for future generations.

Progress Update

Trial project monitoring reporting was conducted by the PES team in October. Whilst full monitoring has not yet rolled-out, initial data shows that progress is being made in these projects. 7 have been able to return the progress monitoring; of these, 4 are in active delivery and 5 have been rated with a green RAG rating for overall project health (i.e.

progress is being made and no faults are reported). The chart below shows the reported Project Health Breakdown for the pillar. Overall, only one Red RAG rating element was reported, and this has been noted by the team and the project will receive additional support where necessary.



Figure 5: Summary tables of RAG ratings from the PES monitoring reports for Sustainable Growth projects.

Work is still being done to develop strategic project alignment within the pillar. To ensure the successful continuation of progress, the leadership group will continue to meet regularly and ensure decisions are made with the most appropriate approach to the Pillar focus.

Next Steps

Through the leadership group, we are:

- Meeting on a quarterly basis
- Reviewing the current list of projects to see where changes may be needed
- Looking at areas that are not partially or fully addressed within the current portfolio of projects

Essentially, we are reflecting on the purpose of this pillar – making the connection between the underlaying data and where we need to act. We are revisiting the available evidence and understanding where there are gaps and how we can address them.