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# **Plymouth Port Initial Market Demand Assessment & Strategic Analysis**

September 2023

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# **Plymouth Port Initial Market Demand Assessment & Strategic Analysis**

September 2023

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# 1 Introduction

## 1.1 Background

Cattewater Harbour Commissioners (CHC) is the Statutory Harbour Authority and the Competent Harbour Authority for the Port of Plymouth (otherwise referred to as Cattewater Harbour).

CHC has been in discussion with Mott MacDonald in connection with its desire to develop a Port Master Plan for the Port of Plymouth<sup>1</sup>. CHC's have identified the following as central drivers for the masterplan:

- The ambition for the Port to become a key gateway to the South West which will drive progress towards regional and national net zero targets.
- Changes in cargo, future trends, and opportunities.
- Resolution of constraints on existing port operations and the potential for growth.
- Opportunities presented by the Plymouth and South Devon Freeport and alignment to the Joint Local Plan for Plymouth and South West Devon.
- Opportunities to drive technological investment into Turnchapel Wharf, and closely engage with autonomous industries.
- Challenges associated with climate, nature, social inclusion, and the growth of the port-city relationship.

## 1.2 Client Vision

CHC has set an overarching ambition for the future of the port and is producing a port masterplan as a first step to futureproofing the port for the benefit of all stakeholders over the next 25 years.

- *The ambition for this period is for the Port to become a key gateway to the Southwest, to foster world-leading maritime research and technology, and play a major role in driving progress towards regional and national net zero targets.*
- *The Commissioners realise the need for the Port to adapt to a changing regional, national, and global landscape. The UK's transition to a decarbonised economy will be a major driver of change and the Port is in a strong position to seize the opportunities presented by the journey towards Net Zero, such as the development of floating offshore wind farms in the Celtic Sea, or a shift in regional container traffic from road to sea.*
- *Existing major customers such as petroleum imports cannot be relied upon to maintain the same volume of trade and this decline will need to be mitigated.*

## 1.3 The Port

The Dockyard Port of Plymouth has four main elements. For this analysis, the focus is Cattewater Harbour, with the area shown in Figure 1 overleaf.

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<sup>1</sup> Department for Transport (DfT) guidance in connection with port masterplans "recommend to all major ports that they produce Port Master Plans" (major ports defined as those currently handling more than 1 million tonnes per annum). Cattewater freight statistics show that the port currently handles over 2 million tonnes per annum.

Figure 1.1: Plymouth Port Masterplan



Source: CHC (2023) Plymouth Port Masterplan Working Slides

The Cattewater Harbour is home to a diverse range of commercial uses, with a range of landowners as shown in **Figure 1.2**.



**Figure 1.2: Cattewater Harbour Commercial Land Ownership**



Source: CHC (2023) Plymouth Port Masterplan Working Slides

### 1.4 FUTURES Summary

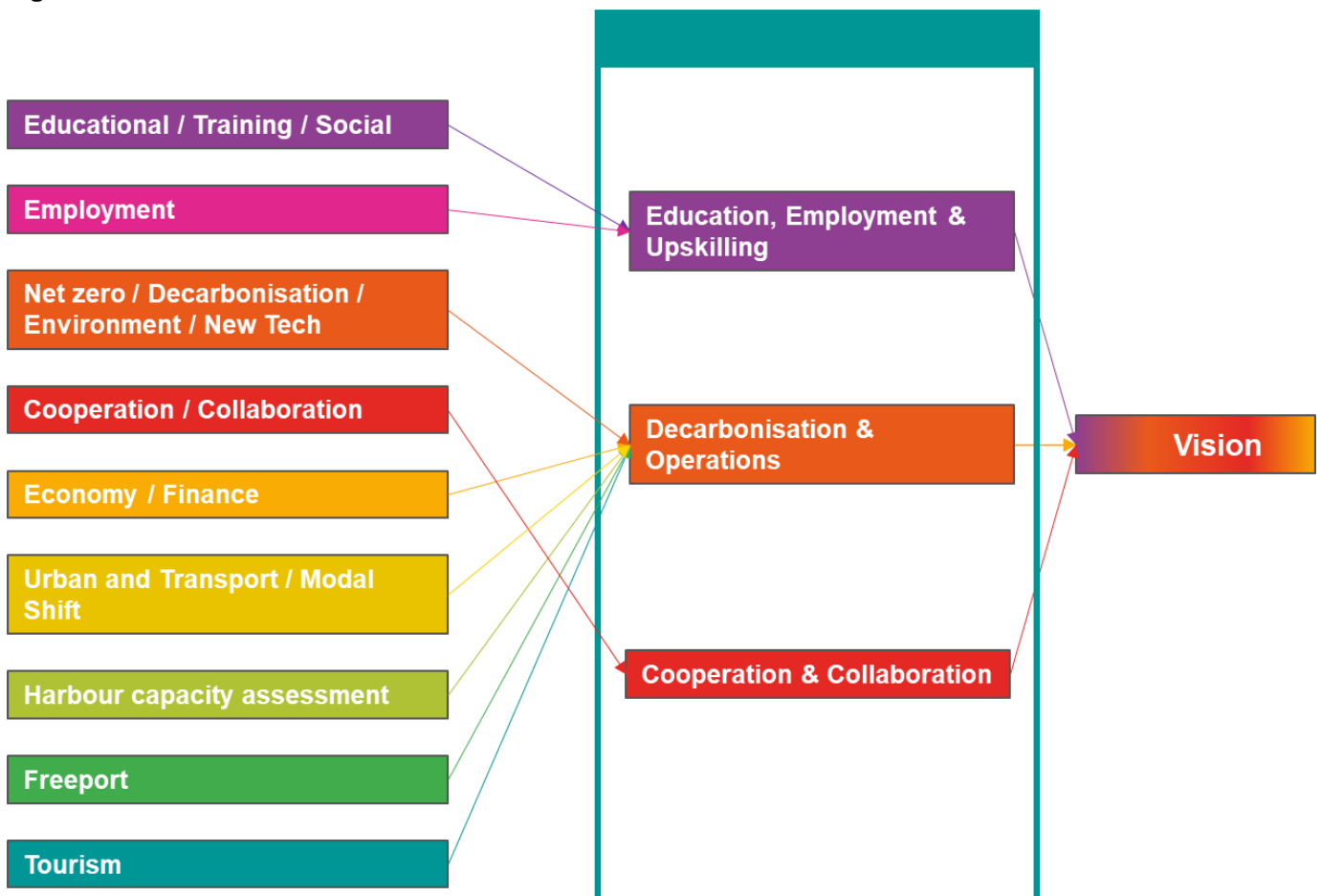
To support the development of a masterplan, Mott MacDonald identified the need to develop a clear vision and objectives to withstand future uncertainties and tackle current issues. This was undertaken using our FUTURES<sup>2</sup> toolkit, through the following process:

- The project team interviewed representatives from local organisations at the start of the project to understand their thoughts and ideas for the future of the harbour.
- The project team also reviewed local and national policy to understand how Cattewater Harbour can contribute to wider planning objectives.

Combined, this stakeholder feedback and policy review gives us a more detailed picture of issues and opportunities affecting Cattewater Harbour.

The final stage, undertaken to define themes was to summarise the information the project team gathered into a series of simplified statements – or “main themes” – which in turn guide the overall vision statement, shown in **Figure 1.3**.

**Figure 1.3: Main Themes and Vision**



Source: Mott MacDonald

<sup>2</sup> FUTURES: vision-led planning for an uncertain world - Mott MacDonald

### 1.4.1 Themes

Each of these themes presented in **Figure 1.3** are underpinned by key objectives:

#### 1. Theme 1: Education, Employment and Upskilling

- Establish Plymouth as a **prominent maritime training hub**, promoting innovation in clean fuels, clean energy and propulsion systems by **maximising existing academic links** and **strengthening public awareness** of what Cattewater has to offer to the maritime sector.
- Strengthen Plymouth's role as a **regional employment centre** through supporting **opportunities and upskilling** in key industries; including fishing, maritime technology, aggregates and offshore wind, maintaining historic industries whilst diversifying into future-forward sectors.

#### 2. Theme 2: Decarbonisation & Operations

- Embed decarbonisation into any future port operations at Cattewater, by engaging in trials to promote the adoption of **alternative fuels** in the maritime industry, positioning Plymouth as a **leader in clean energy technologies**.
- Optimise underused wharves and berths to **increase call frequency, accommodate different types of cargo and encourage growth** in passenger trade.
- Diversify freight transport and passenger transport modes accessing the site to **sustainably accommodate any increases in demand** and better link the Cattewater site to the city centre and strategic road and rail connections, including Plymouth & South Devon Freeport.

#### • Theme 3: Cooperation & Collaboration

- Develop **close collaboration** between internal and external stakeholders around Cattewater to ensure the long-term success and implementation of the masterplan, enabling it to be recognised **as vital to deliver opportunities, social and environmental justice to the wider area**.

This report will provide a baseline for activities at the port and the potential economic implications of each. The sections use the themes and objectives presented, to provide indications on the potential short- and long-term impacts, opportunities and challenges for Cattewater.

## 1.5 Report Structure

The sections of the report, their purpose and summary content are as follows:

- **Section 2** provides an overview of activity at the Port and in Plymouth, for the sections in the primary themes, linked to research on the current economic impact in the area.
- **Section 3** outlines some possible future scenarios and begins to assess the potential benefits / risks of each of these opportunity areas. linked to wider UK-based trends and case studies where relevant and available.
- **Section 4** presents the next steps and areas of further research, to be informed by other planning on the Cattewater masterplan.

## 2 Cattewater and Plymouth – Baseline

### 2.1 Cattewater

#### 2.1.1 Port Area Baseline and Industry

To help us understand current activities at Cattewater, we have undertaken a search of the area around Cattewater Port (see **Figure A- 1** for area) to identify the top 10 uses by rateable value. This is shown below.

**Table 2.1: Cattewater and Hinterlands Employment Floorspace**

Description	Rateable Value (£)	M <sup>2</sup>
Workshop and Premises	1,045,870	21,837
Sorting Centre and Premises	1,040,000	18,829
Warehouse and Premises	718,400	13,540
Liquid Bulk Storage Depot and Premises	422,500	N/A
Aquarium and Premises	398,615	1,441
Retail Warehouse and Premises	388,500	5,459
Store and Premises	325,250	4,694
Public House and Premises	303,650	2,352
Marine and Premises	244,500	N/A
Business Unit and Premises	228,380	2,426
Theatre and Premises	189,000	N/A
Builders Merchant and Premises	149,000	2,154
Vehicle Repair Workshop and Premises	134,500	1,718
Land Used for Storage and Premises	105,850	3,010
Breakers Yard and Premises	72,000	1,100

Source: Mott MacDonald - Data is based on HM Treasury VOA data.

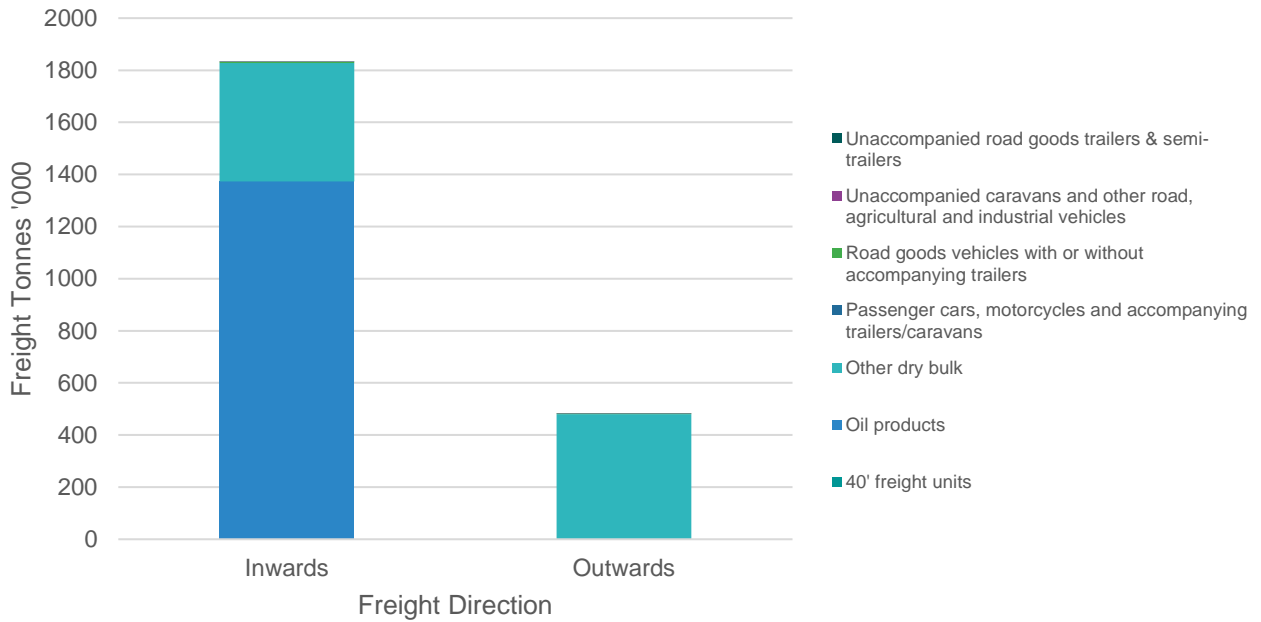
This highlights that there are already a variety of uses in the Port area, with a focus on storage, warehousing and workshops.

#### 2.1.2 Freight Statistics

To further understand the current position, we have undertaken a review of available freight statistics for the Port to identify opportunities and threats for the future of Cattewater Harbour.

Freight movements at Plymouth are dominated by two main types of cargo shown in **Figure 2.1** (2021 data has been used as the most recent release), the importing of oil products and the import and export of dry bulk.

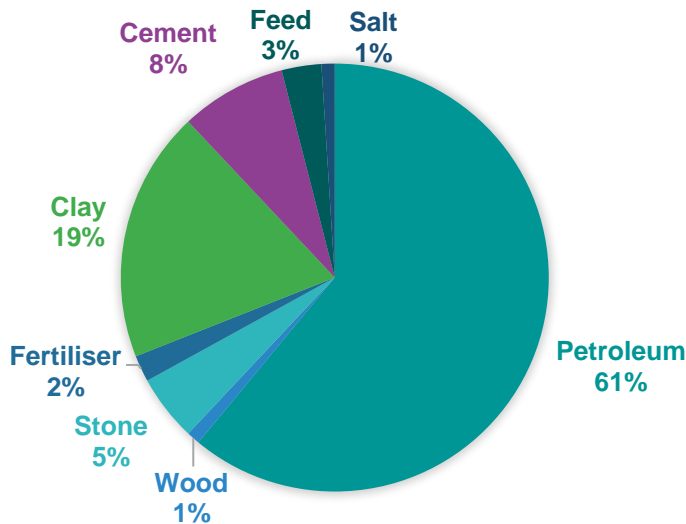
**Figure 2.1: Plymouth Port Freight Type and Direction (2021)**



Source: PORT0499 – UK Major Freight Traffic: Port Level

A more detailed breakdown of both cargo types is recorded by the Cattewater Harbour Commission and is presented in **Figure 2.2**. The cargo is recorded by tonnage and combined to show inwards and outwards.

**Figure 2.2: Tonnage of Bulk Handled at Cattewater 2021/22**



Source: Cattewater Harbour Commissioners (2022) Annual Report

Since 2000, Plymouth has increased the inwards tonnage of the two main recorded cargo types - dry bulk and oil products. The broad trend of both core cargo items in Plymouth mirrors the trend at all UK ports, showing steady growth apart from declines in 2008 during the financial crisis and in 2020 due to the COVID-19 pandemic.

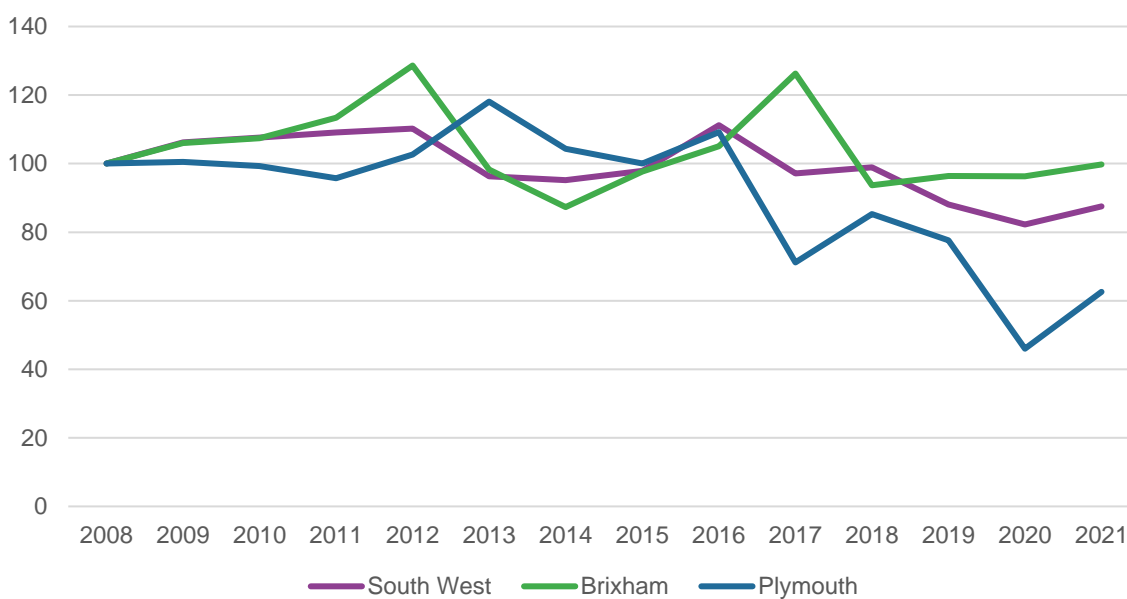
For inward oil products, the main starting locations for cargo are Belgium, Ireland, The Netherlands, and other UK ports. For inwards dry bulk the starting locations are Spain and the UK.

### 2.1.1 Fishing

Fishing has long been economically and culturally central to Plymouth. The main fish quay and market is located in Sutton Harbour, outside of the Cattewater Harbour. For commercial fishing there are 80 species are landed in the area<sup>3</sup>, with local markets as well as exporting to European and Chinese markets.

In employment terms, the change in the number of fishing Full Time Equivalent (FTE) jobs at Plymouth is compared to the South West and Brixham in **Figure 2.3**, with all data sourced from the Fleet Enquiry Tool<sup>4</sup>. We understand that Brixham fish market has received recent investment and has maintained employment levels since 2008 (319 FTE in 2008 to 317 FTE in 2021) and through the COVID-19 pandemic, whereas there has been a significant decline at Plymouth (157 FTE to 98 between 2008 and 2021) that reflects wider trends in the South West.

**Figure 2.3: Number of Fishing FTE in the South West, Brixham and Plymouth, 2008 to 2021, 2008=100**

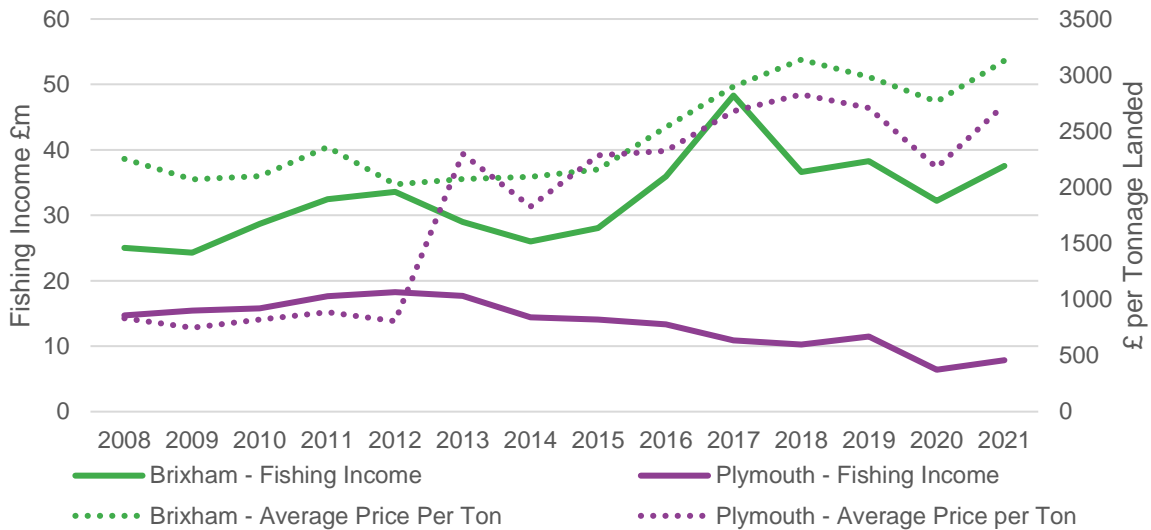


Source: [Fleet Enquiry Tool | Tableau Public](#)

**Figure 2.4** overleaf, presents fishing income and price per tonnage landed. Plymouth, despite having a reduction in fishing income, has been able to significantly increase the average value of the catch, from £832 per tonne to £2,743 between 2008 and 2021 (in nominal prices), to help offset the lower quantity of catch at the port. Brixham has seen an increase in fishing income over this period, both through an increase in quantity and value of catch.

<sup>3</sup> SeaFish (2023) Fleet Enquiry Tool. Available at: [Fleet Enquiry Tool | Tableau Public](#)

**Figure 2.4: Fishing Incomes and Price Per Tonnage Landed, Brixham and Plymouth, 2008 to 2021**



Source: [Fleet Enquiry Tool | Tableau Public](#)

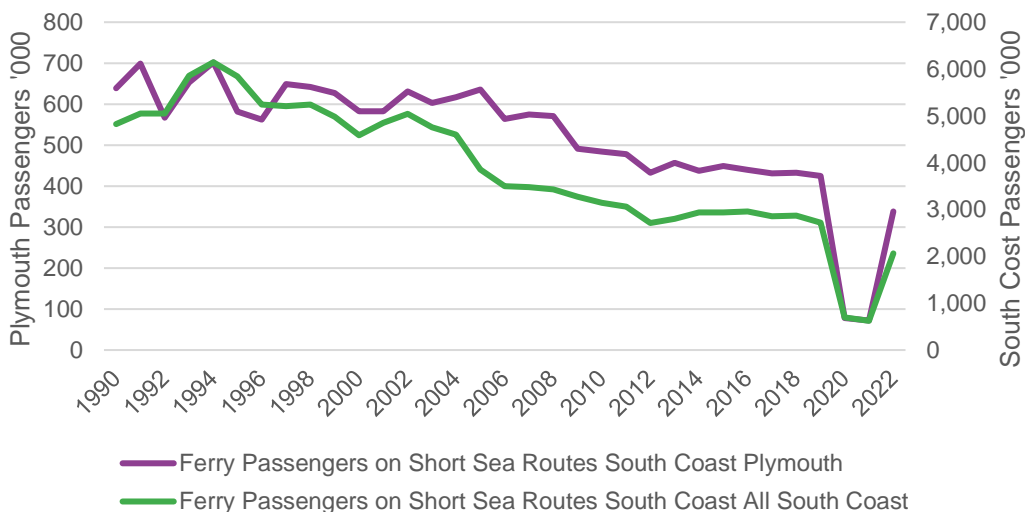
Despite this increase in average price in Plymouth, overall income is declining. This may reflect the wider decline in the sector and the increasing non-viability of commercial fishing from many ports around the UK. However, we do acknowledge that there is a possibility that catch landed at Victoria Dock may sometimes go unrecorded. As such, the above data must be treated with caution.

### 2.1.2 Leisure Uses

#### 2.1.2.1 Ferry Passengers

Passenger movements from Plymouth, via the Brittany Ferries terminal outside of the Cattewater area have been in gradual decline since 1990. **Figure 2.5** shows this is in line with the trend across all UK ports. Total passengers for Plymouth peaked in 1994 with 702,000, declining to a pre COVID-19 figure of 425,000 passengers in 2019.

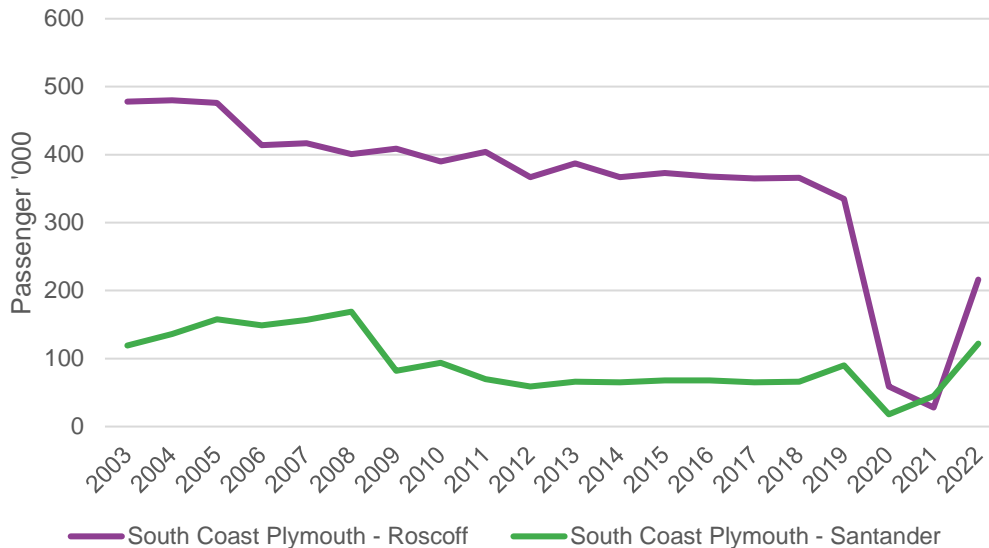
**Figure 2.5: Total passenger numbers for Plymouth and the South Cost ('000), 1990-2022**



Source: All UK international short sea, long sea and cruise passenger movements, by port: from 1950 (Table SPAS0101)

The gradual decline is present for both of the ferry routes from Plymouth, to Roscoff and Santander, presented in **Figure 2.6**.

**Figure 2.6: Total passenger numbers for Plymouth routes ('000), 2003-2022**



Source: UK international short sea passenger movements, by ferry route (Table SPAS0102)

Plymouth also has roll-on and roll-off across these two routes, comprising passenger cars, motorcycles and accompanying trailers / caravans. These passengers are included in **Figure 2.6**, focusing on just passenger traffic the COVID-19 pandemic led to a decrease to 23% of pre-pandemic levels, as shown in **Figure A- 2**.

The impact of the COVID-19 pandemic makes it difficult to identify specific trends in roll-on / roll-off demand. It is acknowledged that the effect of additional visitors passing through the Port is likely to have a more significant positive impact on the wider city than on CHC.

### 2.1.2.2 Cruise Ships

It is recognised that there is a long-term aspiration for Plymouth to become a key cruise port in the South West and to grow cruise visits, which had declined to zero. Over the past five years, initial activities have appeared to be relatively successful, with 4 cruise liners booked in 2018, 5 in 2019 and 12 booked for 2020 bringing approximately 15,000 passengers<sup>5</sup>.

However, the COVID-19 pandemic has had a significant impact on demand, which is only now beginning to recover, with 7 cruise ships docking in 2022 and 12 in 2023<sup>6</sup>.

<sup>5</sup> Plymouth City Council (2022) Plymouth Visitor Plan. Available at: [DOCUMENT TITLE \(plymouth.gov.uk\)](#)

<sup>6</sup> Visit Plymouth (2020) Plymouth on course for bumper 2023 cruise season. Available at: [Plymouth on course for bumper 2023 cruise season - Invest Plymouth \(visitplymouth.co.uk\)](#)



### 2.1.2.3 Marinas

There are five marinas<sup>7</sup> in Plymouth totalling nearly 1,700 berths. The average occupancy for a 200 berth UK marina is 88%, and supports 6.2 FTEs<sup>8</sup>; the local marinas are:

- The Marina at Sutton Harbour (420 berths)
- King Point Marina (171 berths)
- Queen Anne's Battery (280 berths)
- Plymouth Yacht Haven (450 berths)
- Mayflower Marina (approximately 350 berths).

Occupancy rates for Plymouth are not available, with engagement required from these stakeholders to understand the current occupancy, and future demand. Both the Mayflower Marina<sup>9</sup> and Plymouth Yacht Haven<sup>10</sup> list 19 employees, when accounting for the potential that some of these roles being part time, this is approximately in line with the national average.

## 2.2 The Plymouth Economy

### 2.2.1 Employment

Plymouth has a relatively diverse economy, with the following largest employment sectors:

- Human health and social work activities (22,000 employees)
- Manufacturing (16,000)
- Wholesale and retail trade; repair of motor vehicles and motorcycles (16,000)
- Education (12,000)

In comparison to the rest of England (see Table 2.3), Plymouth has a greater proportion of employment in manufacturing, public administration, and defence, reflecting the presence of, amongst others, Devonport.

**Table 2.2: Employment Structure Comparison (by % of All Businesses)**

SIC: Sections	Plymouth	England	Location Quotient <sup>11</sup>
C : Manufacturing	13.8	7.5	1.84
O : Public administration and defence; compulsory social security	6.9	4.3	1.60
Q : Human health and social work activities	19	13.3	1.43
P : Education	10.3	8.7	1.18
I : Accommodation and food service activities	8.6	7.5	1.15
M : Professional, scientific and technical activities	5.2	9.3	0.56
J : Information and communication	1.5	4.6	0.33
K : Financial and insurance activities	0.8	3.6	0.22
A : Agriculture, forestry and fishing <sup>12</sup>	0.1	0.6	0.17
B : Mining and quarrying	0	0.1	0

Source: Business Register and Employment Survey

<sup>7</sup> [Marinas & Ports - Visit Plymouth](#)

<sup>8</sup> British Marine (2017) The Marinas and Mooring Market in the UK. Available at: [Presentation title in here in this style 08.07.2015 \(canalrivertrust.org.uk\)](#)

<sup>9</sup> Mayflower Marina (2023) Handbook. Available at: [2023 Handbook :: 40 \(yudu.com\)](#)

<sup>10</sup> [Meet the team at Plymouth Yacht Haven | Yacht Havens](#)

<sup>11</sup> Location Quotients (LQ's) show the relative specialism locally compared to nationally. A LQ of 1 means that local employment proportions are in line with national averages. Anything above 1 reflects a relative specialism, whilst anything below 1 shows that the local area has a smaller proportion of employment in that sector than the national average.

<sup>12</sup> Industry 03: 03 : Fishing and aquaculture recorded 75 jobs in 2021

A number of sectors in Plymouth are less represented locally than compared to the national picture. However, these sectors are relatively small in scale (e.g. agriculture, forestry and fishing) which reflects that such sectors typically support a limited number of jobs.

Although Plymouth has a substantially smaller proportion of employment in professional, scientific and technical activities, the Location Quotient (LQ) has increased from 0.51 in 2015 to 0.56 in 2021. This reflects the presence of the university and wider local economic development as set out below.

### 2.2.2 Maritime Industrial

Plymouth boasts an impressive pedigree when it comes to the marine sector, with the largest concentration of marine scientists in the world. Developments over the past decade such as Smart Sound Plymouth and the Marine Business Technology Centre (MBTC) innovation support service have encouraged collaboration and creativity between the private and public sectors with three world leading areas of excellence emerging: marine autonomy, clean propulsion, and digital ocean technology. This has resulted in the Department of International Trade (DIT) recognising Plymouth as a UK High Potential Opportunity (HPO) for marine autonomy.

Plymouth is also home to the Oceansgate Enterprise Zone<sup>13</sup>, covering 35ha with development set out over three phases. Locating to an Enterprise Zone offers businesses a number of benefits (including business rates relief and enhanced capital allowances for qualifying sectors).

Cattewater has its own impressive pedigree with a number of emerging high-tech marine businesses primarily located at Turnchapel Wharf. This includes Acua Ocean<sup>14</sup>, which is planning to test an autonomous hydrogen-powered cargo vessel in 2024. A search using Datscha<sup>15</sup> of business at Turnchapel Wharf is presented in **Table 2.3**.

**Table 2.3: Turnchapel Wharf Business Search**

Company Name	Employees	Sub Sector	Turnover
Princess Motor Yacht Sales	30	Marine Equipment Supplies	8,156,760
Plymstock Security Systems	5	Security Equipment Installers	210,530
Turnchapel Wharf	5	Marine Services	689,550
Aquamare Marine	50	Marine Services	10,806,350
Yacht Solutions	21	Marine Services	5,709,732
Plymouth Sailing School	14	Sailing Schools	735,504
Searegs Training	10	Training Centres	525,360

Source: Datscha

### 2.2.3 Visitor Economy

There has been strong growth in the number of visitors to Plymouth, increasing from 4.1m in 2008 to 5.4m in 2018.<sup>16</sup>

The growth of the local visitor economy is supported by Destination Plymouth - a private / public sector partnership. Destination Plymouth's role is to increase visitors to the city and surrounding area, growing visitor spending and tourism-related jobs.

<sup>13</sup> HM Government (2023) Oceansgate Enterprise Zone. Available at: [Oceansgate | Enterprise Zones \(communities.gov.uk\)](https://communities.gov.uk)

<sup>14</sup> <https://www.shetnews.co.uk/2023/06/02/full-steam-ahead-for-hydrogen-vessel-trial-between-aberdeen-and-northern-isles/>

<sup>15</sup> Property Intel - MSCI

<sup>16</sup> Plymouth City Council (2022) Plymouth Visitor Plan. Available at: [DOCUMENT TITLE \(plymouth.gov.uk\)](https://www.plymouth.gov.uk)

The Plymouth Visitor Plan 2020 to 2030<sup>17</sup> estimates that the Plymouth visitor economy supports 5,972 FTE jobs.

- 3,726 direct
- 1,468 indirect
- 779 induced.

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<sup>17</sup> Plymouth City Council (2022) Plymouth Visitor Plan. Available at: [Plymouth Visitor Plan: 2020 to 2030 by Visit Plymouth - Issuu](#)

## 3 Trends and Opportunities

### 3.1 Cattewater

#### 3.1.1 Economic Impacts of a Port

The CBRE State of the Maritime Nation 2019 report estimated that the maritime industry directly contributed to 8.4% of GVA, and 13% (30,000) jobs in the South West<sup>18</sup>. With the 115,000 jobs in Plymouth, this would suggest a baseline figure of approximately 15,000 jobs as a direct result of the maritime industry.

In addition to the direct jobs created at a port, the activity has a multiplier effect at a local and national level. This means that port activity will lead to knock-on impacts in the wider economy locally and nationally, generating additional employment indirectly. A 2019 Oxford Economics<sup>19</sup> report on Portsmouth port found a 1.4 local multiplier, meaning for every £1m contributed to local GDP, a £1.4m was supported through direct, indirect and induced impacts. At a national level, this impact is even higher as for every £1m the Port contributed, a further £2.9m was stimulated in the UK.

#### 3.1.2 Freight Trends and Opportunities

##### 3.1.2.1 Cargo Forecasts

We have undertaken some analysis using a basic trend forecasting method (Ordinary Least Squares Method - OLSM<sup>20</sup>), which provides estimates of possible growth scenarios in dry bulk and oil products for both Plymouth and wider UK ports for the next 20 years, based on previous data since 2000<sup>21</sup>. The forecast in **Figure 3.1** shows steady growth for the inwards movement of oil and dry bulk in the UK, with these trends mirrored in Plymouth.

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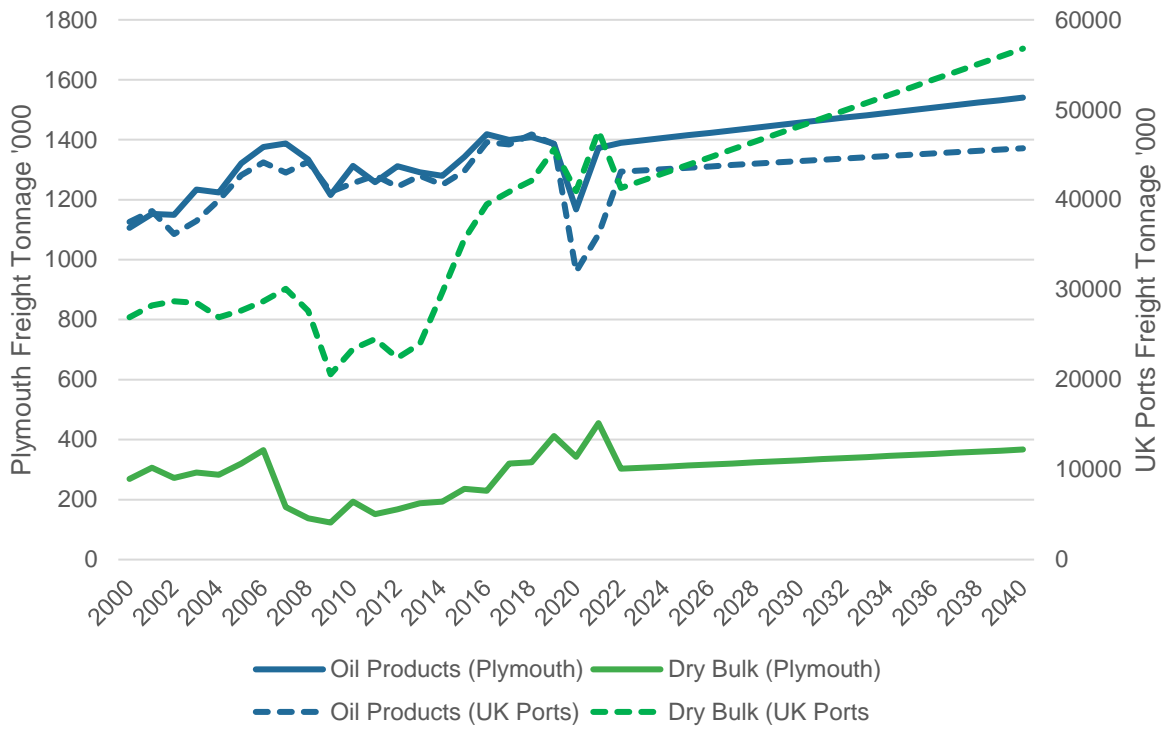
<sup>18</sup> CBRE (2019) State of the Maritime Nation

<sup>19</sup> Oxford Economics (2019) Portsmouth Port's Economic Impacts. Available at: [98.88 Economic Impact 16pp Web report.pdf \(portsmouth-port.co.uk\)](#)

<sup>20</sup> TREND function - Microsoft Support

<sup>21</sup> Forecast included is only for illustrative discussion on potential growth patterns for Cargo handling and should not be used for any other purpose.

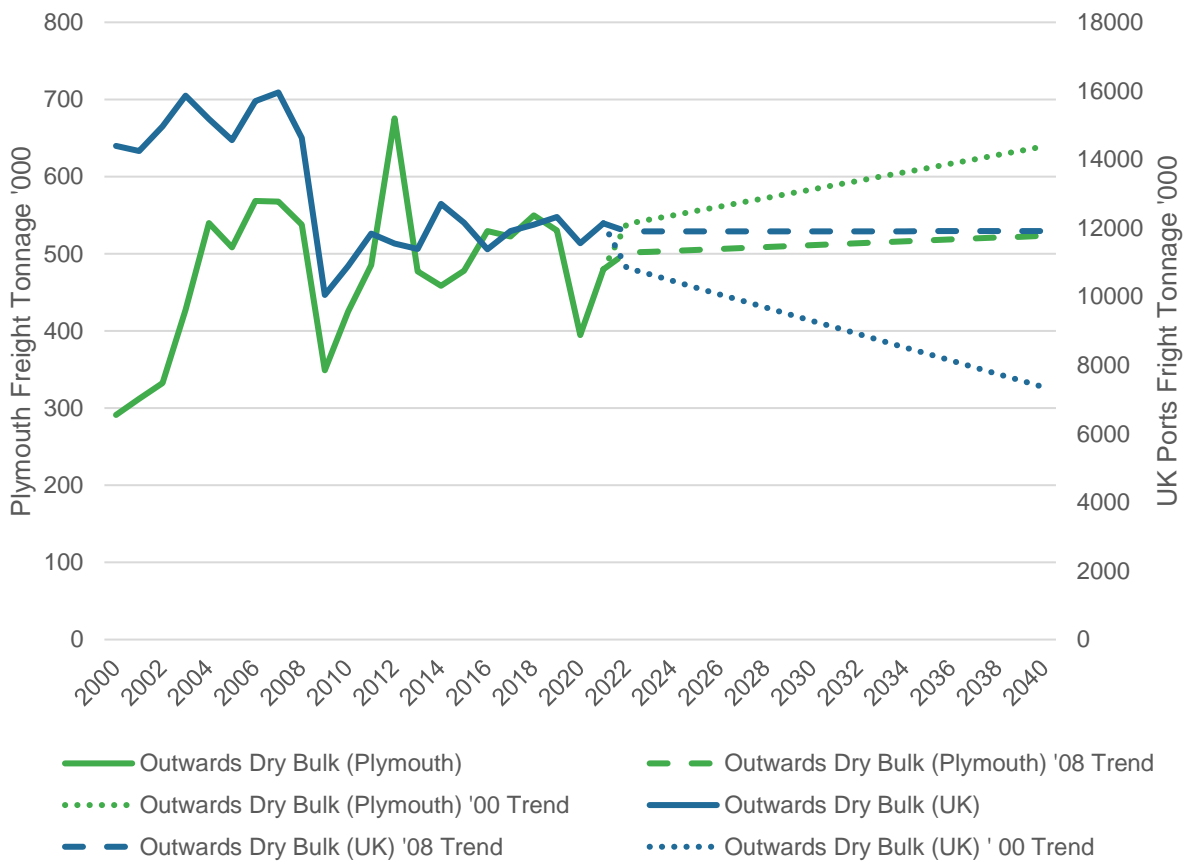
**Figure 3.1: All UK Ports and Plymouth - Inwards Oil Products and Dry Bulk (2000-2021 Data, 2021 -2040 Trend)**



Source: PORT0499 – UK Major Freight Traffic: Port Level

For outwards cargo, there is only one key type at Plymouth in dry bulk, primarily to Turkey, Egypt and the rest of the UK. Historical trends in **Figure 3.2** show a greater volatility in annual tonnage, with a significant decrease in UK exports after 2008 before a recovery, and a rapid growth in exports via Plymouth from 2000 to 2008.

**Figure 3.2: All UK Ports and Plymouth – Outwards Dry Bulk (2000-2021 Data, 2021 - 2040 Trend)**



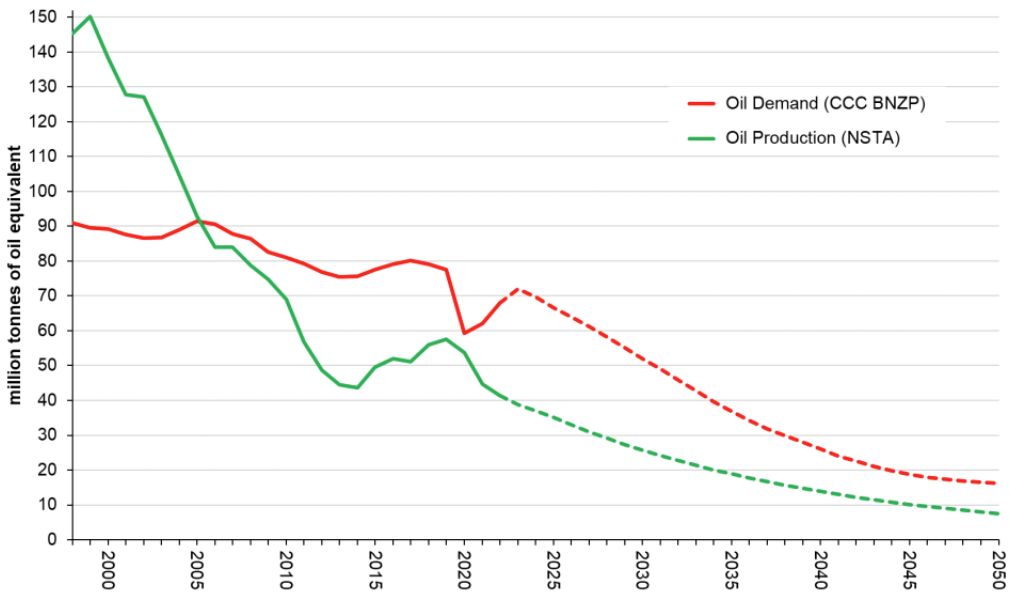
Source: PORT0499 – UK Major Freight Traffic: Port Level

The trend function for this figure has been calculated using two different start dates, from 2000 to 2021 and 2008 to 2021. The use of more recent data shows tonnage to remain at the same level post-Covid. The forecasting shows an increase in the tonnage inwards and the tonnage outwards remaining at the same level as seen between 2008 and 2021. A gradual increase in the quantity of dry bulk was also forecasted in the central scenario for the Port of London, shown in **Appendix Figure A-3**.

**3.1.2.2 UK Petroleum Trends**

It is important to note that the forecasting presented in **Figure 3.1** is based on historical figures for imports of petroleum products to Plymouth and English ports. This does not reflect potential future changes, which will likely occur due to the UK’s transition to Net Zero. The forecasted demand for petroleum is dependent on the energy pathway used, but under a balanced Net Zero Pathway, demand is expected to be reduced approximately from 70m tonnes to 20m tonnes by 2050. **Figure 3.3**, however, does show that demand has been reducing since 2000, counter to the trends for the imports of oil products in Plymouth since 2003, suggesting that while a long-term decline is to be expected, the demand in the short term is likely to be resilient.

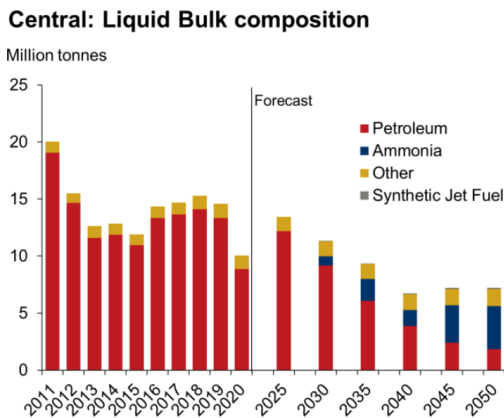
**Figure 3.3: UK Oil – CCC Balanced Net Zero Pathway Demand and NSTA Production Projections**



Source: [CCC Balanced Net Zero Pathway Demand and NSTA February 2023 Production Projections \(nstaauthority.co.uk\)](https://nstaauthority.co.uk)

An Oxford Economic report forecasting cargo at the Port of London estimated a similar reduction in petroleum imports, with the reduction occurring largely between 2030 and 2040.

**Figure 3.4: Port of London – Central Forecast of Liquid Bulk Composition from 2020 to 2050**



Source: [Future trade through the Port of London \(pla.co.uk\)](https://pla.co.uk)

It is reasonable, therefore, to suggest that Cattewater should be considering a range of alternate scenarios should demand for oil product imports decline as forecast. This forecast does indicate there will be an increased demand for Ammonia, which can be used as a fuel for hydrogen fuel cells. The level of hydrogen demand for road vehicles, alongside the proposed hydrogen production facility within the freeport<sup>22</sup> means there is potential for some of the reduction in petroleum to be mitigated.

<sup>22</sup> [Plymouth and South Devon Freeport first to be given green light with Full Business Case approval - News](#)

### 3.1.2.3 Growth of a Container Port

The Plymouth Containerised Cargo Survey Report<sup>23</sup> on container movements in Devon and Cornwall, to explore how many businesses located in Devon and Cornwall move containers and / or would be willing to relocate their container traffic from other UK ports.

Through survey work with participants, an estimate of the movement of containers in Devon and Cornwall was 78 containers per week (39 inbound and 39 outbound), primarily using the ports of Southampton and Felixstowe. The key decision-making factors on the ports used (as cited by respondents) are:

- Price (cost of transportation);
- Capability for those ports to accommodate large vessels;
- Ports that have proximity to Plymouth; and
- Ports can accommodate US cargo.

For Plymouth to be a viable option (if container handling facilities were put in place), the port would have to offer competitive pricing but would clearly benefit from proximity to those businesses in Devon and Cornwall - creating potential time and carbon savings.

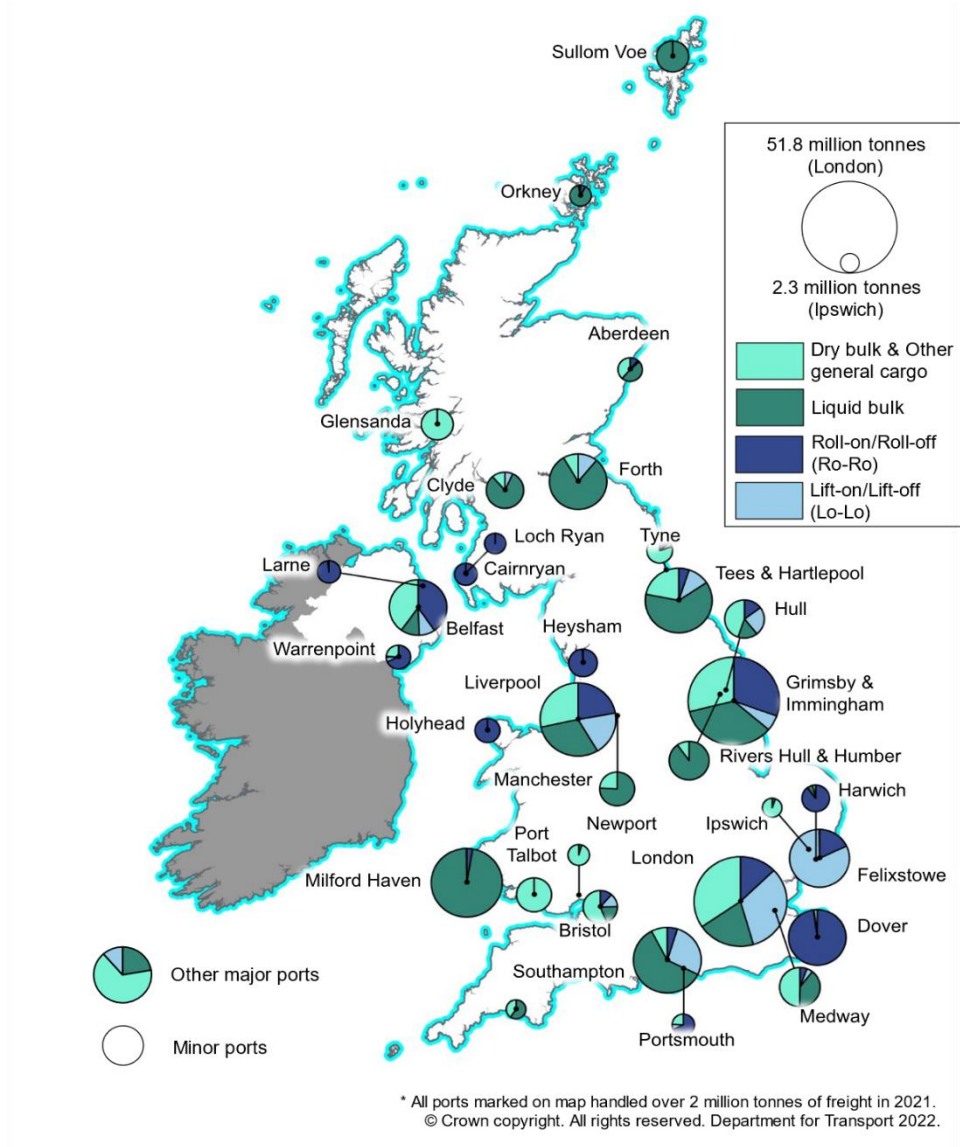
As shown in **Figure 3.5**, the closest local competition for lift-on / lift-off is at Bristol and Southampton.

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<sup>23</sup> University of Plymouth (2022) The Plymouth Containerised Cargo Survey Report



**Figure 3.5: Map of UK ports by tonnage and cargo group, for major ports over 2 million tonnes in 2021**



Source: Department for Transport (2022)

However, it is worth noting that some local businesses have already moved warehouses to another location (such as the Midlands) for logistical reasons, including better access to the national road network for onward distribution. Ensuring there is sufficient demand for regular container ship dockings would be vital for any container operation, as infrequent calls would reduce any time saving and convenience benefits arising from the use of a local port.

### 3.1.2.4 Trend in UK Freight

The UK is reliant on the movement of goods, with imports and exports comprising 62.9% of GDP, higher than the global average of 56.3% in 2019. Ports make up a significant amount of this movement, with 95% of goods by weight through maritime ports. Goods moved by boat also

had the lowest carbon per kilometre, and while there are further decarbonisation requirements in the industry this represents a potential low carbon form of trade<sup>24</sup>.

The level of maritime movement is expected to continue to increase to 2050. UKRI estimated tonnage to increase by 41% from 2020 levels<sup>25</sup>. The National Infrastructure Commission found a similar increase in their forecasts (**Table 3.1**), with an increase in the total short-sea traffic between the UK and Europe, and an increase in the total amount of traffic at container ports.

**Table 3.1: Forecasts for UK Port Traffic to 2050**

Cargo	2015	Business as Usual 2050	Carbon Reduction 2050	Carbon Survival 2050	Manufacturing Renaissance 2050
Short Sea Traffic (Million Units)	9.6	19.14	18.05	18.05	7.00
Deep Sea Container Ports Traffic (Million Units)	2.62	4.36	4.11	4.11	11.74

Source: [Future of Freight Demand 2019 \(nic.org.uk\)](#)

Such trends suggest there is an opportunity for Plymouth (and Cattewater) to build upon existing freight cargo levels to support a sustainable long-term future. The number of containers moved within the UK is also expected to increase, the growing number does not guarantee there would be sufficient demand in Plymouth, which will be dependent on local requirements and the availability of different modes of freight transport.

However, at this stage, uncertainties exist around demand for key cargoes (such as oil products) as well as the scale of opportunity at Cattewater for replacement cargoes.

### 3.1.3 Fishing

At Plymouth there are opportunities to increase the volume of fish passing through the port, through a redeveloped Fish Market<sup>26</sup>. Several recommendations were made including:

- Feasibility Study: Do a detailed in-depth feasibility study into a hub & spoke model and a redesign of Fish Market/Quay buildings to increase capacity. This should include the option of a refrigerated processing area, to remain competitive with peers.
- Explore Victoria Wharf as an option to increase capacity for landing more and larger vessels.
- Grading Machine: Purchase an additional fish-grading machine, however, this is dependent on additional space being identified.
- Ice Machine: Review ice machines and add/replace existing provision to provide the volume and quality of ice required by the industry.

While these options have the potential to increase the quantity and fishing income, they are unlikely to create a significant increase in the number of jobs.

#### 3.1.3.1 Creating Additional Economic Value from Fishing

Increasing the value of catch sold will be an important long-term strategy for the sustainability of a smaller fishery such as Plymouth. Short Food Supply Chain (SFSC) is a concept in food systems that refers to a direct and shortened food distribution system from producer to

<sup>24</sup> Department for Transport (2022) Future of Freight: a long-term plan. Available at: [Future of Freight \(publishing.service.gov.uk\)](#)

<sup>25</sup> UKRI (2021) UK Transport Vision 2050. Available at: [IUK-110122-UK-Transport-Vision-2050.pdf \(ukri.org\)](#)

<sup>26</sup> Arcadis (2020) Plymouth City Council Plan for Sustainable Fishing

consumer. It emphasises local production and distribution to create a more sustainable and efficient food supply chain system by reducing the environmental impact of food transportation and promoting closer relationships between producers and consumers. This can be seen in Plymouth with new restaurants such as the Old Fish Market<sup>27</sup>, combining local produce and cultural heritage.

A study completed in Cornwall<sup>28</sup> looked at weakness in the local fisheries, with 80% of fish exported and a weak bargaining position. A key aim of the Fisheries Local Action Group (FLAG) Cornwall has been to make better use of the potential purchasing power of the 4.5 million visitors who come to Cornwall every year. This includes the integration of fishing and tourism, such as instances where fishers take out tourists on their boats to create additional sources of income. For Plymouth the same principle may be possible subject to further viability work, with the integration of the fishing industry with the visitor economy, by providing activities, cultural heritage and contribution to the food and beverage industries.

As outlined in the Council's plan for sustainable fishing this process appears to be underway, with policies focused on:<sup>29</sup>.

- **Improved Branding:** To enhance its sense of place, the Fish Quay should look to improve its physical approach. This would help develop public interest and understanding and increase a sense of place.
- **Link Plymouth Fish Quay to Plymouth Seafood Festival:** The Plymouth Seafood Festival is incredibly successful and should be used to further the link to the Fishing Market and Quay.

## 3.2 Visitor Economy

### 3.2.1 Plymouth's Maritime Visitor Economy

#### 3.2.1.1 Policy Objectives

Destination Plymouth targets are to:

- Grow visitor spend by 30% from £347 million to £450 million in a decade.
- Increase the total visitor numbers by 15% by 2030.

The visitor plan looks to build on three themes:

#### 1. Blue-green city

- **Ocean Playground:** Provide year-round activities on, by and under the water.
- **Stories of the Ocean:** Integrating culture into city centre and waterfront development.
- **National Marine Park Gateway:** Development the site of the National Marine Aquarium, increase the accessibility of the fish market for the local community and visitor.

#### 2. Brilliant Culture and heritage

- **The Box:** Plymouth's new cultural destination, should outline Plymouth's rich fishing industry heritage. Further other heritage, leisure, and arts activities in the city.
- **Après Sea:** Grow our evening, musical and cultural community events.

<sup>27</sup> [Fabulous new fish market opening in honour of city's heritage - Plymouth Live \(plymouthherald.co.uk\)](https://www.plymouthherald.co.uk)

<sup>28</sup> Prosperi et al. (2019) Adaptation strategies of small-scale fisheries within changing market and regulatory conditions in the EU. Available at: [POSTPRINT-Adaptation strategies of small-scale fisheries\\_REV\\_04122018-Prosperi et al.pdf \(unipi.it\)](#)

<sup>29</sup> Arcadis (2020) Plymouth City Council Plan for Sustainable Fishing

- **Celebrating our maritime and military heritage:** Grow the emerging cluster of potential visitor attractions has potential to be developed longer term to show case the city's marine and naval heritage.

### 3. Premier Destination

- **City conference campus and accommodation:** Developing a city centre conferencing campus to attract small and medium sized conferences, meetings and events to the city.
- **Plymouth cruise and ferry port:** Improved capacity for traffic and transport, with a second smaller berth facility at Trinity Pier.

#### 3.2.1.2 Port Requirements

Whilst the strong recent growth of the visitor economy suggests potential opportunities for Cattewater, it is important to consider how tourism growth would align with existing and likely future commercial activities at the port.

#### 3.2.2 Cruise Ships

The mooring of cruise ships is likely to create more value for the Plymouth economy than CHC. CHC does not charge ships when they are in the Plymouth Sound, however, they do have a service charge for vessels utilising the Barbican Landing Stage tender point (£1,500), and charge per passenger (£8.61) for landing at the Barbican tender point<sup>30</sup>.

Research on the impact of cruise ships on the local economy demonstrates a mixed picture which is impacted by location and the age and demographic profile of passengers on the ship. These figures do show a higher per head value than is received by CHC for landings.

- **Cruise ships visiting the city of Tarragona (Catalonia):** A total of 15 per cent of the cruise passengers did not spend anything at the destination. The total average expenditure per cruise passenger was €21.2 (~£18.15), excluding transportation<sup>31</sup>.
- **Cruise ships visiting the Canary Island:** Average shore expenses analysed for cruise passengers was €52.10 per stopover<sup>32</sup>.
- **Passenger Spending in Port while visiting during a Cruise:** CLIA 2018 Global Economic Impact Study estimated spending at \$101 in 2018, approximately £75.9<sup>33</sup>.

Taking high level assumptions of 2,000 passengers on a cruise ship, 15 vessels per year and a spend of £25 per passenger gives a total spend of approximately £750,000 per annum in 2023 prices. Applying a GVA to Turnover conversion of 0.35 (cautiously estimated due to spend in multiple sectors) produces a GVA from cruise ships of around £262,500 per annum. With GVA per filled retail job in the South West £36,226<sup>34</sup>, this gives 7.2 FTE that would be supported by spending from cruise ship visitors in the local economy. Increasing this spend to CLIA higher estimated of £75 would increase the jobs supported due to passenger spending to 21.6 FTEs. This could account for a longer duration of stay for passengers per port, but the jobs directly supported by cruise ships would remain low.

<sup>30</sup> Cattewater Harbour Commission (2023) Schedule of Rates and Dues. Available at: [Schedule-of-Rates-2023-2024.pdf \(plymouthport.org.uk\)](#)

<sup>31</sup> Domenech and Gutierrez (2019) Determinants of cruise tourists' expenditure visiting port cities. Available at: [EM-TRJJ190106 793..808 \(emerald.com\)](#)

<sup>32</sup> Banos and Tovar (2021) Estimating cruise passenger's expenditure: A censored system approach. Available at: [Estimating cruise passenger's expenditure: A censored system approach - ScienceDirect](#)

<sup>33</sup> Cruise Line International Association (2021) State of the Cruise Industry Outlook. Available at: [PowerPoint Presentation \(cruising.org\)](#)

<sup>34</sup> [Regional gross value added \(balanced\) by industry: all ITL regions - Office for National Statistics](#)

This is a very high-level estimate which shows that, in terms of order of magnitude, cruise ships should not be the basis for a large portion of the local economy, given the lack of long stay times and lower spending per passenger.

### 3.2.3 Marinas

Marinas can contribute to the local economy in two main ways, either directly through supporting jobs at the marina or through the visitor's spend in the local economy.

A study<sup>35</sup> completed in Scotland found that residents<sup>36</sup> spend on average between £2,800 and £6,100 on leisure boating per year. Visitor berth expenditure considers two distinct expenditure types.

- **Formal berthing facility** (i.e. a pontoon, mooring and quayside at a marina or harbour). Formal berthing facility per night spend considers visitor berthing fees, accommodation, entertainment and leisure, food and drink, retail, and transport spending. Average nightly spend of £159.
- **Anchored outside of a formal berthing facility (i.e. “drop the anchor”)**. Considers the same expenditure areas as formal berthing nights with the exclusion of berthing fees. Average nightly spend of £89.

## 3.3 Employment

Employment and industry is a large subject area. For the purpose of this analysis, we have focused on low-carbon, high-tech and marine-based industries as these have the closest alignment with the Vision and Themes set out in Section 1.4.

### 3.3.1 Freeport

Freeports are special areas within the UK's borders where different economic regulations apply. By delivering investment on specific sites benefitting from tax and customs incentives, it is anticipated that Freeports will create thousands of high-quality jobs in some of the UK's most disadvantaged communities.

The Freeports model proposed by the UK Government has three core objectives: i) to become national hubs for global trade and investment; ii) create 'hotbeds' for innovation; and iii) promote regeneration through the creation of high-skilled jobs. It is intended that all Freeports around the UK will have access to a number of different policy levers, including:

- Taxation benefits for businesses - potentially including Enhanced Capital Allowances, Business Rates, reduced National Insurance contributions and Land Transaction Tax, for qualifying businesses / uses.
- Business rates retention - for local authorities, enabling 100% business rates retention over the initial baseline for a 25-year period (the same as for Enterprise Zones).
- Simplified customs arrangements for businesses.
- A supportive planning environment - potentially including Local Development Orders to prioritise particular sectors / use classes.

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<sup>35</sup> EKOS (2022) Economic Value of Boating Tourism in Scotland. Available at: [measuring-the-economic-value-of-boating-tourism-in-scotland-27-march-2023.pdf](https://www.britishmarine.co.uk/measuring-the-economic-value-of-boating-tourism-in-scotland-27-march-2023.pdf) (britishmarine.co.uk)

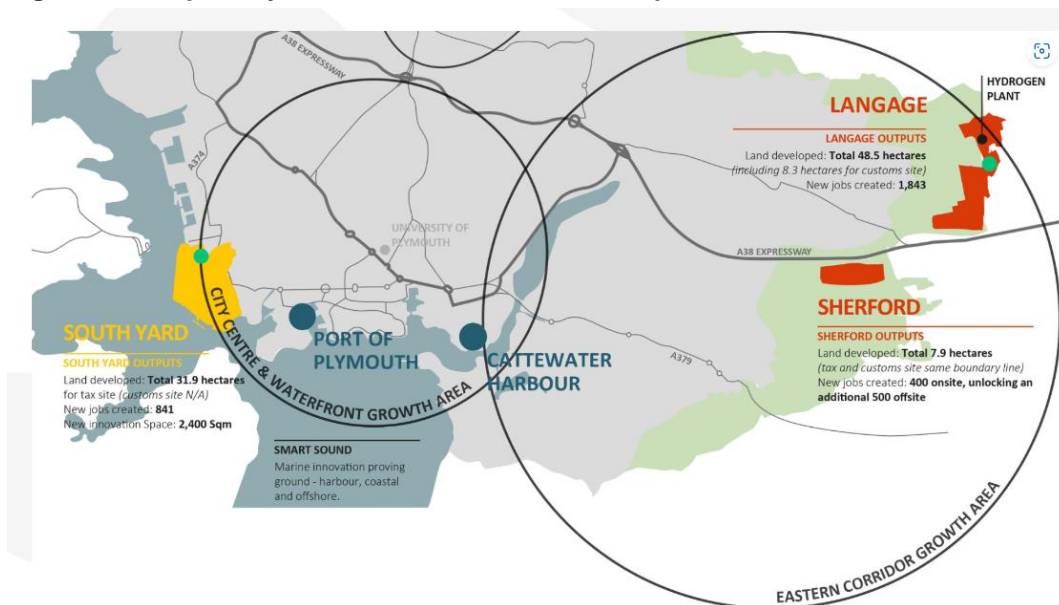
<sup>36</sup> Annual resident berth expenditure considered annual spend on resident berthing fees, fuel, boat insurance, repair and maintenance, food and drink, retail, and transport spend on days when a boat user visits their boat without cruising and/or uses their boat to go sailing.

- Seed capital - each Freeport will be granted £25 million in seed capital funding to be used primarily to address infrastructure gaps in tax and / or customs sites that are perceived to be holding back investment.

### 3.3.1.1 Plymouth and South Devon Freeport

Three ‘tax sites’ shown in **Figure 3.6** have been designated in the Plymouth and South Devon will benefit from some or all of the policy levers set out above. These sites are at Sherford, South Yard and Langage. The former two sites were formally designated on 4<sup>th</sup> July 2022 and the latter formally designated from 14 October 2022. None of these sites lie within CHC jurisdiction, although it is reasonable to expect positive demand from Freeport designation as new investment locally may lead to growth and supply chain opportunities for commercial port users. There is also a possibility that additional sites could be designated – including those within CHC’s jurisdiction, however, we are unable to comment on the likelihood or otherwise of this at this stage.

**Figure 3.6: Map of Plymouth and South Devon Freeport**



Source: Property – Plymouth and South Devon Freeport (pasdfreeport.com)

The forecast for employment in the Freeport is displayed in **Table 3.2**. This shows that there will be demand for around 3,584 new jobs by 2028/29, which would be a significant increase in professional and technical occupations for the area, as well as increasing Plymouth’s strengths in skilled trade and manufacturing.

**Table 3.2: Freeport Skills Demand**

	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30
Group 1: Manager, Directors and Senior Officials	0	1	97	157	258	291	312	312
Group 2: Professional Occupations	0	1	219	375	675	756	798	798
Group 3: Associate professionals and tech occupations	0	1	201	301	493	551	586	586
Group 4: Administrative Occupations	0	0	96	134	185	207	220	220
Group 5: Skilled Trade Occupations	0	2	414	567	887	975	1034	1034
Group 6: Caring, Leisure and Service Occupations	0	0	1	2	4	4	4	4

	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30
Group 7: Sales and Customer Service Occupations	0	0	15	29	55	62	65	65
<b>Total</b>	<b>0</b>	<b>6</b>	<b>1217</b>	<b>1883</b>	<b>3047</b>	<b>3381</b>	<b>3583</b>	<b>3583</b>

Source: Plymouth and South Devon Freezone (pasdfreeport.com)

### 3.3.2 High Tech and Maritime Industries

#### 3.3.2.1 UK Policy

The maritime sector is a critical part of the UK economy, and 95% of the UK's trade is seaborne. In 2017, the sector directly contributed an estimated £17bn GVA and directly supported 220,100 jobs<sup>37</sup>.

Maritime autonomy is a major emerging technology trend, it was identified in the Government's Foresight: Future of the Seas report as the single most important technological development in the maritime sector.

Four technological trends are identified as key enablers for maritime autonomy with the potential to significantly impact the sector<sup>38</sup>:

- the use of data and data analytics;
- the development of artificial intelligence (AI) and machine learning;
- advanced sensor technology; and
- improvements in robotics.

High tech jobs are also associated with large place-based employment multipliers, for every one job created in this sector it is estimated that an additional 1.9 jobs are created in the local area<sup>39</sup>.

#### 3.3.2.2 Plymouth Opportunity

Developments over the past decade such as Smart Sound Plymouth, the Enterprise Zone and the Marine Business Technology Centre innovation support service have encouraged three areas of excellence to emerge: marine autonomy, clean propulsion and digital ocean technology. This has resulted in the Department of International Trade recognising Plymouth as a UK High Potential Opportunity for marine autonomy<sup>40</sup>.

There is a relatively significant opportunity for high value job growth in the High Tech and Maritime Industries in Plymouth. The growth would expect to be concentrated outside of the Cattewater masterplan area, due to the location of the freeport. Activities at Turnchapel Wharf suggest there is some level of opportunity for CHC, with a mix of high tech and maritime based businesses currently located in the area.

Further engagement would be required with the freeport, to understand the requirements of those organisations and how this could be incorporated into a masterplan to add value, as well as the potential for additional sites designation at a later date.

<sup>37</sup> State of the maritime nation report 2019 | Maritime UK

<sup>38</sup> Department of Transport (2019) Technology and Innovation in UK Maritime: The case of Autonomy. Available at: [Technology and innovation in UK Maritime: the case of autonomy \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/424847/technology-and-innovation-in-uk-maritime-the-case-of-autonomy.pdf)

<sup>39</sup> HM Treasury (2020) Green Book Appendix A.2 Placed Based Analysis

<sup>40</sup> Future looking bright for Plymouth's marine sector | PLYMOUTH.GOV.UK

### 3.3.3 Low Carbon and Renewable Energy

Low carbon and renewable energy economy (LCREE) turnover and employment estimates are both at their highest level since the first comparable figures in 2015. Between 2020 and 2021, UK turnover increased by 30.8%, from £41.6 billion to £54.4 billion, while employment rose by 23.4%, from 200,500 FTE in 2015 to 247,500 in 2021.

Floating offshore wind has been identified as a key opportunity in Plymouth and is further reviewed in this section.

#### 3.3.3.1 Job Creation in Offshore Wind

As of 2020 there are 15,205 direct jobs for offshore wind in the UK, with 10,888 indirect jobs<sup>41</sup>, with these jobs often in skilled roles.

There are a number of forecasts on the potential impact of Floating Offshore Wind (FLOW) on the UK economy. These are, however, predicated on the requisite investment from the UK Government to pump-prime FLOW delivery and unlock additional private sector contributions.

Overall, it is estimated that the UK needs almost 100GW of offshore wind to meet Net Zero targets by 2050. For context, currently, only around 10GW of offshore wind has been installed. The complexity of delivering fixed offshore wind turbines suggests that FLOW is a value-for-money opportunity that offers a strong return on initial investment<sup>42</sup>.

This same study estimates that, by 2050, the FLOW industry has the potential to deliver £43.6 billion in UK Gross Value Added (GVA), creating more than 29,000 jobs in the process.

#### 3.3.3.2 Plymouth Opportunity

An emerging focus for the UK is the potential for Floating Offshore Wind (FLOW) farms. The Crown Estate has been exploring such opportunities in the Celtic Sea and is targeting 24GW of output by 2045.

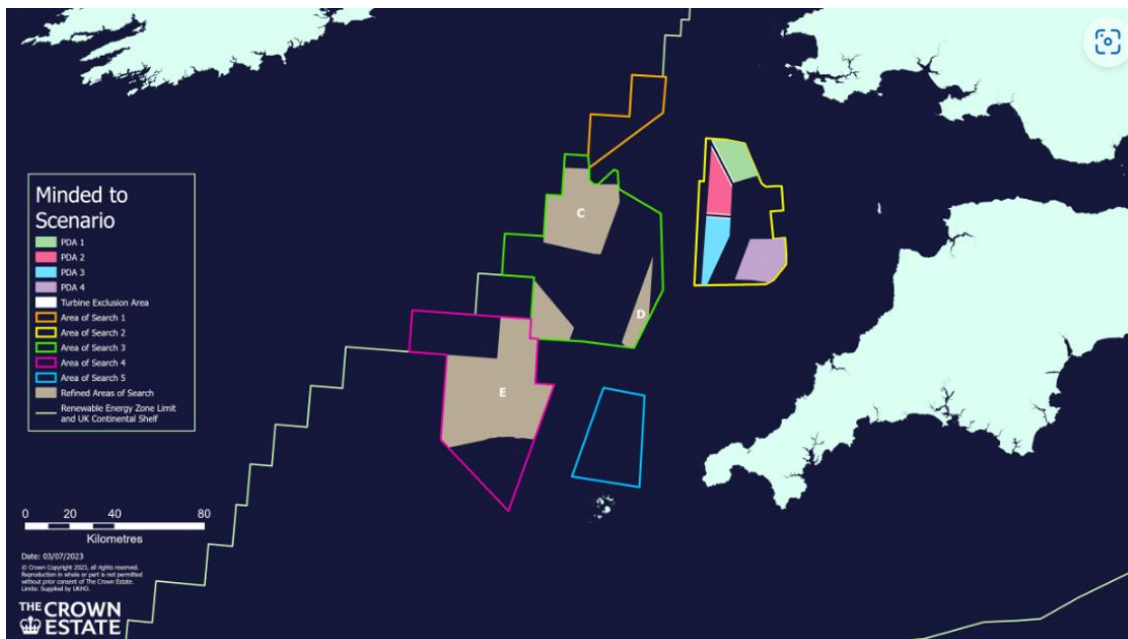
The original five areas of search in the Celtic Sea have now been reduced to four smaller Preferred Development Areas, displayed in **Figure 3.7**. These are all located between South Wales and North Devon / Cornwall, with potential for servicing from Ireland, South Wales and Southwest England.

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<sup>41</sup> Offshore Wind Industry Council (2022) Offshore Wind Skills Intelligence Report. Available at: [OWIC Offshore Wind Skills Intelligence Report - March 2022 \(sectormaritime.es\)](https://www.offshorewind.org.uk/resources/offshore-wind-skills-intelligence-report-march-2022)

<sup>42</sup> Industrial Leadership (2021) Unlocking the UK's Floating Wind Potential, Floating Offshore Wind Centre of Excellence



**Figure 3.7: Areas of Focus – FLOW in the Celtic Sea**

Source: The Crown Estate July 2023

This may offer some degree of opportunity for Plymouth. However, it is recognised that the new Celtic Freeport (comprising sites at Milford Haven and Port Talbot in South Wales) is better placed to be the primary beneficiary of FLOW investment. Plymouth is unlikely to attract operations and maintenance facilities for the FLOW turbines, due to being further from the Preferred Development Areas.

As noted by the Regen study into floating offshore wind<sup>43</sup> (published May 2022 on behalf of Heart of the South West LEP), Plymouth “could be used as a port for some component manufacturing and to support the vessels needed in FLOW. There are evidently significant port capabilities in Plymouth, and it could be a good location to support the fabrication and manufacturing of FLOW components, as well its potential as a dock for FLOW vessels. The role of Plymouth could expand further if FLOW projects are developed off the south coast and in the western approaches to the English Channel.”

At this stage in the development of FLOW it is challenging to provide accurate estimates on the scale of this opportunity for Plymouth.

The designation of the Plymouth and South Devon Freeport (see Section 3.3.1) is positive for investment in the overall port. Although Cattewater is not part of the Freeport, from discussions with CHC we are aware that the nearby Oceansgate area is already attracting attention from the FLOW sector – a major company has expressed an interest into paving over existing drydocks for use as a laydown area. There is a lack of available space currently at Cattewater, which may impact on market potential – at least in the short to medium-term.

Equally, CHC has highlighted the significant potential for anchor handlers and barges to use Plymouth. Opportunities around FLOW may be a bigger opportunity for Plymouth than existing investment programmes (including those centred around Devonport, for example).

It would appear reasonable to expect that most marine FLOW activities (e.g. operations and maintenance of the FLOW turbines, etc) go to those ports that are most easily accessible from

<sup>43</sup> REGEN (2021) Floating offshore wind opportunity study for the Heart of the South West. Available at: [Slide 1 \(regen.co.uk\)](#)

the Preferred Development Areas. Whilst this would not favour Plymouth, supply chain development could represent an investment opportunity (subject to sufficient developable land), potentially positioning Plymouth as a centre for marine training and autonomy linked to FLOW technology.

### 3.3.3.3 Regional Case Study

In September 2021, the Welsh Government partnered with the Offshore Renewable Energy (ORE) Catapult to release their evaluation of the potential for Wales to capitalise on the shift towards FLOW. A key conclusion from this document was<sup>44</sup>:

- No single Welsh port could currently handle all of the activities required for the deployment of a large floating offshore wind farm. However, Port Talbot and Milford Haven were identified as having the current capability to deliver most of the required activity which, with the necessary infrastructure investment, could deliver all the necessary activities.

Both Port Talbot and Milford Haven are located in South Wales, close to the Preferred Development Areas identified by the Crown Estate as it seeks to establish the Celtic Sea as a leading FLOW proponent. Within this context – and that of the Celtic Freeport – it has been estimated<sup>45</sup> that FLOW could generate and sustain around 11,000 FTE jobs in South Wales.

### 3.3.3.4 The East Coast Hub (Case Study)

The East Coast Hub<sup>46</sup> is Ørsted's home for the long-term operations and maintenance of their operational East Coast offshore wind farms, with a total of 588 turbines and a capacity of 3.7GW.

There are 520 people currently employed at the East Coast Hub in the Humber, 230 directly employed by Ørsted and the remaining being long-term operations and maintenance contractors.

Over the period to 2030, the number of people working out of the East Coast Hub will increase to over 800, adding 250 high-value jobs in the green economy.

## 3.4 Summary of Opportunities

The table overleaf summarises the initial sector analysis undertaken in the assessment. Each is rated using an RAG rating, from low (red) to high (green), for Cattewater and the wider Plymouth area.

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<sup>44</sup> Renewable Energy Catapult Development Services Limited and ITP Energised (2021) Floating Wind in Wales. Available at: [Floating wind in Wales substructure and port review \(gov.wales\)](#)

<sup>45</sup> Celtic Freeport Economic Impact Assessment (Scenario 2)

<sup>46</sup> The East Coast Hub comprises 5 no. offshore wind farms, operated by the Danish energy company Ørsted.

**Table 3.3: Summary of Opportunities**

	<b>Economic Impact</b>	<b>Potential Opportunity</b>	<b>Deliverability / Feasibility</b>
<b>Freight</b>			
Cattewater	<p>A key driver of revenues at Cattewater.</p> <p>Has a high multiplier within the local and national economy creating direct, indirect and induced employment.</p>	<p>Forecasts suggest a limited change in the current freight quantity over the coming years.</p> <p>Longer term there will be a requirement to diversify the freight due to a reliance on petroleum which is expected to decline.</p> <p>The use of Ammonia for hydrogen fuel cells could be an area of rapid growth, linking to the new facility at the freeport</p> <p>Tonnes of freight and the number of containers moved in UK ports will continue to increase to 2050.</p>	<p>A clear plan is required to transition land and employment for petroleum, use change will require investment.</p> <p>Any reduction should be over a long period of time giving the port time to adjust.</p> <p>A significant amount of land is dedicated to these industries and will require other economic uses to replace them.</p> <p>Ensuring sufficient demand for containers to allow for regular dockings will be needed to compete with larger ports, as well as external factors beyond CHC's control (e.g. enhanced road access, etc).</p>
<b>Fishing</b>			
Cattewater	<p>Fishing represents a small portion of total revenues and Cattewater is not the primary fishing quay within Plymouth.</p>	<p>Although the price per tonne has increased, overall income is in decline.</p> <p>There is local competition in Brixham for the larger scale processing of catch.</p>	<p>Range of existing fishing facilities already in place at other harbours – a small proportion of revenues reflects viability challenges without significant external funding.</p>
Plymouth	<p>Fishing represents a small portion of total revenues. Fishing is an important part of the cultural heritage of the area but is currently underrepresented in the area.</p>	<p>Opportunity to make fishing a small but important part of the visitor economy and support local jobs with short supply chains.</p>	<p>A series of quick wins have already been planned, but there is limited feasibility for wider changes due to local competition.</p>
<b>Visitor Economy</b>			
Cattewater	<p>Some leisure uses in water sports, marinas and ferry operators.</p> <p>Cruise ships only have a marginal impact from service charges and passenger drop-off targets.</p>	<p>Economic impact would come through making the port a destination, rather than a working port.</p> <p>Cattewater does have Marinas, which could be integrated into the local area and visitor economy. The port is also located near the centre of Plymouth.</p> <p>Increasing the number of cruise ships without creating additional revenue (beyond harbour dues)</p>	<p>Significant changes would have to be made to the industrial areas to make them suitable for visitors.</p>

	<b>Economic Impact</b>	<b>Potential Opportunity</b>	<b>Deliverability / Feasibility</b>
	Employment impact from Marians is likely to be larger than cruise ships and creates and more consistent impact on the local area.	is likely to have a low impact on Cattewater's future commercial sustainability.	
Plymouth	<p>Plymouth currently has a strong leisure economy.</p> <p>Wider impact of marine tourism is proven to be significant from other coastal cities.</p>	<p>The level of attraction to Plymouth is reliant on branding efforts to raise awareness of the city and its history.</p> <p>Plymouth is aiming to increase revenue and employment through leisure and business tourism.</p>	<p>The visitor plan has identified a service of deliverable objectives.</p> <p>The number of cruise ships visiting Plymouth is forecast to rise significantly during 2023 and beyond.</p>
<b>High Technology and Maritime Industries</b>			
Cattewater	Turnchapel Wharf contains 20 businesses, some of which are in these industries.	<p>The opportunity to build on Turnchapel successes and work more closely with relevant stakeholders to maximise benefits.</p> <p>There are very high multipliers that are associated with high skilled jobs, supporting jobs in the wider area.</p>	<p>Likely to be focused on Freeport sites, feasibility within Cattewater would be reliant on creating benefits to relocate there over the freeport sites / getting additional tax sites designated.</p> <p>Availability of land and investment into the required types of workspaces and supporting infrastructure will be a key constraint.</p>
Plymouth	Opportunities exist in high-growth, high-value sectors linked to the university and Freeport designation.	Plymouth has a growing opportunity in high-tech maritime industries, linked to the Freeport and the university.	Focused on Freeport sites. Seed investment should help enable development.
<b>Offshore Wind</b>			
Cattewater	Scale of benefit is likely to be far lower than for better located ports (e.g. South Wales) to benefit from FLOW investment in the Celtic Sea.	Although Cattewater will not attract key O&M activity or turbine manufacture, there is a clear supply chain opportunity.	<p>There is a significant amount of industrial floorspace in Cattewater that could be repurposed.</p> <p>There would need to be a clear advantage to locate at Cattewater, over other locations within the wider port.</p>
Plymouth	Scale of benefit is likely to be far lower than for better located ports (e.g. South Wales) to benefit from FLOW investment in the Celtic Sea.	Although Plymouth will not attract key O&M activity or turbine manufacture, there is a clear supply chain opportunity.	Plymouth has a specialism in marine industries and manufacturing, with an increasing level of research making it an attractive hub.

Source: Mott MacDonald analysis

## 4 Summary and Next Steps

Building on the analysis of the available evidence base, this section recognises existing information gaps and presents uncertainties for stakeholders that will help guide the next steps of the masterplan as part of the upcoming programme of stakeholder workshops.

### 4.1 Freight

There are opportunities to maintain revenues derived from the import and export of existing core cargoes, although there is a degree of uncertainty around the impact of Net Zero on oil products over the medium to longer-term in line with Government policies. It would be prudent to plan for a long-term decline in oil products.

- **Oil Products and Changes in Cargo Type**

- What are the medium to long term expectations for Oil Product freight and the industries that are reliant on it?
- Is there likely to be a negative impact on the local supply chain should this freight decline?
- Have any replacement cargo types been identified?
- Is there any understanding of potential scale for these replacement cargoes?
- What Physical changes to the port would be required to handle this?

- **Containers at Plymouth**

- What is the demand for a container port in Plymouth?
- Does this represent a viable option with the potential for more port-to-port container movement?
- What are the key barriers restricting growth in Cattewater as a container port, aside from demand (i.e. are the water depths and quay lengths that are required for container vessels similar those required by bulk and oil vessels? What size of vessels are using the existing nearby shipping route?)

### 4.2 Visitor Economy

Plymouth has substantial growth potential within the visitor economy and has set ambitious growth targets. If achieved, these will have a significant positive impact on the city's economy.

The Marinas at Cattewater means there is currently some impact from the visitor economy. Any further development would require improved access from the city, and the repurposing of industrial land.

- **Creating and Using the Port**

- How much space would be available for these uses, given the current competing sectors?
- What additional infrastructure and investment would be required to support these uses?
- What activities are most in demand for Plymouth, and could be accommodated at Cattewater?

### 4.3 Fishing

The fishing sector has experienced significant challenges over recent decades. This is reflected in Plymouth, with falling revenues despite an increase in price per tonne landed. Fishing does have the potential to play a smaller but vital role however in the growth of the visitor economy,

Given the wider challenges of the sector – as well as the limited economic benefits derived thus far from significant investment at Brixham, for example – it is not recommended that fishing is prioritised within the future Cattewater masterplan, but it could be maintained as part of a multi-use harbour where the quay can serve more than just fishing vessels.

- **The Role of Fishing**

- Are there any future plans to significantly increase the quantity of catch unloaded at Cattewater?
- If the visitor economy does increase, how can the expansion to the fish market and hospitality be integrated into these areas to support fishing?

#### 4.4 High Technology and Maritime Industries

The University of Plymouth is at the forefront of high-tech maritime research which offers opportunities to increase the number of high-skilled, high-value jobs in Plymouth. This research is supported by recent public sector interventions, including the Enterprise Zone and more latterly the designation of the Plymouth and South Devon Freeport.

Again, however, the potential impact at Cattewater is a little more limited, although there is a degree of growth opportunity to build upon existing activities at Turnchapel, if CHC is able to position the harbour appropriately with key stakeholders (and potentially seek to designate key sites as part of a revised Freeport).

- **Cattewater and the Freeport**

- How can Cattewater present a case for investment and business relocation over and above the benefits at the Freeport site?
- Is consideration being given to incentivising relocation of specific industries at Cattewater?
- How can Cattewater position to try and get additional sites designated within the Freeport?

- **Spatial Constraints**

- What floorspace is currently available / areas that are developable for these industries to use beyond the successful Turnchapel development?
- What facilities are these types of businesses requiring?

#### 4.5 Offshore Wind

The most significant opportunity currently is linked to the development of FLOW in the Celtic Sea – with the Crown Estate stating ambitious aspirations for energy generation.

Whilst Plymouth would appear well-positioned to capitalise, with a university specialising in high-tech maritime research, the relative distance from Cattewater to the Preferred Development Areas (compared to ports in South Wales, such as Port Talbot or Milford Haven) means that the focus should be on supply chain opportunities linked to the university.

- **Opportunity Type and Size**

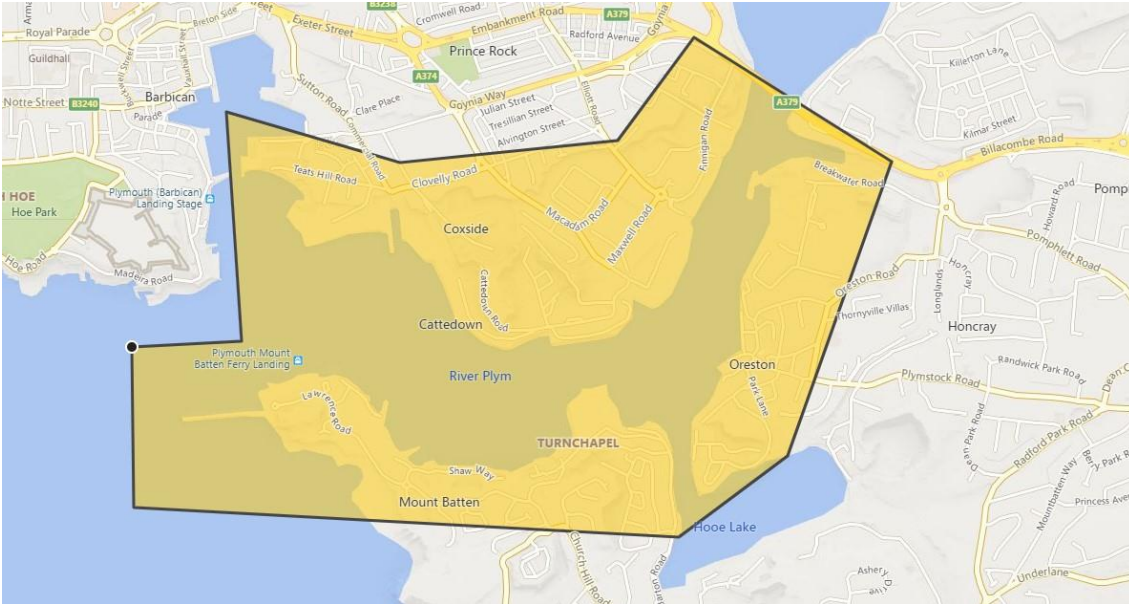
- What elements of the floating offshore wind industries are Plymouth targeting? What is the level of supply chain potential?
- How can Cattewater present a case for FLOW investment over Ports located closer to the identified Preferred Development Areas in the Celtic Sea?

#### 4.6 Other

- Are there any additional considerations that have not been included in this initial analysis?

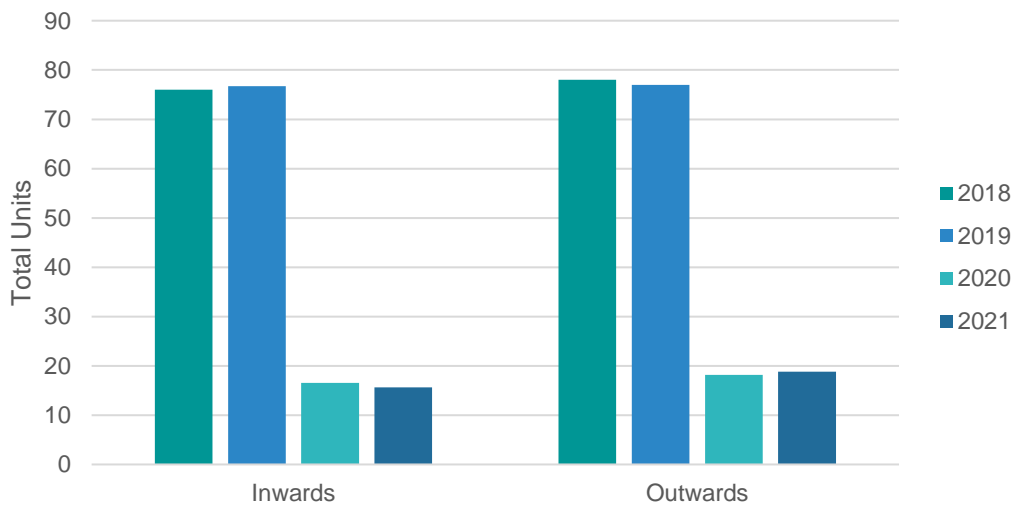
# A. Appendix

**Figure A- 1: Employment Search Area**



Source: Mott MacDonald

**Figure A- 2: Passenger Cars, Motorcycles and Accompanying trailers/caravans (Total Units, 2018-2021)**

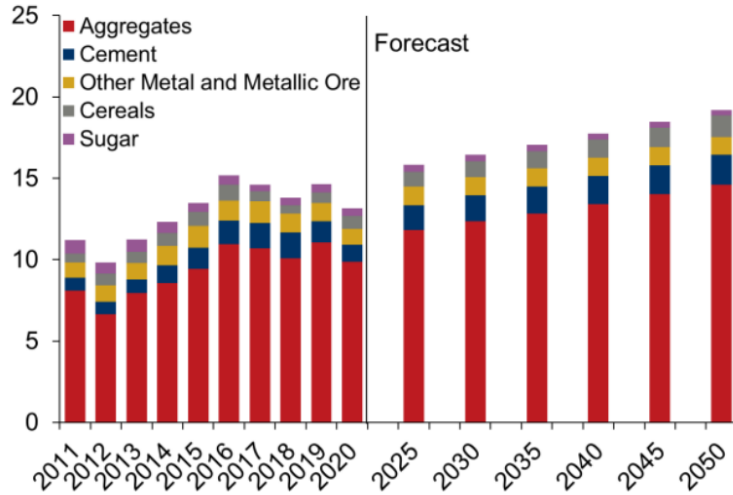


Source: PORT0499 – UK Major Freight Traffic: Port Level

**Figure A-3: Port of London – Central Forecast of Dry Bulk Composition from 2020 to 2050**

**Central: Dry Bulk composition**

Million tonnes



Source : Oxford Economics/Port of London Authority

Source: [Future trade through the Port of London \(pla.co.uk\)](http://future-trade-through-the-port-of-london.pla.co.uk)



