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## Baseline Social Information for Marine Planning: Exploring the social impacts of emergent marine sectors in deprived coastal communities (MMO1132)



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# Baseline Social Information for Marine Planning: Exploring the social impacts of emergent marine sectors in deprived coastal communities (MMO1132)

October 2019



**Report prepared by:**  
ICF Consulting Services Ltd

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## 1. Introduction

ICF with Collingwood Environmental Planning (CEP) and ABPmer were contracted by the Marine Management Organisation (MMO) to undertake a study (MMO1132) to support social baselining for England's marine plans, by identifying and improving the existing evidence base and updating understanding around social issues that are relevant to marine planning.

The first deliverable from the study, a 'social evidence review' identified the social evidence priorities for marine planning. A second set of deliverables undertook research to improve understanding of three issues of relevance to marine planning for which the social evidence review identified evidence gaps. This document presents one of the three research deliverables: 'Exploring the social impacts of emergent marine sectors in deprived coastal communities'. Two other reports are published separately, one on the health and wellbeing benefits of coastal recreation and barriers to access; and the other on seascape quality and value.

### 1.1 Research objectives

The research aims to improve understanding of the potential for new maritime economic activity to affect socioeconomic deprivation in coastal communities, and hence support future marine planning policy design and assessment. The research has addressed this through a review of existing academic literature and through ex-post evaluation of two case studies (Green Port Hull in Kingston upon Hull and Wave Hub in Hayle).

The objectives of the research were to:

1. Understand how economic growth and the emergence of a new marine sector can deliver social impacts to coastal communities; and
2. Explore how these social impacts are experienced across deprived communities.

The research objectives were addressed through a two-stage process. Each of these stages were supported by their own deliverables that encompassed detailed research methods, analytical approaches, results and discussion. These are reported on in the Annexes of this report. The aim of this report is to provide a synthesis across these evidence sources in relation to the research questions. The two stages were:

- A brief literature review (Annex 1: Literature Review) on socioeconomic impacts associated with development were considered. This covered economic impacts, such as job creation and issues of access, permanency and knock-on effects, impacts stemming from public sector or community funding, impacts on the physical environment and impacts on community identity and empowerment.
- Two case studies: Green Port Hull (GPH) (Kingston upon Hull) and Wave Hub (Hayle), representing emergent sectors in the last 5-10 years in deprived areas (based on the Index of Multiple Deprivation). The purpose of the case studies was to evaluate the extent to which the economic activity of an emergent sector may have generated social impacts on individuals and communities in deprived

areas, and how the (expected) impacts of this are experienced. The case study research consisted of:

- Initial case studies profiling, based on desk-research (Annex 2: Case study profiles);
- Stakeholder interviews with seven individuals in Hayle and surrounding areas with connections to local government and community groups. These interviews explored many of the issues raised by the literature review and the Hayle case study profile. Responses were analysed and the main findings are reported (Annex 3: Stakeholder interviews – Hayle);
- One focus group with members of the general public in Hull. This explored issues raised by the literature review and Hull case study profile. Participants in this focus group did not have specialist knowledge of GPH. The findings from this session are provided as a focus group note (Annex 4: Focus group report).
- Three additional interviews<sup>1</sup> were conducted for the GPH case study with individuals who could provide specialist knowledge of the development and associated initiatives in their local context. These have not been separately reported on, but their findings have been incorporated into this main report.

It is intended that this report may be read independently of the Annexes. If further detail is required, readers can refer to the separate Annexes which are cross-referenced throughout.

## 2. Approach and method

### 2.1 Stage 1: Review of recent evidence

A short literature review was undertaken. The purpose of the literature review was to draw together the body of existing evidence on the linkages between economic activity and its social benefits, particularly in deprived areas.

This included a review of:

- Research exploring the pathways and conditions through which inward investment and economic growth/restructuring can deliver social impacts. For example, the direct provision of jobs and training opportunities but also broader community investment routes, such as sponsorship, community investment projects, and local supply chain programmes; and
- Research examining the social impacts of changes resulting from particular pathways. For example, the various social benefits associated with employment (such as personal identity and worth), the characteristics of jobs that influence wellbeing, and the relationship between income and subjective wellbeing.

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<sup>1</sup> Including: Mark Jones, Director of Regeneration, Hull City Council; and Amar Ramudhin, Professor and Director, Logistics Institute, University of Hull

A set of research questions and sub-questions were agreed with MMO and are presented in Table 1 below.

**Table 1: Literature review research questions and sub-questions.**

Research Objective	Research question / Sub-question
<p><b>1) Understand how economic growth and the emergence of a new sector can deliver impacts i.e. the pathways</b></p>	<p>a) How does a sector / company, or economic growth more broadly, impact on individuals and communities? What are the pathways and linkages? E.g. Job creation, training, mobilisation of local supply chain, community investment projects etc. Are some of these linkages stronger than others?</p> <p>b) Are these different in more deprived versus less deprived areas?</p> <p>c) Are there particular examples for coastal communities or marine sectors?</p>
<p><b>2) Identify the social impacts of changes in particular sectors delivered through the pathways, and whether these are common across different social groups</b></p>	<p>a) What types of social impacts, positive or negative, do the sectors have through the pathways have? E.g. impacts on property values, noise levels, air pollution, traffic, health and wellbeing.</p> <p>b) Do they vary according to different social groups and people? And those living close to the physical development site and those living further away?</p> <p>c) Are there barriers to accessing positive social impacts?</p>

Sources were identified through non-systematic methods including literature already known to the study team, key and/or seminal papers of relevance known to the team, supplementary searches on Google Scholar, and using snowballing techniques to identify additional sources. The search prioritised UK-based studies, although exceptions were included where sources were judged particularly relevant to the study questions and transferable to a UK context. Only sources from the past 15 years (2004-present) were considered.

Twelve sources were reviewed in full to inform the literature review. Sources were reviewed in terms of their relevance to the research questions and for robustness. The results of this were synthesised and are available in Annex 1.

The results of this review were then used to inform project approach to the case studies, helping to focus the desk research and define the approach to primary research (i.e. the schedule of questions and prompts developed for interviews and the focus group).



## 2.2 Stage 2: Case studies

The key case study selection criterion was the presence of an emergent sector in the last 5-10 years in an area which is deprived (based on the Index of Multiple Deprivation).

The two case studies selected provided differing examples in terms of:

- Geography and degree of urbanisation (Hayle is a rural community in Cornwall and part of the South West Marine Plan Area, Hull is an urban area in East Yorkshire and part of the East Marine Plan Area);
- Location of development (the Wave Hub development in Hayle is an offshore site; while the GPH development is onshore, directly on the estuary in Hull); and
- Delivery relative to pre-development projections (Wave Hub has not resulted in the influx of device test investment that was anticipated, whilst GPH has seen key investments made).

A set of research questions and sub-questions related to the case studies were agreed with MMO and are presented in Table 2 below.

**Table 2: Case study research questions and sub-questions.**

Research Objective	Research question / Sub-question
<b>1) Further describe the local area characteristics (economic, demographic, deprivation conditions and social wellbeing)</b>	<p>a) What are the existing data/evidence describing the demographic and socioeconomic characteristics of the chosen case study areas? Consider population, employment by sector, unemployment, deprivation indices, as a core set, and include any wider social wellbeing evidence.</p> <p>b) What other regeneration activities take place in the local area (or have taken place in recent years)?</p>
<b>2) Provide an overview of the economic activity of the emergent sector</b>	<p>a) What was the investment in the particular development?</p> <p>b) What has been the estimated / expected impact of the industry / development in the case study area? (e.g. ex-ante impact assessments, planning permission information etc.)</p>
<b>3) Explore the impact of the sector on the local community</b>	<p>a) What have been the business investment-related impacts on the local community (e.g. has there been any investment on community projects or training for local workforce?)</p> <p>b) What were the impacts of development on the local community (e.g. any mid-term or ex-post evaluation).</p> <p>a) How are these impacts spread across the community? Do they vary depending on the social groups and people? And those living</p>

Research Objective	Research question / Sub-question
	close to the physical development site and those living further away?
<b>4) Explore local community experiences, perceptions and attitudes of local economic growth and its impacts</b>	a) Where available, what have been the local community perceptions and experience of the development and its impacts?

Case studies were initially explored through desk research. The results of these profiles (Annex 2: Case study profiles) were then used to identify key gaps and design the focus of the primary research (Annex 3: Stakeholder interviews – Hayle and Annex 4: Focus groups report).

### 2.2.1 Hayle

For the case study on Hayle, the primary research conducted was comprised solely of interviews with individuals involved in local government and community groups. Seven interviews were conducted in June 2019 (from 14 contacts who were approached). Interviewees were chosen based on their involvement either directly with Wave Hub and its supply chain, or more generally with local community, business and government organisations who were expected to have insight on the impacts realised. Interviewees were associated with or had previously been associated with Cornwall Council, the Hayle Town Council, the Chamber of Commerce and the Hayle Harbour Advisory Committee.

Interviews were undertaken by telephone, lasted between 30-45 minutes and were recorded and transcribed. The results of these interviews were then synthesised and presented as a summary in Annex 3: Stakeholder interviews – Hayle.

### 2.2.2 Hull

For the case study on Hull, one focus group was held in a local village hall in June 2019. The focus group involved 12 participants, all residents of Hull. Participants were recruited by a professional market research company based on pre-established criteria and were mixed in terms of gender, age, employment situations, educational levels and distance of their residence from the physical developments associated with GPH.

The focus group was recorded and subsequently transcribed. A summary of the focus group findings is provided in Annex 4: Focus group report.

Three interviews were also conducted to support the case study on Hull<sup>2</sup>. These took place in June 2019, lasted 45-60 minutes each and, where consented by the interviewees, were recorded and transcribed.

<sup>2</sup> Including: Mark Jones, Director of Regeneration, Hull City Council; and Amar Ramudhin, Professor and Director, Logistics Institute, University of Hull

### 3. Key findings

A cross-cutting thematic analysis was undertaken looking at research findings within and across the two case studies to identify differences, similarities and implications, as well as case-specific issues of significance<sup>3</sup>. This section presents the findings of this cross-cutting analysis, presented under thematic headings. Findings from each individual strand of the research are presented in the Annexes 1 to 4.

#### 3.1 The case studies

The findings in this report are based on two case studies.

- The Wave Hub, Hayle, a testing site for offshore renewable energy technology, which was developed between 2007-2012. It included a considerable financial investment in the area and has involved extensive stakeholder engagement to alleviate concerns raised locally. Hayle is a rural community located in Cornwall.
- Green Port Hull (GPH) in Hull looks at the impacts of a partnership between Hull City Council (HCC), East Riding of Yorkshire Council (ERYC) and Associated British Ports (ABP) to “*promote the region and attract renewable energy sector investment*” to the Humber (University of Hull, 2017a). The cornerstone development of GPH is the Siemens Gamesa and ABP joint investment to construct a wind turbine manufacturing plant and associated facilities in the Port of Hull. Additional investment was awarded to GPH through the Regional Growth Fund, for the Green Port Growth Programme (GPGP). GPGP was designed to build an offshore wind renewable energy local value chain to support the delivery of a combination of training and development programmes for local residents, inward investment and a range of business support activities. Hull is an urban area in the east of England.

The relative locations of each are indicated in Figure 1. Green Port Hull (Kingston upon Hull) is indicated in green; Wave Hub (Hayle) in blue.

Figure 1: Case study locations. **Source:** © OpenStreetMap contributors



<sup>3</sup> The report does not provide full analyses of the individual case studies. Analysis of case-specific research is provided in the Annexes; Annex 2: Case study profiles; Annex 3: Stakeholder interviews – Hayle; and Annex 4: Focus group report.

## 3.2 Socioeconomic impacts of development in deprived areas

This section presents the range of socioeconomic impacts identified in the literature and explored with stakeholders and members of the public in the case studies. Although many of the impacts identified in the literature were found in the case studies, additional impacts were also identified and people's perceptions and experiences of these impacts varied.

### 3.2.1 Local economy

When discussing the impacts of an emergent sector, the literature notes that impact can be generated directly and/or via indirect and induced economic multipliers: (i) direct impacts of a new economic activity i.e. via the jobs directly provided to deliver the activity, (ii) the indirect impacts that the new economic activity may have on the local economy, typically by boosting the output of their supply chains, and (iii) the induced impacts of additional income (from direct and indirect jobs) spent within an economy. Such effects are well documented in economy literature and guidance (e.g. Scottish Government, 2018).

Pre- and post-development evidence was available in literature quantifying the impact of the Siemens development and the Green Port Growth Programme on the local economy, employment and Gross Value Added (GVA). Qualitative insights from stakeholders and members of the public in Hull suggested a considerable secondary impact of development throughout the supply chain, additional investment attracted into the area and increased disposable income.

Pre-development projections of the impact on the local economy were produced as part of the feasibility study for Wave Hub (Environmental Impact Assessment). These projections have not been realised. No assessment of actual impacts on the local economy in Hayle was available, however interviewees – even those largely in favour of the project – consider the actual impacts to have been minimal. This was noted by many as being a source of disappointment. For interviewees in Hayle, Wave Hub has to some extent acted as a catalyst for local development and contributed to a focus on the marine renewables sector. Wave Hub is considered to have been a major influence on the decision to construct the Marine Renewables Business Park in Hayle, and many of the impacts discussed by interviewees relate to the business park rather than the Wave Hub testing site itself.

### 3.2.2 Employment

The impact of new economic activity on creation of jobs – both directly by employers in the new activity, as well as their supply chains and wider economy (i.e. indirect and induced impacts) – is often cited in literature and was the most commonly identified impact in the case study research.

#### **Creation of employment opportunities for local businesses and workers**

Whilst the generation of employment opportunities is important, particularly in a socioeconomically deprived area, such jobs may also be prone to leakage and displacement effects (see HCA, 2014 for further details on this). Where leakage occurs, new employment opportunities are taken up by individuals from outside the

local area, often because local workers do not have the skills required for the work. Where displacement occurs, a new sector may develop at the expense of other local sectors, meaning that while some new jobs are created, other pre-existing jobs may be lost.

Early outputs of a Green Port Impact Assessment (GIA) carried out by the University of Hull showed that the Siemens Gamesa wind blade factory alone created 1,063 jobs (from June 2012 to March 2019) in Hull and the adjacent East Riding council. A significant proportion of these jobs – 90% - went to people living within 30 miles of the factory (Interview with University of Hull), suggesting that leakage has not been a major issue and the local community was the primary beneficiary of the jobs created. Other stakeholders engaged as part of this case study (namely Hull City Council and members of the public participating in a discussion focus group) shared a similar opinion of the benefits of GPH on local employment. This appeared to generate a positive sentiment amongst focus group participants. Only one interviewee appeared sceptical about the impacts being truly local.

GPH, as an initiative set up to promote investment in renewables in Hull, encompasses a range of programmes that extend beyond the Siemens Gamesa factory. The Green Port Growth Programme (2012-2019)<sup>4</sup> aimed to capitalise on the Siemens – ABP investment to develop a new sector economy in the heart of the Humber. It is estimated that the Programme, including initiatives to support businesses and an apprenticeship and work programme, has supported the creation of more than 2,000 jobs in the facilities created and the renewable sector and supply chain. The positive impact on local businesses was also noted by some of the participants in the focus group. The GIA also identified “*an additional 627 supporting jobs based on the latest employment multiplier data for the UK manufacturing sector*”, while it further suggested that the development helped provide employment to 76 long term unemployed people through employment in related industries (University of Hull, 2017a).

Focus group participants emphasised the value that reducing unemployment had for the local community: even when discussing negative impacts that had come with the GPH development, discussion often came back to the point that the situation prior, marked by high unemployment, was significantly worse than any of the negative impacts that had come after the development.

In the Hayle case study, by contrast, Wave Hub has not brought about significant employment opportunities. According to one interviewee, only two full-time staff are currently employed at the company. While some jobs have been brought to Hayle, through the development of the Marine Renewables Business Park<sup>5</sup>, interviewees

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<sup>4</sup> The Green Port Growth Programme, funded with £26m through the Regional Growth Fund, was awarded to GPH following a bid by Hull City Council and East Riding of Yorkshire Council. The Programme, planned to run from 2012 to 2019, has six strands of work with linked initiatives and programmes. These are detailed in Annex 2.2. Figures provided in this report emerge from the Green Port Hull Impact Assessment (GIA) carried out by the University of Hull (2017b) and interviews with members of the team leading the work carried out as part of this study. Evidence is available for only two of the six strands of work which are the: Skills and Development work strand and Business Support & Advice work strand.

<sup>5</sup> The Marine Renewables Business Park in Hayle was developed as a direct result of Wave Hub's presence in Hayle. It contains both office and industrial space intended for marine renewables

noted that it was unlikely that those jobs would have benefitted the local community, due to the skills required for the work. As one interviewee described: “*because [marine renewables] is a fairly high tech and specialist business, I don't suppose anybody from Hayle has been employed there in one of the better jobs*”.

### **Pre-development concerns regarding displacement**

Concerns about potential displacement effects were raised in relation to both GPH and Wave Hub during the development phase. Past research by the MMO has commonly identified displacement as a potential impact of the interaction between marine sectors (MMO, 2014).

In the case of GPH, concerns seem to have been raised by local businesses that “*Siemens would kind of poach some of their workforce*” (HCC interviewee). The HCC interviewee suggested this happened to some extent “*because Siemens jobs are seen as very good jobs locally*”, however, it was not considered to cause any issues as local businesses were readily able to recruit to replace that workforce.

In the Hayle case study there were initial concerns from the fishing community that the exclusion zone around the testing site would displace fishing activity (particularly if success led to further expansion). These concerns led to Wave Hub establishing a fund intended to offset these impacts, although it does not appear that an agreement on how best to use this fund was ever reached. Moreover, according to interviewees, it is not clear whether the income of fishermen was meaningfully impacted as a result of displacement once the site was constructed.

In both examples, concerns were raised by local residents at the time of development around potential displacement effects, but these did not materialise in either case. However, there are indications that initial concerns influenced how the emergent sector was perceived and the extent to which it was supported.

### **Quality of, and access to, local employment opportunities**

The literature notes the importance of the type of job provided. Some literature finds that job creation is only really impacts on deprived communities when quality, better-paying jobs are made available to local residents (Crisp et al., 2015). However, local access to such jobs is often dependent on upskilling interventions, but these are not always available or feasible to deliver. In fact, a review of literature by the MMO (2011) found that the generation of more lower-skilled jobs can have the biggest impact on deprivation in a community (i.e. where new jobs match the skills of the local community).

Both case studies reflected these findings. Hull residents participating in the focus group suggested that jobs created as a result of GPH were suitable for a range of needs and skills, including opportunities for high-skilled and low skilled employees. The latter were equally – if not more – desirable, as it meant jobs were available to those who were not able to pursue further qualifications.

The GPH jobs were also considered by most to have good pay and offer opportunities for career progression “*...if you're starting off at an apprenticeship and you like it, you could possibly be there for the rest of your life.*” (Hull focus group interviewee). One interviewee, raised a concern around the quality of opportunities

that were accessible to locals, suggesting that *“jobs for true local people tend to be lower end”* and that locals would not be able to obtain the higher technical jobs created. However, the majority felt that training and upskilling programmes satisfactorily addressed such concerns and, as previously stated, a range of job types were created.

The jobs created by GPH and supported by the wider Green Port Growth Programme encouraged diversity in employment, through actions to promote Women into Manufacturing and Engineering ([WiME](#)) and young people with learning disabilities ([Pathway Plus Project](#)). Hull City Council, in collaboration with Siemens, further organised employment opportunity days held in the local area in an effort to engage adjacent disadvantaged communities.

Participants to the Hull focus group noted that Siemens also offered flexible working arrangements, creating appropriate opportunities for people with young children. It was felt that these jobs were available to people locally in Hull and that the focus on skills and education would help to keep it that way.

It was interesting to note that in discussions around the quality of the employment opportunities created, members of the public identified risks of specialising in an industry that can be seen as niche. This was linked primarily to the development of skills that were not seen as readily transferable. Although participants ultimately concluded that the benefits outweighed the risks, participants appeared to highly value employment and skills that offered longer-term security.

In the case of Hayle, no significant employment has been created, but interviewees did express the importance of bringing better quality jobs to the area. This is also an important aspect of Hayle’s Neighbourhood Plan (Hayle Town Council, 2018). Better quality jobs in this case does not necessarily mean high skilled jobs, as some interviewees also noted that it was unlikely that the few high skilled jobs that were created (through the Marine Renewables Business Park) were available to local residents.

The permanency of work is also important: if jobs created are seasonal or temporary, communities will also face seasonal unemployment, which can negatively impact wellbeing (Bardasi and Francesconi, 2004) and contribute to feelings of social isolation (House of Commons, 2007). This is often an issue in coastal communities where the economy is dependent on tourism (MMO, 2014).

The case study research and interviews with stakeholders in Hayle seem to support this argument. Interviewees in Hayle referred to some temporary benefits during the construction phase, as some locals were able to supply vessels to help with construction. However, these were not seen as opportunities that had any lasting effect. Several interviewees noted that there were a lot of low-paid, seasonal, tourism-related jobs and zero hours contracts in Hayle, and there was a strong desire to bring more meaningful, better paid and permanent jobs to the town.

Initial projections on Wave Hub’s impact had suggested that Wave Hub would bring such opportunities to the area through indirect impacts on a wider marine renewables sector. The fact that this has not occurred was a source of



disappointment for several interviewees and the initial overestimation of positive impacts was characterised as a significant mistake.

### **3.2.3 Investment in the local community**

The literature identified a range of ways in which businesses can invest in a local community including through support for voluntary organisations, investments in infrastructure, the sponsorship of projects or events, and through skills, training and education-business partnerships (Carley et al., 1991). The GPH case study was able to identify a number of the above and explore the impacts and community's perceptions of those. In general, GPH's investment in the local community has been recognised and appreciated by the local community.

In the case of Hayle, no significant investment has been made in the local community. Consequently, several interviewees were of the opinion that Wave Hub had nothing to do with Hayle and was not part of the local community. No information was available on examples of investment in the local community, and no interviewees were able to confirm any cases. Some interviewees mentioned that they had put out information or participated in some local consultation events around the time of development, but that there had been no evidence of investment or engagement since.

#### **Skills and training**

Training has been considered in the literature as an enabler for the local workforce to gain access and benefit from the employment opportunities created in the new sector. As noted in the discussion on quality of employment, high skilled jobs are only valuable to a community where residents have the skills to access such jobs. Some criticism on the value of training and upskilling exists in literature, with Crisp et al. (2015) finding little evidence to suggest that the impact of upskilling interventions extends beyond the individual benefited to the wider community.

Opportunities available for apprenticeships and upskilling were assessed in the GPH Impact Assessment (GPH-IA) and commonly mentioned by members of the public as a way of accessing the new employment opportunities created. Participants to the focus group in Hull were of the opinion that benefits of GPH through upskilling and apprenticeship were widespread, and considered these benefits to be distinct from the benefits offered by increased employment.

The GPGP was designed to help build a local environment that would attract renewable businesses. One of the cornerstones of the Programme was a Skills Development strand of work aiming to develop local workforce that would be capable of meeting the demands of the new industry. The strand included a programme of apprenticeships, training packages, upskilling and wage subsidies for disadvantaged groups, with the aim of strengthening the existing engineering skills base particularly in the local renewables and manufacturing sector.

A preliminary assessment of impact and interviews with Professor Amar of the Logistics Institute of the University of Hull (who is leading the GPH-IA) suggest that a total of 1,180 Apprenticeships have been completed<sup>6</sup> (between June 2012 to March 2019) and another 973 employees participated in an upskilling programme

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<sup>6</sup> Please note that these were included in the total job creation figure reported earlier



supporting businesses. These figures refer to residents of the Hull and East Riding area.

An earlier assessment of evidence up to 2017/18 suggested that although opportunities were available across backgrounds and age groups, they seem to particularly benefit young employees, with representation of the over 45 year olds estimated at just 14% of the total number of those receiving training for qualifications. Apprentices were also younger: the majority being between 18 and 19 years old.

The GPH programme further supported the establishment of a 'Green Port Hub' at the Central Library in Hull to "*help residents and businesses access information on the region's emerging renewable energy sector*" (University of Hull, 2017b). Besides a business support and information centre, the Hub is also home to an exhibition offering insights about working at the Siemens development and is equipped with IT pods to support jobseekers. A Siemens recruiter was reported to be on-site at the Hub once a week. No participants in the focus group were aware of the Green Port Hub and any impact this has had on the local community could not be assessed through the primary research.

Led by Hull City Council, in collaboration with Job Centre Plus and educational and training providers, a training and skills package was put in place aiming to "*improve employability and skills levels within Hull and the East Riding*" achieving the "*maximum benefit from the Siemens Gamesa investment by securing jobs for local people*" (University of Hull, nd). A skills group has been formed by GPH to that purpose.

A Training Hub was also developed through an extended collaboration between local authorities, the University of Hull, colleges and training providers across the wider Humber aiming to create a sustainable pool of skilled workforce<sup>7</sup>.

### **Local events and installations**

A review of case study literature also revealed GPH has funded local events, such as the Hull Street Race (a closed road race for electric cars) and ABP has funded educational school trips across the Humber. However, although these were known to several focus group participants in Hull, they were not readily linked to GPH. Participants were not aware of GPH supported art installations in a diverted public footpath close to the development (including those who have used the footpath).

A wind blade that was erected in the city centre as part of the Hull City of Culture activities was mentioned across interviewees and members of the public and was thought to have considerably contributed to raising awareness around GPH.

### **3.2.4 Impacts of physical infrastructure / industrial activity**

Literature suggests that people's assessment of their surrounding environment is heavily influenced by its physical characteristics, as opposed to perceptions around the local economy (TBR et al., 2005). Crisp et al. (2015) also found some evidence to suggest that interventions aimed at improving the physical environment are more

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<sup>7</sup> <https://greenporthull.co.uk/jobs-training/traininghub>

likely to have an impact on the community as a whole as opposed to interventions focused on employment and skills, which have impact largely on the benefitting individuals.

The emergence of a new sector can impact on a local community, positively or negatively, through the construction of supporting infrastructure and/or through investment in the local built and natural environment. These impacts were discussed as part of the primary research for both Wave Hub and GPH. In the case of Wave Hub, most impacts related to the Marine Renewables Business Park. For GPH, these impacts were discussed mostly in relation to the physical development of the Siemens factory and supporting facilities.

The biggest effects of the physical impacts are likely to be felt by those closest to the development. An online local resident survey (n=74), carried out as part of the impact assessment of GPH, found that concerns in the resident survey (41% indicated that there were negative impacts) were primarily raised by respondents who lived close to the development site (University of Hull, 2017c). However, participants in the focus groups identified little impact regardless of their proximity to the site.

Findings from the literature review suggest that the impact of physical changes brought on by development tend to change over time. As the community becomes used to the changes brought about by development, acceptance increases (Haggett, 2011). This was also evident in the case studies across impacts mentioned.

### **Visual impact**

The visual impact, as perceived by local stakeholders, of the GPH industrial site (Siemens factory) in Hull, and Business Park in Hayle (the Wave Hub testing site itself is too far off shore to have significant visual impact) differed between the case studies.

Interviewees in Hayle were very positive about visual changes brought about by the Marine Renewables Business Park. The site where the Business Park is located was described before the development as a “bleak site” and a “bit of a wasteland”, and the changes were described as significant. As one interviewee explained: “if we showed you pictures of what it looked like on the North Quay before Wave Hub and what it looks like now, it's like two different worlds”.

Stakeholders in Hull provided mixed views, with the overarching assessment being that views of the development were interesting if simply passing by, but not something that the majority of participants would like to see as part of their daily or immediate view, as illustrated in the following quote from one of the participants: “it's a positive thing, but I wouldn't say that if it was outside my window.” However, as noted by one participant the Siemens development is located in an industrialised area. With a BP power station and steel factory amongst the developments in the vicinity, it is the sort of development that was “expected”.

### **Traffic, noise and dust**

Interviewees and focus group participants in Hull did not identify any significant impacts on traffic, air pollution or noise. Issues such as road traffic were attributed to

poor road infrastructure, which was thought to be a challenge existing before GPH that affects the wider City of Hull. In fact, one of the interviewees suggested that investments, such as the one by Siemens-ABP, strengthened the argument for a major road scheme which is currently awaiting Secretary of State approval.

Any minor issues around noise or dust, generated by or linked to infrastructure of GPH, were very localised and linked primarily to the construction phase. A noise barrier was also raised as a requirement of the GPH planning consent and although (according to one of the interviewees) a few people complained it “*obliterated the view*”, those concerns had subsided in time.

No impacts in relation to traffic, noise or dust were noted in the Hayle case study.

### **Environmental impacts**

According to literature and confirmed by interviewees in Hull, any significant impacts of the GPH construction on the environment were identified and addressed as part of the process of securing a planning consent. Members of the public engaged were content that there were no significant impacts. However, this did not seem to be an informed opinion (with many indicating they would like more information on this area), but rather from trust in Hull City Council’s focus on green planning and in part to trust in Siemens as an environmentally-friendly company.

In Hayle, prior to the development of Wave Hub, concerns were raised about the potential environmental impacts. However, none of the interviewees identified any residual issues of concern currently on this matter.

### **Impacts on public access and recreational land use**

A public footpath was diverted during construction of the Siemens development which limited access along the waterfront, although “*no significant adverse effects on land uses and recreational activities*” were identified as part of the original Environmental Impact Assessment. As noted by the Hull City Council interviewee, the footpath could have posed a significant hurdle, potentially halting the development, should there not be agreement by the local community. Resolution of the issue was attributed to early and continuous engagement and provision of information to the local community “*at every stage of the development*”. Communication was also supported by the local news who were thought helpful in conveying information to the wider community.

The majority of participants in the focus group were not familiar with the footpath, while one participant incorrectly suggested (and others agreed), that “*all footpaths are closed*”. A total of five participants to the workshop, amongst them some of those living closest to the development, had used the footpath for walking or jogging. Overall, it was suggested that the path is predominantly used by those living nearby: “*I don’t think many people know about it unless you live on this estate*”. The diversion of the public footpath did not appear to have had impacts on participants of the workshop, and any impact is likely limited to residents in close proximity to the footpath.

### **Other impacts on infrastructure**

Some interviewees noted that the Wave Hub project might have been a greater success and brought more benefit to the local community had it been accompanied

by improvements to the local harbour. The harbour in Hayle is currently in need of dredging and only navigable by smaller vessels at certain times of the day. This means it is of limited use for servicing devices at the Wave Hub site. The harbour is also of limited use for any marine businesses who occupy the business park and need access to the water, and for the local community. It appears that many residents expected that Wave Hub may have been able to help with the harbour infrastructure, and the absence of any improvements has left many residents disappointed.

### 3.3 Non-material impacts on deprived coastal communities

#### 3.3.1 Impact on population and housing

Improvements in the local economy and job availability can lead to inward migration and hence increased labour market competition and increase in the local population (Hincks, 2017). The latter can apply pressure on local services and markets (Hincks, 2017) and lead to changes in the make-up of the local population and character of the local area.

Interviewees and members of the focus group in Hull identified an influx of population in Hull, which was thought to have contributed further pressure on an already struggling local infrastructure. Lack of housing, schools, access to medical care and a struggling road network were the issues mentioned by stakeholders. However, these impacts were not solely attributed to GPH, as a number of other major catalysts are also apparent (including the Reckitt Benckiser Research and Development facility and Hull being named City of Culture in 2017), which were thought to have attracted investment and people to the local area.

Increased demand for housing has led to further regeneration in Hull. An interviewee noted that GPH and offshore renewables attract high-skilled employees who tend to live in managed accommodation in the city centre and can have a positive impact on property prices. The Hull City Council interviewee noted that there were “*more housing conversions in the city centre*”. Asked about how such changes impact the local character of the area and property prices another interviewee suggested that “*it did not make much difference*” as “*true locals live in their own areas*” whereas foreign and temporary workers would seek a central location.

Focus group participants also recounted that increased demand for housing had led to a significant amount of construction and a proliferation of new-builds. Only a couple of people in the focus group referred to the impacts housing development had on the local character of the area. One participant noted that the new developments lacked in character compared to the old houses they replaced. However other participants noted new-builds addressed a market demand and were “*good for new people*”.

Exploring how these changes made local residents feel, no impact was identified on people’s sense of belonging or attachment. Participants to the Hull focus group argued that “*[change] is a part of life*”, whilst one of the interviewees (Hull City Council) mentioned that the influx of people has brought more cultural diversity into the area helping to create a more “*international vision*” for Hull.

In the Hayle case, as no significant impacts have been felt, there has been no additional pressure placed on resources.

### 3.3.2 Identity

Previous work conducted by the MMO (2014) points to a significant evidence base around the importance of long-term economic activities to a community's identity and sense of place. The work cites the role of commercial fishing as an historical example, and more recently, the role tourism has played in altering local cultural identity. This was reflected in both of the case studies. Overall, the GPH development had a positive impact on people's sense of pride. This was described in case study literature reviewed, and confirmed in stakeholder research across case studies. Focus group participants noted that GPH had contributed to *"putting Hull back on the map"*.

In Hayle, despite the lack of direct impacts from Wave Hub, some interviewees felt that the legacy of Wave Hub for Hayle is a sense of renewed optimism, focus and hope of future economic gains through marine renewables. The renewed sense of optimism and a belief that Hayle is *"pulling itself up by its bootstraps"* and no longer a *"declining town"*, was very much set against the recent context of Hayle as a town in decline. These opinions appeared to be universal, however interviewees differed in the extent to which they included Wave Hub specifically as part of this narrative – as opposed to wider activity such as the business park and general focus on investment on renewables and other projects in the south west. This suggests that this type of impact on public sentiment is likely something that is felt or assessed in very different ways by individuals.

Trying to better understand the above impacts, it is worth reflecting on evidence found in the literature review that suggested that the decline of traditional industries (such as fishing), which used to define some of the currently deprived areas in the UK, had left a gap (TBR et al., 2005) and a *"sense of loss"* in communities (Cole et al., 2011, p31). This suggests that the development of a new industry – or simply the expectations of one – establishing a long-term presence in the area can bring about a new sense of identity and purpose in the community, which seems to be the case for Hull. Interviewees compared and contrasted GPH at several points to the role the fishing industry had previously played in Hull. In the case of Hayle, as neither Wave Hub nor the marine renewables industry have taken off yet, this was less evident, but there was evidence of a sense of loss and a hope that a new industry could help to address this.

## 4. Conclusions and implications

### 4.1 Impacts of emerging sectors on deprived communities

The impacts on the local community most commonly identified in literature and by local stakeholders, related to tangible improvements in the availability of jobs, wide local economy, and local infrastructure.

**Availability of jobs:** While availability of jobs was considered an indicator of success of GPH, literature suggests that the impacts can frequently be limited at an individual level and not always reach / impact on the wellbeing of the wider community. However, the GPH case study suggested that the impact has been more widely felt. In part this appears to have been due to the relatively large number of jobs created, but also due to level of visible (to the local community) effort put into ensuring local access to those jobs. Local recruitment, linked to an extensive programme of apprenticeships, training, recruitment events and job seekers' support, has resulted in 90% of the jobs created being occupied by locals. In addition, the jobs offered opportunities for both low and high skilled workers and were available to applicants across age groups with varying levels of qualifications.

### **Economic prosperity**

GPH has had demonstrable economic impacts, in terms of both jobs directly created and supply chain effects. By contrast, Wave Hub has not had any significant demonstrable economic impact. In both case studies, however, in addition to demonstrable economic impact, the developments appear to have had a positive effect on community perceptions of the local area and prospects for the future.

For GPH, the investment and its impacts were linked to an improved sense of prosperity in the community and positivity about the future. GPH was seen as part of Hull and a defining development in transitioning the city into a more prosperous future, even contributing to "*putting Hull back on the map*".

Similar perceptions were found in Hayle, despite the limited economic impacts of Wave Hub. The activity and investment around Wave Hub has provided hope that there may be future opportunities for the community related to marine renewables.

### **Physical changes to the local area**

Improvements in infrastructure appeared to be of importance to interviewees, and these were linked to emergent sectors. In the case of Hull, pre-existing issues with the road infrastructure were mentioned and there was a hope that GPH might provide the leverage needed to make required improvements. For Hayle, pre-existing issues with the harbour and its lack of navigability were mentioned as something the Wave Hub development could have helped to address, and which would have brought significant benefits to the community and wider economy. There was disappointment that harbour improvements had not occurred.

## **4.2 Factors influencing people's perceptions of the impacts**

### **Historic context**

In both cases, the perceptions of stakeholders were clearly influenced by local historic contexts and this affected how people interpreted both successes and failures.

In the case of GPH, participants in the focus group tended to compare both the benefits and costs of the development with those of the fishing industry. For example, when discussing the issue of skills being too niche and non-transferable,

some participants referenced the plight of the people who had been trained to fillet fish after the industry left. The working conditions in the fishing industry, as well as Hull's recent history of unemployment, also appeared to influence what participants viewed as acceptable.

Among interviewees in Hayle, historic context played an important role in their understanding of impacts. In particular, Hayle has been subject to steady economic decline over the second half of the twentieth century, and in that time, there have been many promises of development that have not come to fruition. This series of disappointments seemed to affect some interviewees' perceptions of Wave Hub, as it was characterised as just another example of the same story.

### **Expectations**

In Hayle, some people had concerns of possible negative impacts from Wave Hub on the environment and to fishing. In Hull, some local businesses were concerned about employees potentially leaving to take better jobs at GPH. In both cases, these concerns do not appear to have materialised. Similarly, the positive expectation raised by employment projections associated with a fully utilised Wave Hub was not met, leading to disappointment. Both developments conducted significant consultation and communication activity ahead of the developments, however it is not clear how well such expectations were managed.

### **Trade-offs**

Within the focus group discussion, it was also notable that many participants appeared to take an informal 'cost-benefit' approach to their discussion of impacts. Wherever negative impacts were mentioned, many would mention that these were, however, acceptable, because the negative impacts were outweighed by positive impacts in other areas.

### **Awareness**

The GPH case study found that workshop participants were aware of a broad range of the benefits, and the activities being undertaken to support them (outside of the direct economic activity). This appears to have helped in fostering a positive opinion of the development and its benefits for the local area.

## **4.3 Interaction with the community and other initiatives**

### **Community engagement**

Good communication and publicity around the project and its impacts was thought to have significantly contributed to the acceptance of the development in Hull and any negative impacts and concerns identified during the planning process. There was a strong sense of trust by members of the public towards both the Hull City Council and Siemens operating the wind blade factory, with indications in one of the stakeholder interviews that it may have been fostered by early and extensive engagement carried out with the local community. Focus group participants also noted that they had heard a lot about the development, both in the local news and because it was a frequent topic of conversation among local people.



In Hayle, by contrast, although there was initial engagement with community groups, this appears to have largely stopped after deployment. For some interviewees, this meant that they did not feel particularly connected to the project. Many noted that even for the Marine Renewables Business Park, this is not something that most residents of Hayle would know much about.

### **Interaction with other initiatives**

In both case studies, interaction with other initiatives were of significance – both were part of broader initiatives to develop marine sectors in their local area.

A large part of the positive sentiment amongst the local community for the GPH development has been its apparent success in providing ‘local’ jobs, which it has done through a range of project, initiatives and partnerships – and been visible in doing so.

In Hayle, Wave Hub is part of the local regeneration plan. The links between initiatives such as Wave Hub and the Marine Renewables Business Park as part of a broader effort of regeneration and renewables development, may have played a role in the positive sentiment regarding future opportunities that some interviewees reported despite the limited direct economic effects of Wave Hub.

## **4.4 Implications**

Emergent sectors can have clear impacts on local economies and employment and wider community infrastructure. This has the potential to bring significant changes in local perceptions of an area, and opinion on future prospects. These positive effects appear to have the potential to be disproportionately great compared to the actual material effects on the economy, employment and infrastructure.

How people perceive and value an emergent sector and its impact can be heavily influenced by local context. In addition, prior expectations, awareness of the actual impacts and the framing used to judge positive and negative effects are important. Understanding of these factors should influence how developments are presented and interact with communities.

How developments engage with communities and interact with local and wider initiatives is an important part of gaining trust and ensuring that the development is grounded in the broader needs and opportunities for an area.

## **4.5 Limitations and gaps**

### **4.5.1 Limitations of the research**

This research was limited by the small sample sizes used for primary research. In the case of GPH, a representative focus group was used, which has helped to provide a sense of general public sentiment. In Hayle, interviews with individuals connected to local government, businesses and community groups were used, meaning that interviewees likely had more knowledge of the development than other local residents might. Small sample sizes used also meant that this study was unable to assess the impact of various outcomes across different social groups.



This research is also limited by the difficulty in disentangling the impacts of one emergent sector from other regeneration or development initiatives occurring in parallel. However, development does not generally occur in isolation, meaning that this is reflective of most marine planning situations.

#### **4.5.2 Gaps in the evidence and areas for future research**

This research could be expanded to consider how impacts might differ between social groups. Further research on this would require more extensive primary research with a wider range of residents from a single local area.

This research cannot answer what types of benefits would be most valued by socioeconomically deprived communities. However, it does indicate the importance of local context, and a more thorough understanding of this question would require further research engaging with multiple coastal communities.

Lastly, building on this research to compare perceptions herein with the perceptions of more affluent communities impacted by emergent marine sectors could be insightful. Future research carried out across both deprived and affluent communities is proposed.

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## Annex 1 Literature Review

This annex presents the results of the first stage of the research, the preliminary desk-based research which informed the subsequent stages of the research. This annex is organised as follows: approach to the literature review including aims, research questions used to scope the review, the search strategy and how the literature was reviewed and analysed; key findings from the review organised by impacts identified; and finally, the conclusions including literature gaps identified by the review, options for future research, and suggestions on how the findings may be used in the next stage of the research on socioeconomic impacts.

### A1.1 Approach to the literature review

#### A1.1.1 Aim of the literature review

The literature review sought to understand the existing evidence on:

- How changes in economic activity – such as via an emergent sector – can influence local areas, communities and individuals; and
- The nature of the social impact experienced as a result of such influence.

#### A1.1.2 Scoping the review

To focus the literature review, a refined set of research questions and sub-questions were developed and agreed with MMO. The research questions and sub-questions are presented in Table A1.1.

**Table A1.1: Literature review research questions and sub-questions.**

Research Objective	Research question / Sub-question
<b>Understand how economic growth and the emergence of a new sector can deliver impacts i.e. the pathways</b>	<p>a) How does a sector / company, or economic growth more broadly, impact on individuals and communities? What are the pathways and linkages? E.g. Job creation, training, mobilisation of local supply chain, community investment projects etc. Are some of these linkages stronger than others?</p> <p>b) Are these different in more deprived versus less deprived areas?</p> <p>c) Are there particular examples for coastal communities or marine sectors?</p>
<b>Identify the social impacts of changes in particular sectors delivered through the pathways, and whether these are common across different social groups</b>	<p>d) What types of social impacts, positive or negative, do the sectors have through the pathways have? E.g. impacts on property values, noise levels, air pollution, traffic, health and wellbeing.</p> <p>e) Do they vary according to different social groups and people? And those living close to the physical development site and those living further away?</p> <p>f) Are there barriers to accessing positive social impacts?</p>

### A1.1.3 Search strategy

Sources were identified through a review of literature already known to the study team, key and/or seminal papers of relevance, supplementary searches on Google Scholar, and using snowballing techniques to identify additional sources. The search prioritised UK-based studies, although exceptions were included where sources appeared to be particularly relevant to the study questions and transferable to a UK context. Only sources from the past 15 years (2004-present) were considered.

### A1.1.4 Review and analysis of literature

#### Review process

1. Sources already identified at proposal stage were quickly reviewed.
2. Searches were conducted via Google Scholar to fill in gaps in the evidence and snowballing was used for relevant articles.
3. Short list of approximately 20 papers deemed relevant from the search and other known and/or seminal papers and order shortlist in terms of relevance was identified.
4. These papers were reviewed, evidence extracted in relation to research questions, relevance and robustness
5. Evidence was analysed and written up.

#### Relevance criteria

- Relevant topic (i.e. first sift): impacts of development, socioeconomic deprivation, coastal communities, UK, paper is accessible
- Relevance to research questions

#### Robustness criteria

In reviewing the robustness of each shortlisted paper, issues to consider included, for example (drawing on Defra/NERC guidance, see Collins *et al.*, 2015):

- Specific questions and hypotheses are addressed
- Related existing research or theories are acknowledged
- The methodology used is clearly and transparently presented, and any assumptions listed
- The geography and context of the study is clear, with a discussion of how relevant findings are to other contexts
- Conclusions are backed up by well presented data and findings
- Limitations and quality have been discussed
- Sources of funding and vested interests are declared.

For example, for quantitative studies: is the sample size appropriate? Are the findings/claims appropriate (i.e. not making claims beyond the data)? For qualitative studies: has it been done in sufficient depth? Is it clear where findings have come from? etc. Where studies are highly relevant though their robustness raises some issues, they were included in the review, and any robustness concerns flagged.

## A1.2 Primary literature sources reviewed

The final list of literature reviewed in full as part of the research is presented in Table A1.2; additional papers that were drawn on are included in the reference list at the end of this report.

**Table A1.2: Final list of literature reviewed.**

Author	Title	Year	Publication
Bardasi & Francesconi	The impact of atypical employment on individual wellbeing: evidence from a panel of British workers	2004	Social science & medicine
Cole, Batty & Green	Low-income neighbourhoods in Britain: the gap between policy ideas and residents' realities	2011	The Joseph Rowntree Foundation
Crisp, Pearson & Gore	Rethinking the impact of regeneration on poverty: a (partial) defence of a 'failed' policy	2015	Journal of Poverty and Social Justice
Depledge et al.	Future of the Sea: Health and Wellbeing of Coastal Communities	2017	Foresight, Government Office for Science
Haggett	Understanding public responses to offshore wind power	2011	Energy Policy
Hincks	Deprived neighbourhoods in transition: Divergent pathways of change in the Greater Manchester city-region	2017	Urban Studies
Lavin et al.	Health Impacts of the Built Environment: a review	2006	The Institute of Public Health in Ireland
MMO	Maximising the socioeconomic benefits of marine planning	2011	MMO
MMO	Social Impacts and Interactions Between Marine Sectors	2014	MMO
NEF	Hitting the target, missing the point: How government regeneration targets fail deprived areas	2008	NEF
North & Syrett	The Dynamics of Local Economies and Deprived Neighbourhoods	2006	Department for Communities and Local Government
TBR et al.	Business-led regeneration: case studies in four urban areas	2005	Neighbourhood Renewal Unit and Small Business Service

Much of the available literature focuses on the impact of regeneration or economic development on deprived neighbourhoods. These sources tend to focus on economic impacts: whether new developments lead to jobs, and the material and non-material benefits brought by these jobs, and in some cases the impacts on the physical environment. Fewer examples were found of literature that considered other, less direct pathways through which development may have an impact on socioeconomic development, such as the impacts on property values or pollution. Most of the literature reviewed used qualitative methodologies, basing findings on interviews with individuals or through focus groups. This may explain why less direct pathways are not discussed as extensively in the literature, as such pathways may not be as clearly evident to residents as more obvious impacts on jobs or their physical surroundings.

## A1.3 Key findings

Economic change and development, including targeted regeneration initiatives, can impact communities in a variety of ways. The following sections consider the different pathways, identified in the literature, through which this might occur, namely: economic impacts, public sector and community funding, changes to the physical environment and community identity and empowerment.

### A1.3.1 Economic impacts

The creation of jobs and additional income is often cited as a key impact regeneration, development and economic initiatives will have on deprived neighbourhoods.

#### **Extent and access to jobs created by new economic activity**

Such impact can be generated directly and via indirect and induced economic multipliers: (i) direct effects of a new economic activity i.e. via the jobs directly provided to deliver the activity, (ii) the indirect effects that the new economic activity may have on the local economy, typically by boosting the output of their supply chains – which may in some instances, include other marine sectors. For example, fishing boats may be used as guard boats for offshore installations such as oil and gas platforms (MMO, 2014, Rodwell et al, 2013), and (iii) the induced effects of additional income (from direct and indirect jobs) spent within an economy. Such effects are well documented in economy literature and guidance (e.g. Scottish Government, 2018). However, in general economic multipliers are considered relevant only when evaluating the impact of changes in economic activity within a sub-geography of the national economy (e.g. Miles, 2019).

The extent of such impacts may be influenced by issues of leakage and displacement<sup>8</sup> (e.g. see HMT, 2018; HCA, 2014).

Leakage: the extent to which effects “leak out” of a target area into others e.g. workers commuting into other areas to take up new employment opportunities (HMT,

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<sup>8</sup> Substitution effects are often considered alongside leakage and displacement. Substitution is considered less relevant in the case of emergent sectors as it is typically associated with changes in behaviour within existing firms.

2018; TBR et al., 2005). Such job opportunities may also result in permanent in-migration of workers to fill the jobs being created (Hincks, 2017).

Displacement: where the new economic activity leads to new jobs being created, but also leads to job losses in other local sectors impacted by the new development (HCA, 2014). A relevant form of displacement for marine sectors can occur where there is competition for space at sea. For example, off-shore developments may pose barriers to the fishing industry and can result in the displacement of fishing activity to less desirable fishing grounds. The MMO report on Social impacts and interactions between marine sectors (2014) takes a detailed look at the effects of various marine sector interactions.

In addition, improvements to the local economy and the creation of jobs may also lead to inward migration of job seekers and hence increased labour market competition and an increase in the local population (Hincks, 2017).

It is therefore important not only to measure how many jobs are created, but also to consider who takes up jobs, whether those people live in poverty and the change of income experienced (Crisp et al., 2015). Some sources find that job creation is only really impactful to deprived communities when quality, better-paying jobs are made available to local residents, and in many cases this can only occur through upskilling interventions, where local residents are given support or training that makes them competitive in the job market.

However, while upskilling interventions have been shown to help individual circumstances and reduce leakage effects, there is little evidence to suggest that improvements in individual circumstances and employability result in area-wide improvements (Crisp et al., 2015). This may be in part due to the fact that individuals who do improve their circumstances are more likely to leave that neighbourhood and community network (North and Syrett, 2006). Therefore, the current emphasis on upskilling in much of the employment-focussed regeneration may not have a significant impact on the community as a whole. In fact, a review of literature by the MMO (2011) found that the generation of more lower-skilled jobs has the biggest impact on deprivation in a community.

### **Permanency of job creation and employment**

The impacts associated with job creation or changes to the economy may not be long-lasting, however, as in some instances the jobs or changes to income are seasonal, temporary or otherwise time-limited (e.g. tourism, infrastructure construction). Greene and Geisken (2013), with reference to a windfarm project in Oklahoma, found that there was a particularly strong economic benefit for some local groups during the construction phase of the project, as people involved in construction moved to the area in large numbers, leading to increased revenue for hotels and other local businesses.

If jobs created are seasonal or temporary, communities will also face seasonal unemployment, which can negatively impact wellbeing (Bardasi and Francesconi, 2004) and contribute to feelings of social isolation (House of Commons, 2007).



A large dependency on temporary or seasonal industries and any associated fluctuations in permanent populations may also have knock-on effects on key social infrastructure and facilities, such as recreation facilities, as these could become unviable to maintain in the off season (MMO, 2014) or alternatively unable to support the spikes in population when they do occur (House of Lords, 2019).

### **Non-material impacts of job creation and employment**

In addition to this, the non-material impacts of job creation—including the quality and meaningfulness of the work (NEF, 2008)—are equally important to understanding how economic development may impact socioeconomic deprivation. A previous literature review conducted by the MMO (2014) shows a range of non-material impacts that have been associated with the creation of employment. This includes positive mental health impacts, as employment can create social ties and contribute to a sense of identity and positive self-esteem. There is evidence, for example, from the fishing sector, that fishing is considered by those involved to be a ‘way of life’, rather than just a job, due to the sense of independence, adventure, excitement and achievement it brings. As a profession, it also benefits from a strong sense of shared culture and tradition (see also A1.3.4 below).

There is also evidence for the benefits of employment to physical health, as higher unemployment in a community is associated with higher mortality and poorer general health. Such non-material benefits will differ between types of employment: higher paying, permanent positions are more likely to bring such benefits and are more likely to offer additional ones, such as access to private healthcare, pensions and maternity/paternity leave. Lower paying or temporary positions are more likely to contribute negatively to well-being, as they can lead to increased uncertainty and reduced income and restrict training opportunities that could contribute positively to social mobility. Lower-skilled work is not necessarily contradictory with the need for quality and meaningful work, however: a 2011 study on low-income neighbourhoods in Britain found that although many of their interviewees identified the financial benefits of low-skilled jobs, they were far more likely to cite non-financial benefits, such as the contribution of work to self-esteem and the opportunity for social contact (Cole et al., 2011).

### **Wider impacts**

Where economic developments or regeneration initiatives do lead to increases in jobs, income and population, this may also lead to increased pressure on local resources, for example leading to rising house prices and increases in rents (Hincks, 2017).

### **A1.3.2 Public sector and community funding**

New developments may impact on socioeconomic deprivation through the direct contributions businesses make to the public sector and community.

Public sector: a new development may lead to an increase in tax revenue, which can support public sector spending. This is considered by Greene and Geisken (2013), who look at the socioeconomic impacts of windfarm development in Oklahoma. They found that within the studied community, tax revenue from the project contributed positively to the development of the local community through additional investments

in schools and improved public facilities. The MMO (2014) also note the contribution businesses make indirectly to social infrastructure and facilities through local and national taxes. Locally, businesses pay business rates to their Local Authority, and together with Council Tax, this makes up the most significant source of Local Authorities' income (LGA, 2018). In the UK most national taxes are not dedicated to a particular expenditure purpose, and it is challenging to demonstrate local impacts of national taxes paid by an emergent sector.

Where new economic activity requires physical development, there may be Section 106 agreements established between Local Authorities and developers during the planning approval process. Such agreements place legal obligations on developers to provide certain investment or finance to offset other local pressures the development may be creating. Obligations vary depending on the nature of the development and based on the needs of the District, but may cover: provision of open space, housing, education, highways, town centre improvements and healthcare (MHCLG, 2019). Improvements in such local assets can clearly have direct effects on local communities and beneficial indirect effects. For example, increased access to affordable housing has been shown to have positive impacts on health and educational outcomes (Mueller and Tighe, 2007). Examples can be seen in recent offshore renewable energy development, e.g. the Galloper Wind Farm Fund (Suffolk Coast & Heaths, 2019) or the Rampion Offshore Wind Farm's Section 106 agreement with the South Downs National Park Authority (E.ON, 2013).

In some cases, such investments may have greater employment benefits than those generated directly by the new business as deprived communities often rely more heavily on the public sector for employment (North and Syrett, 2006). Although not related to tax revenue directly, a study looking at the impact of reinvesting revenues from community wind power in Northern Scotland found that reinvesting this money in social services generated a tenfold increase in employment opportunities and income impact compared to the increase generated by the wind power development alone (Okkonen and Lehtonen, 2016).

Some of the literature sources reviewed further consider the role of direct business investment in the community. This is sometimes referred to as "*community benefits*" – defined as monetary payments or other voluntary measures benefitting the local community undertaken by the developer. Community benefits are additional to the impacts of the development itself (Rudolph et al. 2014).

There are a number of different ways in which businesses might directly invest in a community, including (Carley et al., 1991):

- Cash support for voluntary organisations;
- Sponsorship of projects or events;
- Donation of equipment, products and materials;
- Provision of staff time and expertise;
- Recruitment and training;
- Education-business partnerships;
- Local purchasing and sub-contracting; and
- Local investment measures.

Community benefits have been used as part of off-shore wind developments in Scotland and good practice guidance exists (Local Energy Scotland 2018, DECC 2014). Such guidance emphasises the importance of allowing the local community to drive the focus of benefits, as the context and needs will differ from community to community. Some suggestions offered for types of community benefits include apprenticeship schemes, local electricity discounts and supporting local tourism through the creation or support of local facilities.

### **A1.3.3 Physical environment**

Socioeconomic deprivation is impacted on by new developments and regeneration initiatives not only through financial and economic pathways, but also through changes to the physical environment. In fact, in many cases the literature suggests that changes to the physical environment may have a bigger impact on the community as a whole than economic changes. For example, in a series of case studies on regeneration in deprived communities, TBR et al. (2005) found that residents tended to assess their local area in terms of environmental and quality of life factors, rather than the economy. For the most part, participants in focus groups conducted as part of the study appeared to have only a rough understanding of the local economy and who the main employers and contributors to that economy were.

Crisp et al. (2015) also points to the importance of the physical environment, finding that there is little evidence that regeneration efforts focused on the material aspects of poverty or on up-skilling have an impact on the community or neighbourhood as a whole (as opposed to individuals), but that there is some evidence that interventions focused on place (e.g. those that would improve the physical environment and quality of life) do have a positive impact on the community or neighbourhood as a whole. Place-based regeneration efforts have been shown to lead to improved health outcomes and higher levels of satisfaction with the area.

Cole et al. (2011) also find among interviews with residents of deprived neighbourhoods that positive physical transformations were largely welcome, and that poorly maintained public spaces, littering and vandalism were seen as signs of decline.

Physical transformations related to the emergence of a new sector may also be negative. New developments may contribute negatively to pollution and air quality, noise, access to light, immediate surroundings and access to nature. The loss of access to nature and green space may reduce opportunities for physical activity, in addition to causing distress to residents (Lavin et al., 2006). Such impacts may also occur where there developments are further away – for example, some studies have considered people's perceptions of off-shore wind developments and the negative impacts these can have on the seascape and mental health (MMO, 2014), although the evidence on this is mixed. In a review of literature, Haggett (2011) finds evidence that offshore wind developments have encountered negative public opinion due to their impact on the landscape, but that this impact tends to be more pronounced among regular beach-goers and tends to change over time. As the community becomes used to the changes brought about by the development, acceptance increases. Haggett (2011) also finds that the impact changes to the physical

environment will have will depend greatly on local context and meaning a particular site has for the community.

#### **A1.3.4 Community identity and empowerment**

Previous work conducted by the MMO (2014) points to a significant evidence base around the importance of long-term economic activities to a community's identity and sense of place – citing the role of commercial fishing as an historical example, and more recently, the role tourism has played in altering local cultural identity. For many deprived inner-city areas in the UK, people historically lived close to their industrial employers who dominated many aspects of workers' and the community's lives. Many of these industries no longer exist and this has left a gap in support for the community (TBR et al., 2005). The work offered by these employers frequently involved manual labour and tended to be male-dominated. Among interviewees in one study, conversations around the decline of such employers in these areas evoked a "*profound sense of loss*" (Cole et al., 2011, p 31), and although in many instances these jobs have been replaced by service-sector positions that tend to be taken up by women, there was no sense of gain associated with these jobs. Cole et al. (2011) suggest that this may indicate that the sense of identity of an area is tied more closely to sources of traditionally male work and that perceptions of economic change in these areas are highly gendered. It may also be the case that the attachment to these previous employers stems more from their long presence in the area. This suggests that where new developments are successful in bringing new employment and establishing a long-term presence in an area, they may also influence the community's sense of identity, either positively or negatively.

Impacts on deprived communities may also relate to a sense of loss of control. Cole et al. (2011) found a widespread perception among residents of deprived neighbourhoods that changes brought about by regeneration would be imposed on them, regardless of whether they were happy with these changes or not. This suggests that among some communities, even where a new sector has brought about some benefits, change and growth may also contribute to feelings of powerlessness among residents. The same phenomenon is mentioned by Haggett (2011) in relation to offshore wind developments, noting that in some communities, offshore developments are seen as an inescapable and forced industrialisation. For this reason, much of the good practice guidance on developing community benefits or addressing community opposition to development focuses on fostering stakeholder and community engagement.

#### **A1.3.5 Diversity of impacts**

In addition to identifying pathways themselves, the literature also highlights the diversity of impacts and the importance of context when considering how economic development may impact socioeconomic deprivation. Firstly, there is evidence that economic growth within a local authority does not necessarily extend to similar growth within the most deprived neighbourhoods (NEF, 2008) and moreover, that neighbourhood change does not equally benefit all residents (Cole et al., 2011). Secondly, the impacts of economic development will vary over time. In some cases, economic change or regeneration may not have an immediate effect, and the impacts may only be evident at a later point (Hincks, 2017). Thirdly, there is

evidence to suggest that more deprived neighbourhoods respond to changes to the local economy with greater volatility as compared to less deprived neighbourhoods within the same area. This indicates that the impacts of economic change are felt more keenly by more deprived neighbourhoods, who are also more likely to experience “boom to bust” trajectories (Hincks, 2017). Fourthly, no two communities will react to economic development in the same way. Both the Foresight Report (Depledge et al., 2017) and MMO (2011) note the wide diversity of areas considered to be coastal communities. Impacts of changes in economic activity can differ significantly across different types of coastal community, depending on local context and scale, as well as the urban or rural nature of a community.

## A1.4 Conclusions

A review of the literature suggests that emergent new sectors have the potential to impact socioeconomic deprivation in a variety of ways, not only through the creation of jobs and additional income, but also through investments made in the community, changes to the physical environment and the role they play in developing a community’s identity. Some of these effects may be direct and clearly evident to local residents and from the data, while other effects may be indirect.

The review also highlights that impacts will differ significantly depending on the community in question, existing employment opportunities, the type of development, the jobs offered by the development and whether local residents have an opportunity and are interested in obtaining those jobs. There may also be some impacts that are significant to certain individuals or sectors of the community, but not to the community as a whole.

It is therefore difficult to make generalisations as to how an emergent sector might influence a community, and the literature reviewed covers a range of contexts and scenarios. When conducting the case studies, it will therefore be important to:

- **Understand the baseline situation:** what the economic situation, physical environment and community were like before the development, what sort of employment opportunities existed and to what extent this played a role in individual and community identity.
- **Understand what changes have occurred:** what changes have been made to the physical environment, local economy and community, including what sorts of jobs have been created, who has taken these jobs and whether support has been given to potential job-seekers. Having a clear understanding of both the baseline and what changes have occurred will make it easier identify any indirect effects as well as direct effects of economic change.
- **Understand who has been impacted:** are the impacts discussed particular to individuals or certain sections of the population, or can these be ascribed to the community more broadly. As the case studies will be based on qualitative methods and a relatively small sample, it will be important to try to distinguish between these two types of effects as much as possible.

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## Annex 2 Case study profiles

### A2.1 Hayle and Wave Hub

#### A2.1.1 Introduction

Wave Hub presents a case study on offshore renewable energy technology, which has received approval and was developed between 2007-2012. It included a considerable financial investment in the area and has involved extensive stakeholder engagement to alleviate concerns raised locally.

Hayle is governed by Cornwall Council, but also has its own local town council. Information for this case study has been gathered from both Cornwall Council and Hayle Town Council sources.

#### A2.1.2 Review of existing literature on the local effects of Wave Hub

This section reviews documentation related to the planning of Wave Hub and future planning of Hayle to assess what evidence is available on the anticipated and actual impacts Wave Hub has had.

#### ***Initial forecasts of the socioeconomic impact of Wave Hub***

The initial economic impact assessment forecast that Wave Hub would bring moderate benefits for the socioeconomic environment.

#### *Employment*

Throughout the development of the project, several estimates were put forward for the number of jobs and economic benefit that would be created. These figures conflict with one another and it is not always clear from source material what time frames are included and whether figures represent cumulative totals or per annum expectations. The following information is also summarised in Table A2.1.

- For the construction phase, the Environmental Impact Assessment (EIA) produced for the South West of England Regional Development Agency (the original owners of Wave Hub) predicted that impact on employment would peak at 140 jobs, although only around 30 of these would be based in Cornwall (Halcrow Group Limited, 2006). Gross Value Added (GVA) during this period would be £5 million. Once in operation, the Wave Hub was anticipated to require 1.5 full-time staff and to contribute £420,000 per year in GVA. The assessment also predicted positive effects stemming from the wave energy converter developers who would be using Wave Hub for testing, with indirect job creation peaking at 160-200 jobs in the South West during the construction phase, 80-130 of which were estimated to be in Cornwall. GVA from the indirect effects was estimated to peak at £7 million per year during initial phases and reduce to between £1-2 million per year through 2014 and £0.5 million through 2020. Charts from the EIA documenting these estimates are shown in Figure A2.1 and Figure A2.2.
- European Commission documentation associated with the ERDF funding received for the project cited initial predications from the Business Case drafted

in 2005 of 700 jobs (direct and indirect) and a GVA to the South West of £27 million per year until 2020. This plan was revised in 2009 to 95 jobs by 2015, and a GVA of £5.4 million (Roman, 2012). European Commission documentation also suggests that this impact would be evaluated through a survey of device developers and supply-chain companies at a later date.

- The Hayle Neighbourhood Plan to 2030, published in 2018, identifies the potential for Wave Hub and the Marine Renewables Business Park to provide “100 jobs directly, 450 jobs indirectly, and generate £15 million per year to the economy” (Hayle Town Council, 2018)<sup>9</sup>. This most recent estimate suggests that although Wave Hub has done minimal business and therefore produced little impact up to this point, it is still considered key to the area’s future planning and regeneration.

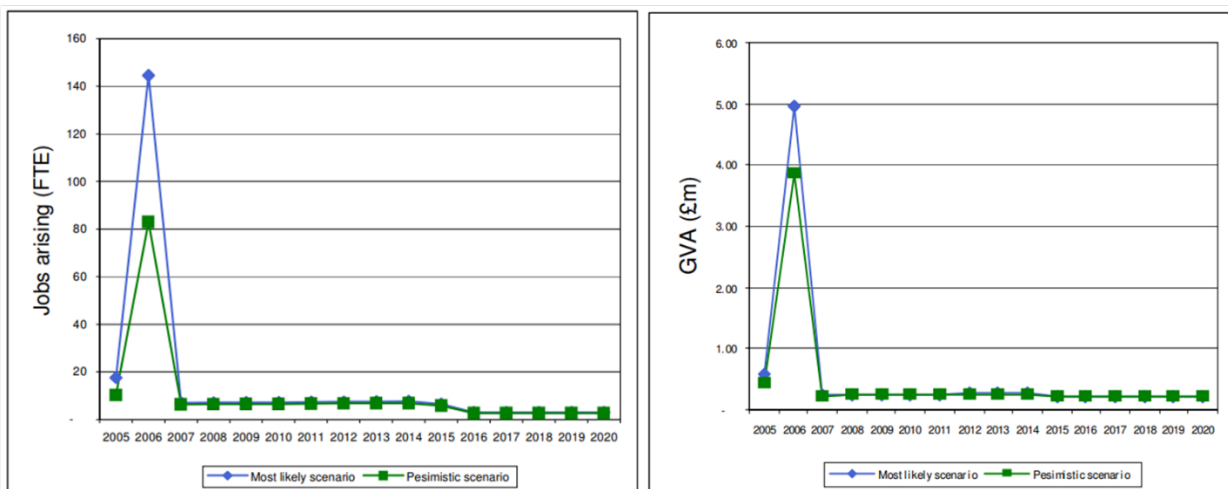
**Table A2.1: Early predictions of Wave Hub job creation.**

Source	Year	Jobs created	Gross Value Added
Environmental Impact Assessment	2006	<i>Direct impacts</i> <b>Construction phase:</b> 140 jobs in the South West, 30 of which in Cornwall <b>Operation phase:</b> 1.5 full-time staff <i>Indirect and Induced impacts from the development of wave energy converter</i> 200 jobs in the South West, 130 of which in Cornwall	<i>Direct impacts</i> <b>Construction phase:</b> £5 million <b>Operation phase:</b> £420,000 per year <i>Indirect and Induced impacts</i> Peaking at £7 million per year in 2008, reducing to between £1-2 million per year through 2014 and £0.5 million through 2020
European Commission Case Study Research	2005	<i>Direct and indirect impacts</i> 700 jobs	<i>Direct and indirect impacts</i> £27 million
European Commission Case Study Research	2009 – revised estimate	<i>Direct and indirect impacts</i> 95 jobs	<i>Direct and indirect impacts</i> £5.4 million
Hayle Neighbourhood Plan to 2030	2018	<i>Direct impacts</i> 100 jobs <i>Indirect impacts</i> 450 jobs	<i>Direct and indirect impacts</i> £15 million

<sup>9</sup> The source of these estimates is not provided and will be explored through interviews.

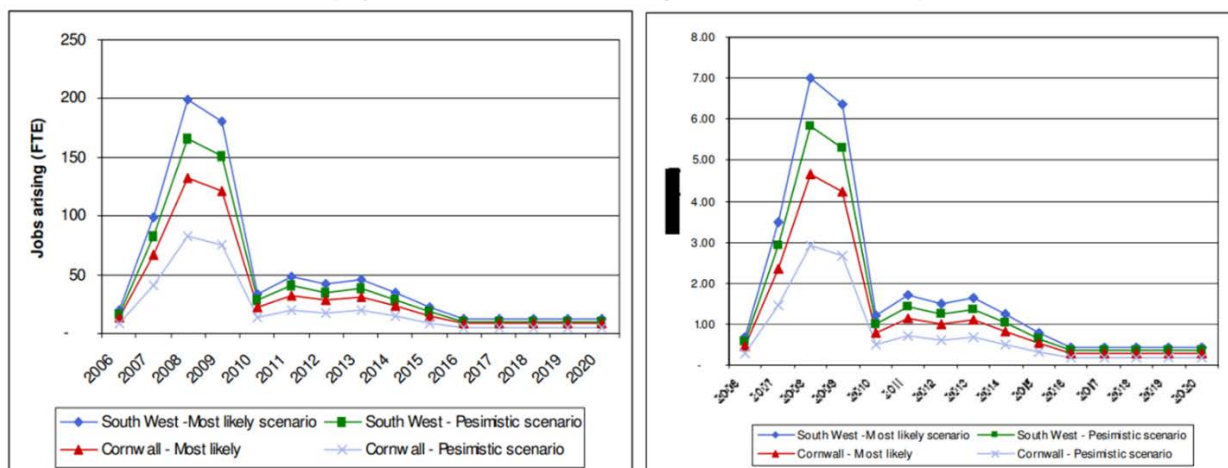
**Figure A2.1: EIA Direct Impacts from the development of Wave Hub (Halcrow Group Limited, 2006).**

Employment and GVA impact on South West economy resulting from development, construction and operation of Wave Hub



**Figure A2.2: EIA Impacts from the development of wave energy converters (Halcrow Group Limited, 2006).**

Direct, indirect, and induced employment and GVA created through the construction and operation of WECs on Wave Hub



### Physical environment

The physical location of Wave Hub was chosen by consensus through consultation with “fisheries organisations, research organisations, environmental groups (including Surfers Against Sewage), local businessmen, archaeologists, the statutory bodies and NGOs” (Iskandarova, 2013, p 145), as the location that would be most suitable for the technology while having the least impact on the physical environment.

Some impacts on the physical environment within Hayle itself were identified by the EIA. Construction was anticipated to bring about a short-term increase in traffic and potential temporary diversions of a footpath and cycle route. The site is located 10 nautical miles off the coast and most of the infrastructure would be out of sight,

therefore no significant long-term effects on the physical environment were expected (Halcrow Group Limited, 2006).

### **Community perceptions**

There is limited evidence available on stakeholder perceptions of the development. A study was conducted in anticipation of the Wave Hub development (West et al., 2009) in 2006 during the planning phase of the project. The study involved a small number of interviews with local stakeholders. This study identified several potential issues for the local community, including:

- The exclusion/safety zone could have a financial impact on some local fisherman and boat users, and the cables associated with the development could pose an additional challenge to trawlers. However, a stakeholder from the county council indicated that an initial “*saturation*” of complaints from fishermen, along with requests for financial compensation, had led to this opposition not being “*taken seriously*”.
- Although the impact of Wave Hub itself was considered by many to likely be minimal, there was a fear that this could lead to further associated developments in the future and damaging cumulative effects on the physical environment.
- Many stakeholders felt that the cited economic benefit was an exaggeration and that many of the technical support jobs created would go to other areas in Cornwall with more expertise in marine fitting and maintenance. Therefore, many of the actual benefits were likely to be regional rather than local.
- There were concerns from local and visiting surfers, surfing associations and businesses that surf conditions might be negatively impacted, particularly if further developments were to be built.

### **Evidence on actual impacts**

No published reports on actual impacts have been identified and no official evaluations or assessments of Wave Hub’s progress appear to have been produced. Reports in the media suggest there has been little to no use of the Wave Hub site by wave energy converter developers (BBC 2013, 2018) and that it has not led to “*any substantial amount of long-term jobs*” (BBC, 2013).

Wave Hub has, however, led to an additional development in Hayle: the Hayle Marine Renewables Business Park. This was developed “*as part of a collaborate package of investment in Hayle Harbour and North Quay*” with £24 million of funding from ERDF, Cornwall Council and central government (DCA Public Relations, 2014). Construction began in 2014 and the Business Park was partially occupied (55%) as of April 2018. Tenants include a mix of public sector, private and academic organisations related to marine renewables (Cornwall Council, 2018).

Wave Hub’s website suggests that a total of £170 million was invested by Cornwall and South West England “*to provide world leading research and demonstration facilities*” (Wave Hub, 2019), although it is not clear how much of this investment could be attributed to Wave Hub.

Since the site has been developed, it is not clear whether public concerns have been alleviated or how stakeholder perceptions have otherwise evolved. A Community Consultation in 2016 showed that 89.8% of respondents were in favour of “*the*

*regeneration of Hayle, focusing mainly on the harbour area and the development of the wave hub and associated employment development”* (Hayle Town Council, 2018), although this statement encompasses regeneration activities more generally, and negative coverage of Wave Hub in the media suggests that sentiments on the development in particular may not be as positive.

### **A2.1.3 Implications for the case study approach**

This review raised several gaps that were subsequently addressed through primary research.

Desk research suggested that:

- The project itself has not taken off as expected, in part due to the uncertainty around wave energy technology, and therefore has not brought the economic impact expected. A wide range of predictions on the benefits of the project to job creation and GVA have been put forward, but there is little to no evidence on actual impacts. Research on stakeholder perceptions prior to the development also indicated that several stakeholders had concerns that the proposed benefits claimed were exaggerated (West et al., 2009).
- There were further concerns among stakeholders that any economic benefits that were achieved would be regional rather than local, and many important jobs were more likely to benefit residents in neighbouring communities rather than Hayle (West et al., 2009). No information was identified in planning documents on the likely nature of the jobs created, what skills they would require or whether they were likely to be taken by those in the local area.
- Some stakeholders interviewed before development began expressed concerns around the likely impingement on the physical environment, which could lead to issues and income loss for the fishing industry through the proposed safety exclusion zone and the challenge of trawling without disturbing cables. Potential impacts the Wave Hub could have on surf conditions also led to concerns among the local surfing community and businesses that benefit from the surfing community (West et al., 2009).
- Other regeneration initiatives, such as the Marine Renewables Business Park, have looked to build on the opportunities offered by Wave Hub as a centre for renewables research, and Wave Hub is still a key element of regeneration plans for Hayle.

The interviews conducted as part of the subsequent phase of research gathered further information on what impacts Wave Hub has had, both directly, through its construction and use, and indirectly, through the additional developments that have followed its construction.

When considering additional developments, interviews helped to gain a clearer understanding of the role Wave Hub has played in supporting or leading to other local initiatives related to the sector or other regeneration initiatives in the community and to what extent any impacts have been felt locally.

The initial research conducted by West et al. (2009) pointed to two key stakeholder groups—the fishing community and surfers—who had initially expressed concerns about its construction and who could provide further insight on the impacts of the

development. Primary research also clarified how these concerns have changed or developed over time.

The desk research also provided some important background information on Hayle. Hayle's economy is overly-dependent on tourism and therefore on seasonal, low-paid and part-time work. Plans for regeneration focused around Wave Hub appear to be trying to address this problem. Primary research also considered to what extent Wave Hub has helped to address this dependency, either through its own development or through any role in kick-starting regeneration.

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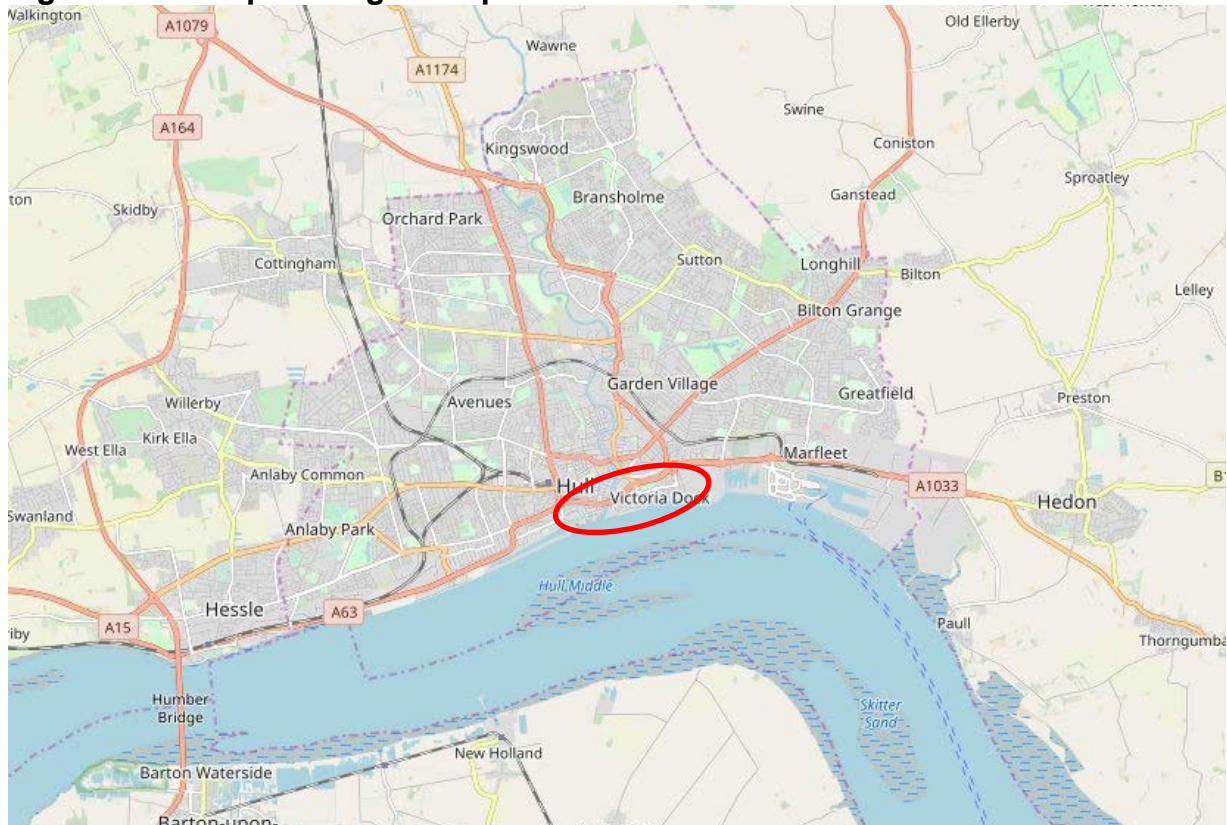
## A2.2 Hull and Green Port Hull

### A2.2.1 Introduction

Green Port Hull (GPH) refers to the initiative established in 2011 as a result of a partnership between Hull City Council (HCC), East Riding of Yorkshire Council (ERYC) and Associated British Ports (ABP) to “*promote the region and attract renewable energy sector investment*” to the Humber (University of Hull, 2017a).

GPH is situated in the wider Port of Hull along the Humber estuary in the city of Kingston upon Hull. The Port of Hull is well connected to main road networks, servicing the British Isles and handling a variety of products including forest products, bulk commodities (ABP, nd) and passenger services. The city boundaries are shown in Figure A2.2.

**Figure A2.2: Map of Kingston upon Hull and location of Green Port Hull.**



Source: © OpenStreetMap contributors

The cornerstone development of GPH is the Siemens Gamesa and ABP joint investment and the construction of a wind turbine manufacturing plant and associated facilities at Alexandra Dock, shown in Figure A2.3. The factory is 396,000 sq m in size and the service and maintenance facility another 12,300 sq m (City Plan Hull, nd)<sup>10</sup>. ABP's ownership at the Port of Hull includes Albert & William Wright Docks, Alexandra Dock, and King George & Queen Elizabeth Docks.

<sup>10</sup> <http://cityplanhull.co.uk/index.php/energy-city-2/>

**Figure A2.3: Green Port Hull.**



## **A2.2.2 Overview of the case study area**

### ***Deprivation***

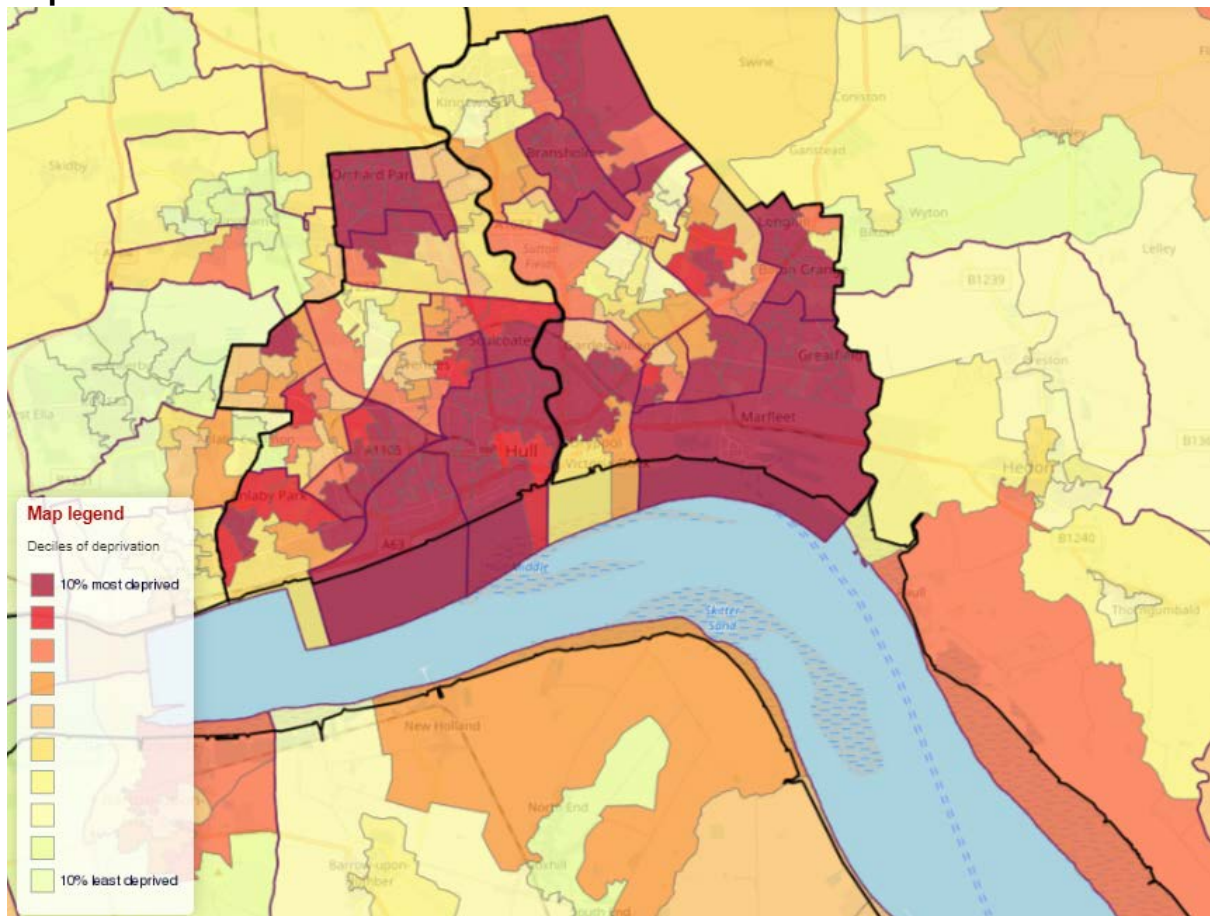
In 2018 the city's population was 260,600 (ONS, 2019)<sup>11</sup>. Hull has high levels of socio-economic deprivation. In 2016 Hull was the lowest ranking Local Authority on the Prosperity Index across 389 LAs in the UK (Legatum Institute, 2016), while the Index of Multiple Deprivation (IMD) (DCLG, 2015)<sup>12</sup>, classifies a number of neighbourhoods in Hull amongst the 10% most deprived neighbourhoods in the country (dark red shade areas in Figure A2.3).

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<sup>11</sup> ONS Population estimates accessed on Nomis  
<https://www.nomisweb.co.uk/reports/lmp/la/1946157109/report.aspx>

<sup>12</sup> The Index of Multiple Deprivation comprised of the following seven domains of deprivation: Income; Employment; Health deprivation and disability; Education skills and training; Barriers to housing and services; Crime; Living Environment. (DCLG, 2015).

**Figure A2.3: Deciles of deprivation in Hull based on the Index of Multiple Deprivation.**



The Public Health Outcomes Framework analysis of IMD data reveals that Hull performs worse than the wider area (Yorkshire and the Humber) and England across indicators of Life Expectancy and most of the wider determinants of health and health improvement, protection and healthcare indicators (Public Health England, nd).

Table A2.2 below offers an overview of how Hull ranks, amongst 326 other local authority districts in England, against IMD and the range of English Indices of Deprivation (DCLG, 2015).

**Table A2.2: Indices of Deprivation 2015 - Rank of Average Scores<sup>13</sup>.**

Index of Deprivation	Rank of Average Score of Hull most deprived (of 326) (DCLG, 2015)
Index of Multiple Deprivation	3
Income	4

<sup>13</sup> According to the DCLG (2015), “the average score measure is calculated by averaging the Lower-layer Super Output Areas scores in each larger area after they have been population weighted. The resultant scores for the larger areas are then ranked, where the rank of 1 (most deprived) is given to the area with the highest score. This gives a measure of the whole area covering both deprived and non-deprived areas.”

Index of Deprivation	Rank of Average Score of Hull most deprived (of 326) (DCLG, 2015)
Employment	6
Education Skills and Training	1
Health and Disability	32
Crime	11
Barriers to Housing and Services	120
Living Environment	32
Income Deprivation Affecting Children	6
Income Deprivation Affecting Older People	13

### **Economy, employment and income**

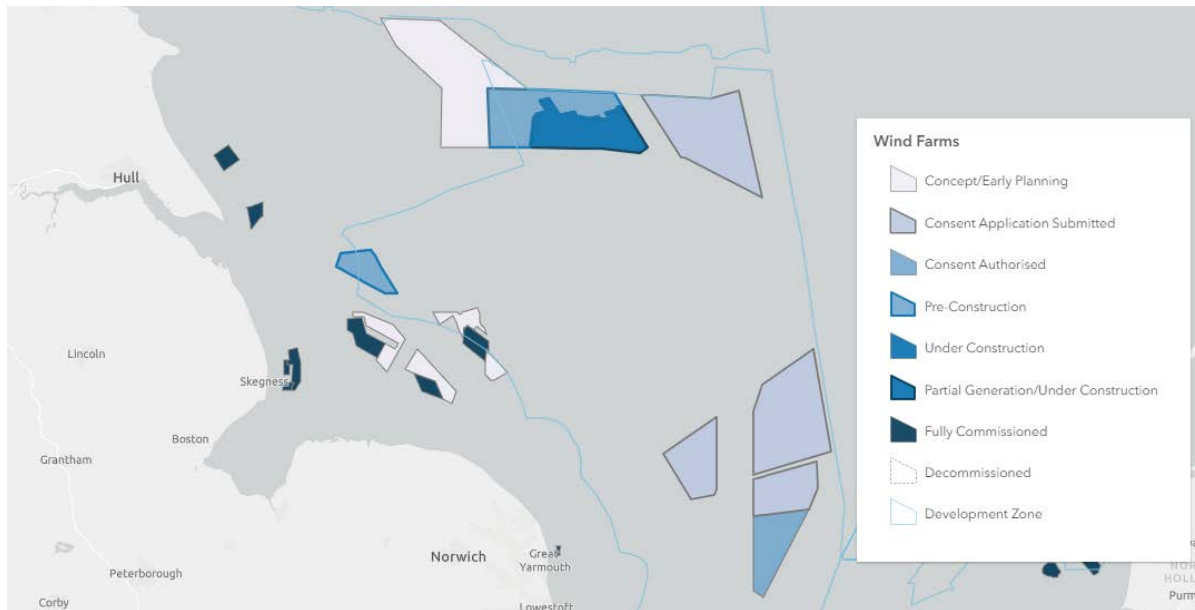
Historically, the economy of Hull, and the wider region, was built on the shipping and fishing industries. Both industries experienced a decline in the 1970s as a result of increased automation in shipping and the 'Cod Wars' which ended a long tradition of long-distance fishing (trawling). For Hull's fishing fleet long-distance trawling was of particular importance with tens of thousands of tonnes landed from Iceland? waters in the 60's. As a result East Yorkshire's shipbuilding industry rapidly declined and Hull was amongst the cities in Britain worst hit by the decline.

More recently, the Port of Hull has been the focus of considerable investment and development – GPH being the cornerstone of the growth experienced. Plans published by the Hull City Council, the wider East Riding of Yorkshire Authority and the Humber Local Enterprise Partnership, all feature renewables as a key source of future growth and employment in the area. GPH is at the heart of these plans, providing deep water ports, land available for development and Enterprise Zones offering discounted business rates (Humber LEP, nd)<sup>14</sup>, while being located 20miles from the North Sea and situated within 12hours sailing distance from three key offshore wind farm zones (see Figure A2.4).

<sup>14</sup> <https://www.humberlep.org/>



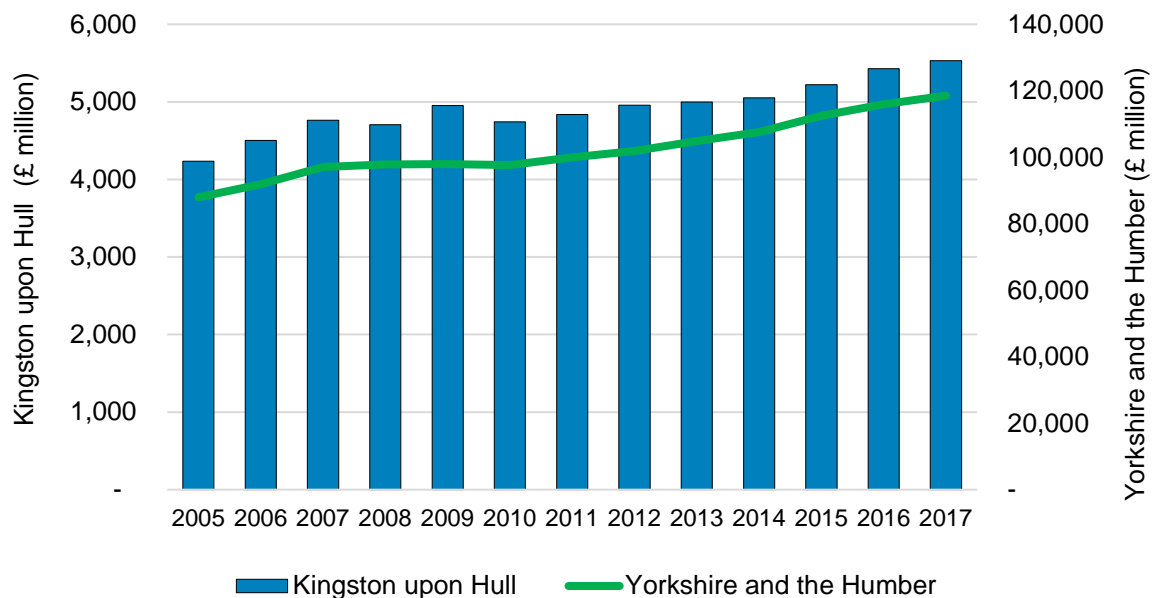
**Figure A2.4: Map of offshore wind farms and development zones near Hull (4C Offshore, 2019).**



**Gross Value Added**

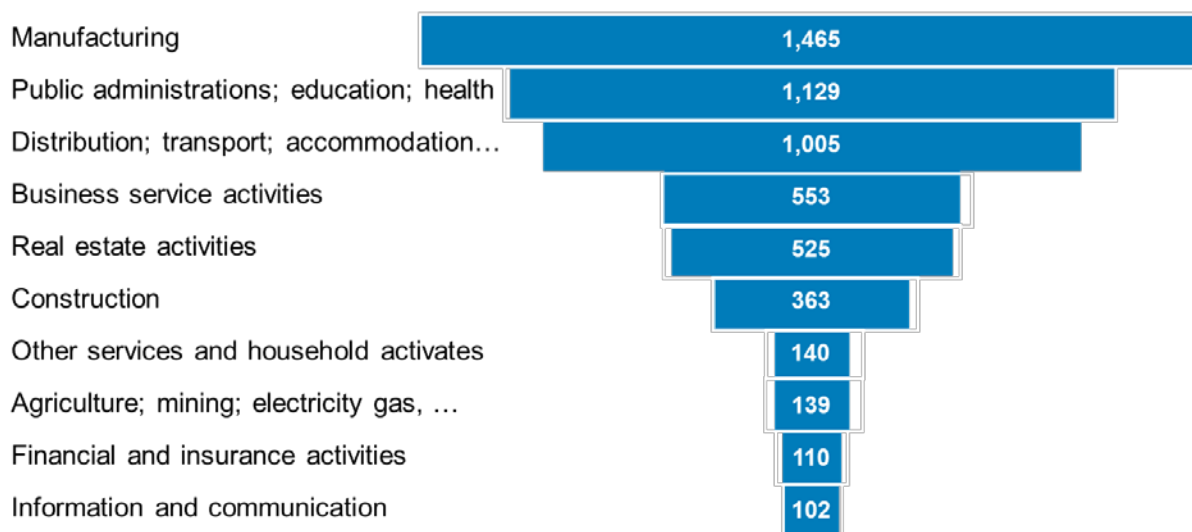
The Kingston upon Hull economy has grown steadily since 2010, following the 2008 global financial crisis, to reach £5.5 billion gross value added (GVA) in 2017<sup>15</sup> (Figure A2.5). Manufacturing, Public administration and Distribution; transport; accommodation and food are the top industries contributing to the GVA in Hull in 2017 (Figure A2.6) (ONS, 2018).

**Figure A2.5: GVA in Hull and Yorkshire and the Humber (Source: ONS, 2018).**



<sup>15</sup> ONS (2018) Regional gross value added (income approach). Accessed at: <https://www.ons.gov.uk/economy/grossvalueaddedgva/datasets/regionalgrossvalueaddedincomeapproach>

**Figure A2.6: GVA (£ million) by industry in Hull in 2017 (Source: ONS, 2018).**



## Employment

In 2018<sup>16</sup> the percentage of those in employment that were occupied in professional, technical and managerial roles (SOC 1-3 categories<sup>17</sup>) was lower in Hull compared to regional and national statistics: 31.1% in Hull as opposed to 41.5% in the Yorkshire and Humber area and 46.4% in Great Britain. More than a quarter (26.3%) of those in employment in Hull worked as Process Plant & Machine Operatives (SOC 8) and in Elementary occupations (SOC 9), which is higher than the regional and national statistics (19.4% and 16.8% respectively).

Looking into the key industries currently providing employment in Hull these are:

- Manufacturing (16.8%) – this is more than double the proportion of manufacturing jobs in the national economy (8.2%)
- Wholesale and retail Trade (15.2%) (national proportion: 15.2%)
- Human Health and Social Work Activities (14.4%) (national proportion: 13.3%)
- Administrative and Support Service Activities (12%) (national proportion: 9.1%)

The level of unemployment in Hull was estimated at 5.8% in 2018<sup>18</sup>, compared to the average 4.2% in Great Britain, with unemployment being higher amongst women. Of those of working age (16-64 years old) who are economically inactive the majority were long-term sick (30.8%)<sup>19</sup>, students (24.2%), looking after family/home (22.4%) or retired (9.6%).

The Business Register and Employment Survey (BRES) in 2011 suggested that the greatest concentration of employment opportunities in Hull is found in the city centre and around the Port of Hull (particularly Alexandra Dock). Figure A2.9 shows the distribution of employment in Hull.

<sup>16</sup> ONS Annual population survey (2018)

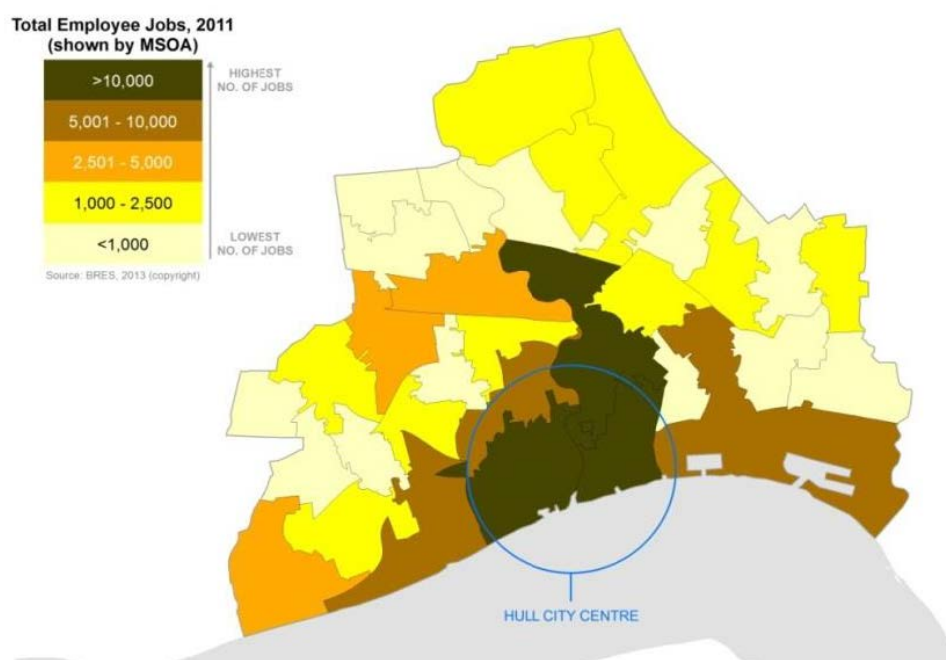
<sup>17</sup> SOC 1: Managers, Directors and Senior Officials; SOC 2: Professional Occupations; SOC 3: Associate Professional & Technical

<sup>18</sup> ONS annual population survey (2018)

<sup>19</sup> Higher than UK average

Census commuting data reveal that the majority of the working population in Hull is employed within the local authority. In 2001, 19% of Hull’s working population commuted outside of the local authority, mainly to East Riding, a low-level of out-commuting (Hull City Council, 2014).

**Table A2.3: Distribution of employment (Source: BRES 2011, taken from Hull City Council, 2014).**



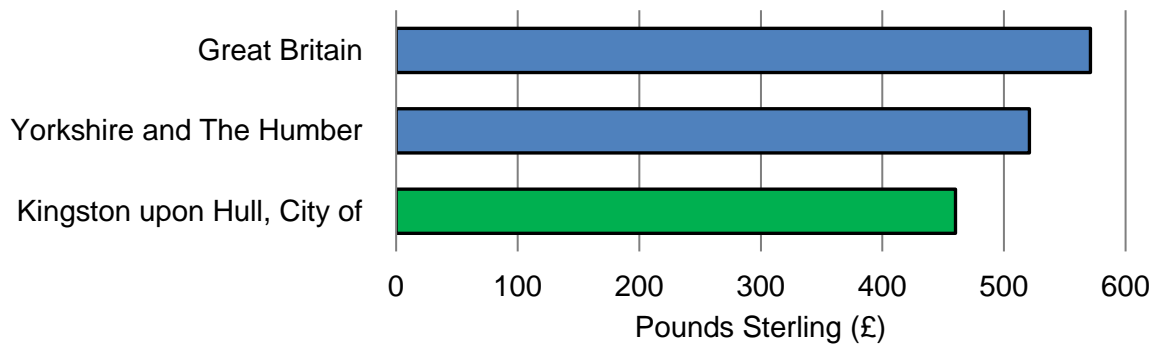
### Income

The weekly earnings of residents of Hull are lower than that of the Yorkshire and Humber area and national levels<sup>20</sup>. In 2018 the gross weekly pay of a full-time worker in Hull was approximately 13% lower than that the corresponding pay in Yorkshire and Humber and 24% lower than the national pay (Figure A2.7). In Hull 4.7% of the working population were claiming out-of-work benefits, compared to 3% for Yorkshire and Humber and 2.7% in Great Britain as a whole (Nomis, 2019). Although claimant count has historically been high in Hull, the latest figures represent a decrease in the percentage difference between Hull and the rest of the country.

<sup>20</sup> ONS annual survey of hours and earnings - resident analysis (2018)



**Figure A2.7: Gross weekly pay by place of residence (ONS, 2018)<sup>21</sup>.**

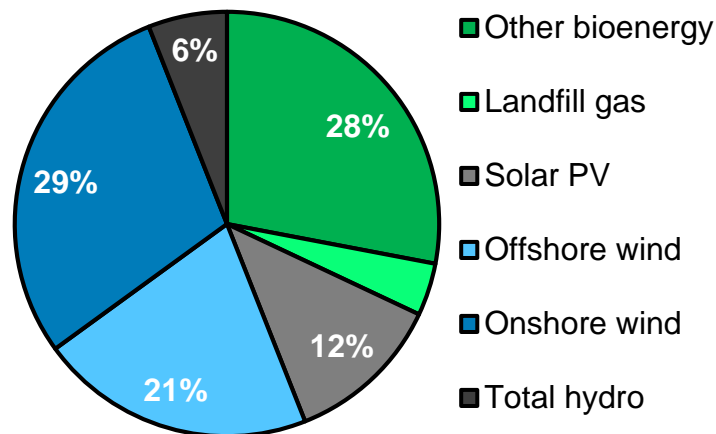


### A2.2.3 Emergent sector and Green Port Hull

#### Emergent sector

UK wind capacity has grown rapidly. In 2017 onshore and offshore wind generated 29.1 TWh<sup>22</sup> and 20.9 TWh of energy respectively, which combined represented half of the total renewable electricity generation in the UK (Figure A2.8) and by far exceeded targets to 2020. Future projections suggest that offshore wind alone could provide 50% of the UK’s electricity demand by 2050.

**Figure A2.8: Electricity generation by renewables source 2017 (Source: BEIS, 2018a).**



The UK Parliament’s Climate Change Act (2008), EU Renewable Energy Directive (2009/28/EC), Feed-in Tariff scheme in 2010 and more recently the Renewables Obligation (ROO 2015) and the Government’s Clean Growth Strategy (last updated in 2018) recognise the importance of wind energy generation and offer incentives for further development of the industry.

<sup>21</sup> Median earnings for full time employees living in the area

<sup>22</sup> Terawatt-hour (TWh)

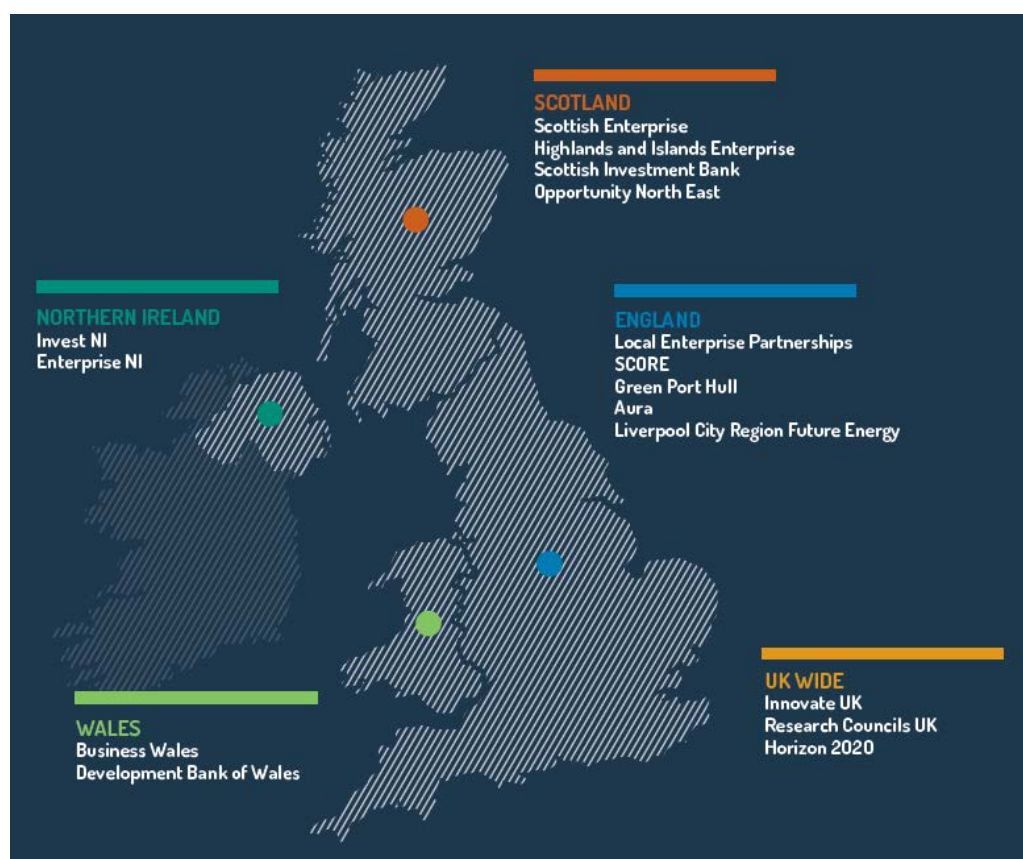
In offshore wind, costs have reduced dramatically with the latest prices as low as £57.5 per MWh. The Offshore Wind Sector Deal (BEIS, 2019) signed between Government and the offshore wind industry lays out ambitious plans to “*deliver 30GW of offshore wind by 2030 – stimulating £48bn in UK infrastructure investment, supporting 27,000 skilled jobs, reducing electricity costs to consumers by £2.4 billion, and seeking to drive a five-fold increase in exports.*” (Offshore Renewable Energy Catapult, 2018)

As demand for renewable energy increases there have been efforts to support the development of the supply chain and manufacturing sector. A recent review of the UK offshore wind supply chain reveals “*approximately 11,000 long term skilled UK jobs have been created*”, however more effort is required to build a supply base that can support the industry in accelerating progress towards achieving UK’s emissions reduction targets (Whitmarsh, 2019).

To meet the legal requirements of the UK Climate Change Act the Government has identified a series of actions, outlined in the Clean Growth Strategy, amongst which considerable investment in innovation including “*£177 million to further reduce the cost of renewables, including innovation in offshore wind turbine blade technology and foundations*” (BEIS, 2018b).

GPH is amongst the key investments and renewable energy innovation hubs in England, providing both manufacturing and supporting services. Figure A2.9 identifies regional support for companies interested in the offshore wind renewable sector.

Figure A2.9: Regional support for offshore wind (Source: Whitmarsh, 2019).



The Humber Local Enterprise Partnership (LEP), in their Strategic Economic Plan, identify ports and logistics and renewables as the top sectors of strategic importance to the economy of Hull and the wider area (Humber LEP, 2014).

The Hull Local Plan to 2032, adopted in 2017, sets out the City Council’s vision to making Hull a leading UK “*Energy Port City*”, identifying a list of 12 Strategic priorities to encourage sustainable economic growth (Hull City Council, 2017).

Part of the attraction in Hull for businesses include 2 Enterprise Zones and the Port of Hull Local Development Order adopted in 2012 and applied to sites at Alexandra Dock and Queen Elizabeth Dock and targeted specifically to attracting renewable energy businesses. Enterprise Zone status provides benefits for businesses by means of simplified and flexible planning arrangements, while the Local Development Order further streamlines the planning application “*by granting outline planning permission for development associated with renewable and low carbon industries*” subject to conditions to ensure that “*development that is permitted does not have unacceptable negative impacts on neighbours, the environment, or the wider area*” (Hull City Council, nd)<sup>23</sup>.

### Green Port Hull

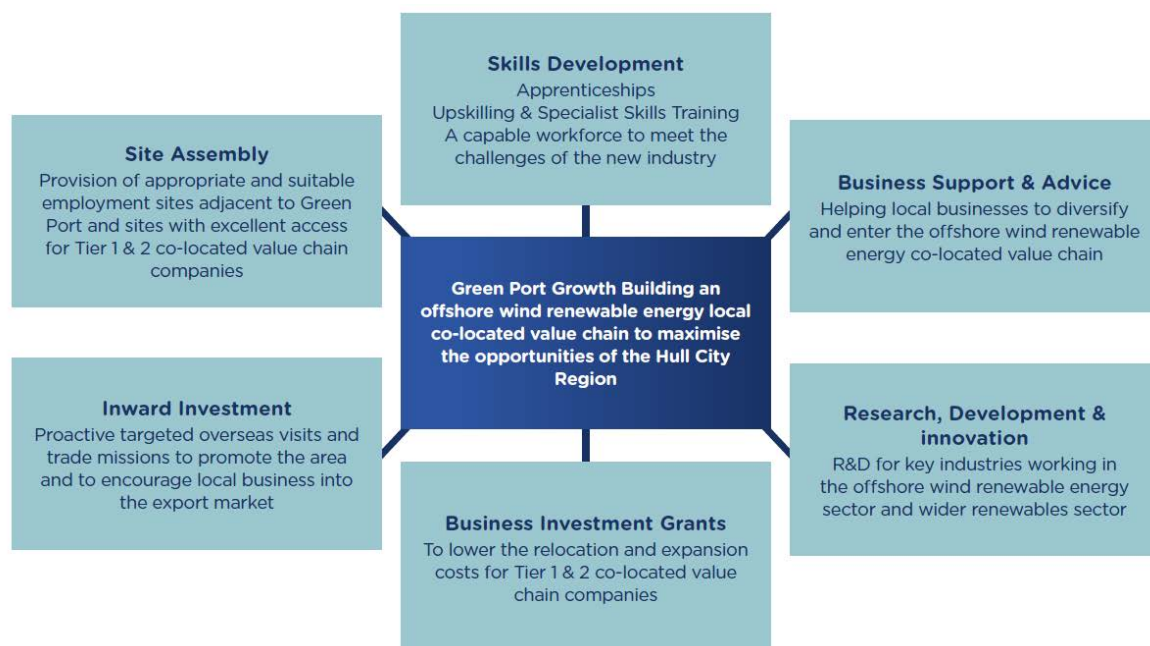
GPH was officially launched in 2010 while planning permission for construction was granted in 2012. GPH aimed to attract investment in renewable energy

<sup>23</sup> <http://www.hull.gov.uk/council-and-democracy/policies-and-plans/hull-local-development-order>

infrastructure, research and development, capitalising on the strategic location of Hull in proximity to the North Sea.

In 2011, following a bid by Hull City Council and East Riding of Yorkshire Council, £26m was awarded to GPH, through the Regional Growth Fund, for the Green Port Growth Programme (GPGP). The Programme, planned to run to 2019, was designed to support the delivery of a combination of training and development programmes for local residents, inward investment and a range of business support activities, detailed in Figure A2.10 (ABP, 2014; University of Hull, 2017b).

**Figure A2.10: Green Project Hull Strands, Projects and Activities (Source: University of Hull, 2017b).**



In 2014 GPH attracted a milestone £310 million combined investment by Siemens Gamesa (£160m) and Associated British Ports (ABP) (£150m) towards the construction of an offshore wind turbine blade manufacturing, assembly and service facilities. News of the development were welcomed by local and national stakeholders, including local councils, non-government organisations and the Government’s Prime Minister and Energy Secretary at the time (BBC, 2014; University of Hull, 2017a).

Siemens’ original investment plan made provisions for £160m investment in a nacelle manufacturing plant at Alexandra Dock and a new blade factory in Paull, East Yorkshire (University of Hull, 2017b). Plans were later changed with Siemens announcing that the blade manufacturing plant would be collocated at Alexandra Dock, as blade manufacturing has “*the potential to create more direct jobs*” for Hull. At the same time the Paull site required additional investment to be ready (University of Hull, 2017b).

The joint Siemens Gamesa and ABP investment, led to the establishment of a wind turbine manufacturing, assembly and service facility, project construction and

logistics and distribution facilities and offices at Alexandra Dock. The development received Hull City Council's Planning Committee consent in 2014 (ABP, 2014).

To date this development is the cornerstone of GPH, supported by the further development of distribution and logistics facilities and offices including a new harbour to service the preassembly and loading of wind turbine components in 2017. The blade manufacturing factory at Alexandra Docks was officially launched in 2018 supporting the manufacturing of towers, blades, foundation and cables for wind farms. It is operated by ABP and is serviced by a number of local suppliers offering freight logistics and transportation, engineering, repairing and fuel services, provisions and safety.

Although the physical site identified as GPH refers to a 58ha land on Alexandra Dock on the Port of Hull, GPH as an initiative includes the wider range of activities designed to support and develop the renewables sector and attract investment in the local area. As such, the Site Assembly strand of the GPGP (identified in Figure A2.10 above) aims to encourage co-location of renewable and supply chain businesses in the vicinity of GPH by bringing forward and mapping (Figure A2.11) a range of sites suitable for potential investors. The sites offer benefits, such as business rate discounts, to different type of suppliers.

**Figure A2.11: Sites suitable for potential investors (Source: Green Port Hull, nd).**



Examples of other renewable energy investment planned in Hull, catalysed by GPH include:



- Energy Works: A £150m investment aspiring to generate electricity that will power 43,000 homes in Hull, including an Energy Works Research Academy carrying out research and development in partnership with the University of Hull (Energy Works, 2019)
- Biomass Handling Facility: A £150m investment enabling transport of sustainable biomass to Drax Power Plant
- Reality Energy Centre - a £130m 49MW biomass fired power plan (Green Port Hull, nd).

## A2.2.4 Review of existing literature on the local effects of Green Port Hull

This section summarises evidence from research and assessments available on the socio-economic impacts of the **Siemens – ABP investment in GPH** to the local area, economy and community.

### Initial forecasts of the socioeconomic impact of GPH

ABP and GPH originally estimated that GPH and the facility originally planned in nearby Paull (in East Riding), would support the creation of 1,000 new jobs at GPH, and several hundred roles during the construction phase (ABP, 2014).

### URS Environmental Impact Assessment

Initial estimates reported in the Environmental Impact Assessment (EIA) (URS, 2011) carried out prior to the development identified impacts as summarised in Table A2.4.

**Table A2.4: EIA assessment of impacts.**

Impact category	Assessment / Comment
<b>Socio-economic</b>	<ul style="list-style-type: none"> <li>• Direct job creation: 345 – 445 jobs during the construction phase and another 700-800 employed through the operation of GPH. The latter number was expected to increase to 1,020 -1,230 staff as wind turbine production increased.</li> <li>• Indirect job creation<sup>24</sup>: expected to be “<i>significant</i>” but no quantitative estimates were provided.</li> <li>• Training and development plans put in place by Siemens (for employees) and by HCC in collaboration with local partners to build relevant skills within the Hull and East Riding of Yorkshire workforce</li> </ul>
<b>Recreational / Land use</b>	A public footpath needed to be diverted which limited access to recreational angling along the path, however “ <i>no significant adverse effects on land uses and recreational activities</i> ” were identified.
<b>Traffic</b>	An increase in daily traffic of up to 1.4%, expected during construction and operation phase, falls within “ <i>typical daily</i> ”

<sup>24</sup> through additional spending and supply chain development

	<i>variation</i> ” and hence no significant adverse effects were identified.
<b>Noise and vibration</b>	Significant adverse effects from noise and vibration were identified during the construction phase. For residential properties, before and after structural surveys were offered to householders
<b>Air Quality and Dust</b>	No significant adverse effects on local air quality expected during construction or operation of GPH, while any minor adverse effects would be limited to local residents and occupiers
<b>Water Quality, Drainage and Flood Risk</b>	Potential significant adverse effects were identified in case of accidental leakage or if <i>“disturbed sediments were released into the Humber Estuary”</i> , however the likelihood of these impacts occurring was assessed as low.
<b>Ornithology</b>	A significant adverse effect was identified in habitat loss for waterbirds, mitigated by the creation of a replacement artificial habitat on site at Alexandra Dock.
<b>Cultural Heritage</b>	Listed buildings and structures on site will be maintained and a Conservation Management Plan put in place. Coping stones, used on the dock walls, that will require removing were to be re-used to the extent possible.

No significant adverse effects were identified on the landscape character and visual amenities, land quality or marine habitats and animals.

### **Green Port Growth Programme**

The Green Port Growth Programme (GPGP) aimed to capitalise on the Siemens – ABP investment to develop a new sector economy in the heart of the Humber. The expected impacts between 2012-2019 were in the Programme objectives. Some of these impacts link directly to the Siemens – ABP investment, whilst others refer to wider actions to attract further investment that combined can:

- *Contribute £300m to the local economy*
- *Create 1,300 jobs*
- *Up-skill and train up to 1,900 local people*
- *Develop over 160 ha of land*
- *Secure £280m of large inward investment*
- *Assist up to 650 local businesses to enter the renewable supply chain*
- *Establish Hull as a Centre for Research and Development for the renewables industry* (Green Port Hull, nd).

### **Impact Assessment**

There are two key evidence sources offering a mid-term assessment of impacts of the Siemens – ABP investment:

1. **The Green Port Impact Assessment (GPH-IA):** The University of Hull’s Logistics Institute was contracted by GPH in 2016, to undertake an economic, social and environmental impact assessment of the renewable energy sector



following the Siemens-ABP investment in GPH. The GPH-IA assessed the combined impact of the Siemens-ABP development and GPGP. Preliminary evidence from the GPH-IA were published in 2017 revealing key impacts on the development in the region. Further insights were provided by the University of Hull, Logistics Institute, with interviewees noting the pending publication of the 2012/13 – 2018/19 GPH-IA<sup>25</sup>.

## 2. The Regional Growth Fund (RGF) Green Port Growth Programme

**Performance Update:** Carried out by GPH in 2015 and evidencing outputs against the Programme’s objectives and key performance indicators. (Green Port Hull, 2015)

The impacts presented below draw from both sources.

### Employment

Preliminary evidence reported in the GIA suggest the creation of more than 2,000 jobs in the facilities created and the renewable sector and supply chain. GPH is credited with creating 1,063 direct jobs in the manufacturing facility provided by Siemens Gamesa.

The GIA also identified *“an additional 627 supporting jobs based on the latest employment multiplier data for the UK manufacturing sector”*, while it further suggested that the development helped provide employment to 76 long term unemployed people through employment in related industries (University of Hull, 2017a). The provision of sustainable employment opportunities to those long-term unemployed also translates into a reduction in claimed benefits providing savings between £228,820 and £288,891 (University of Hull, 2017a).

As shown in Figure A2.12, ONS data suggest unemployment levels are declining both in Hull and the wider region since 2014. A similar trend can be observed in the national unemployment rate which has been slowly declining from 2013 onwards (ONS, 2019)<sup>26</sup>.

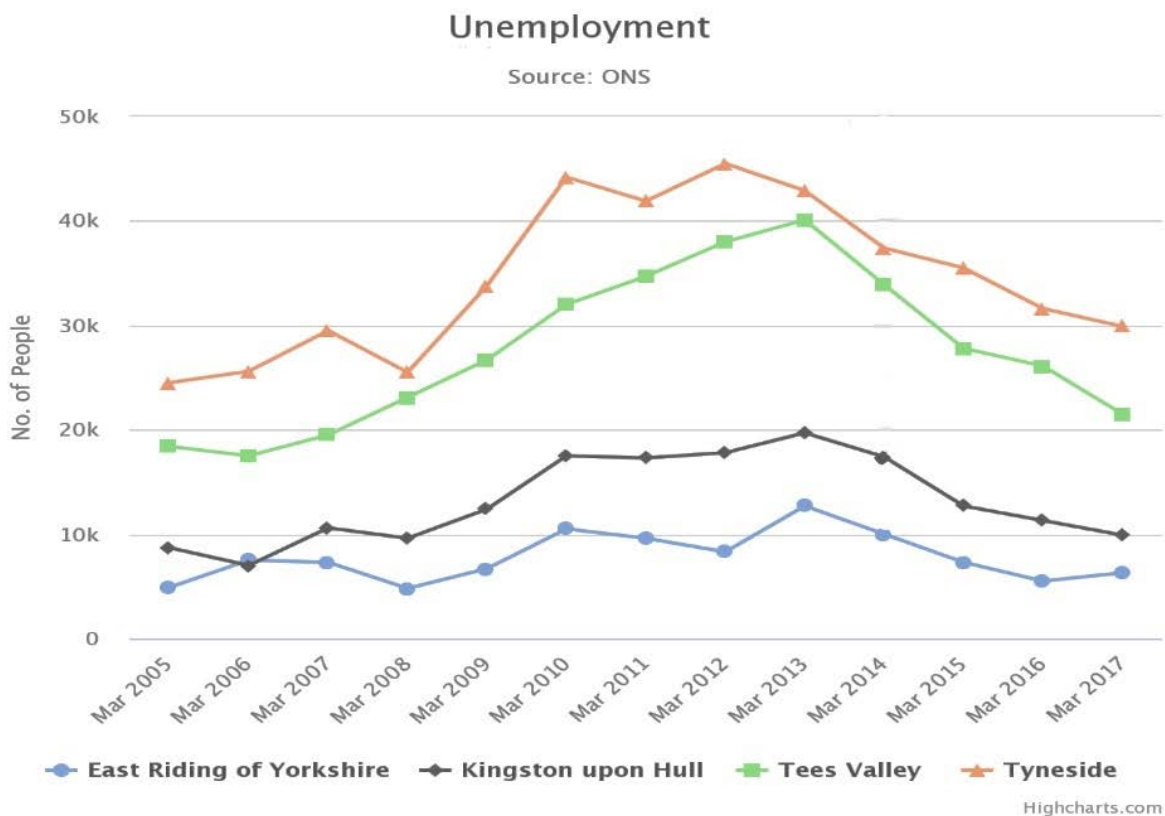
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<sup>25</sup> Green Port Growth Programme Output Profile, 2012/13 – 2018/19. Green Port Hull Impact Assessment (GIA), Logistics Institute, University of Hull. (*pending publication*)

<sup>26</sup>

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/unemployment/timeseries/mgsx/lms>

**Figure A2.12: Unemployment in Hull and the wider region (ONS, 2018).**



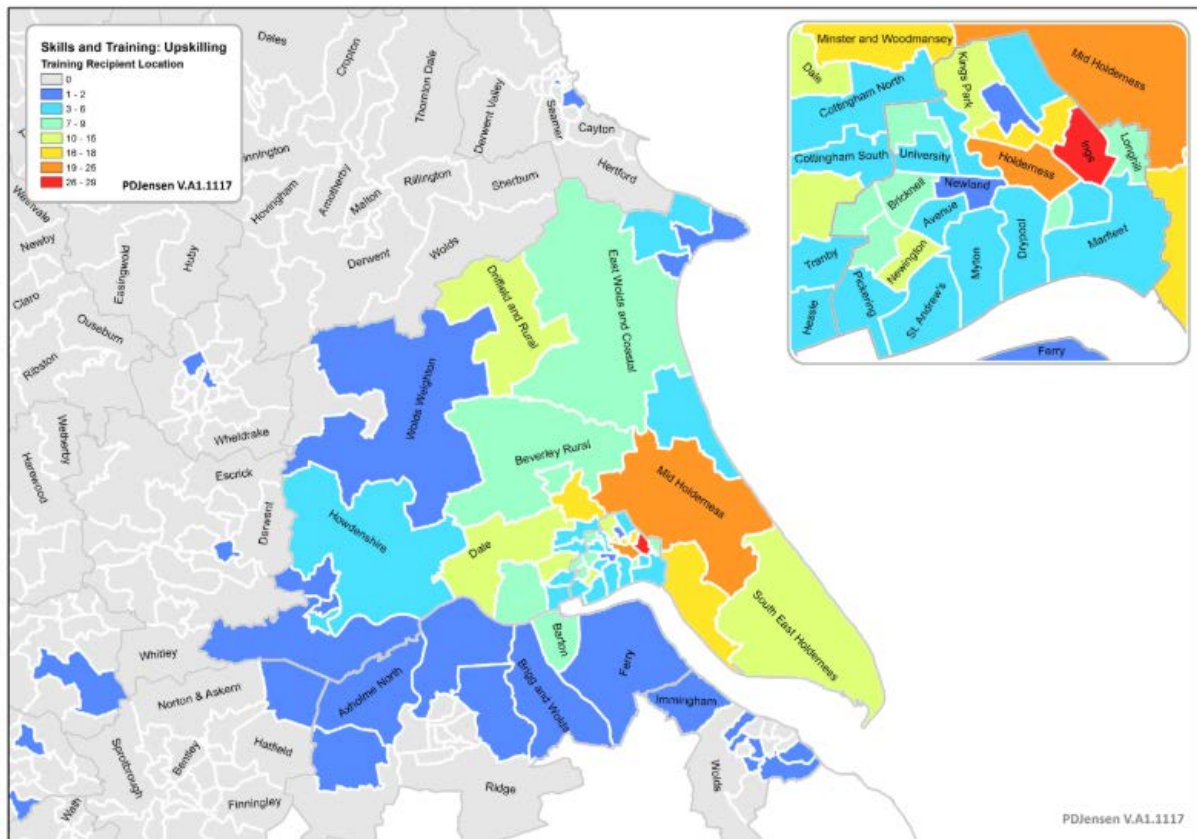
Performance monitoring against the Regional Growth Fund Programme objectives in 2015 (Year 2, Quarter 4) claimed that a total of 698 jobs were created as a result of the GPGP against the target of 800 jobs to be safeguarded by March 2016.

**Local workforce skills**

GP’s GPGP is a key part of its efforts to create benefits for the local area. GP’s Skills and Employment strand included a programme of apprenticeships, training packages, upskilling and wage subsidies for disadvantaged groups, with the aim of strengthening the existing engineering skills base particularly in the local renewables and manufacturing sector.

According the latest data available on the GIA website 422 people were upskilled from 2012/13 to 2016/17, the majority of which received a Level 3 Engineering manufacturing qualification. Figure A2.13 shows the geographic distribution of recipients of the upskilling training programme.

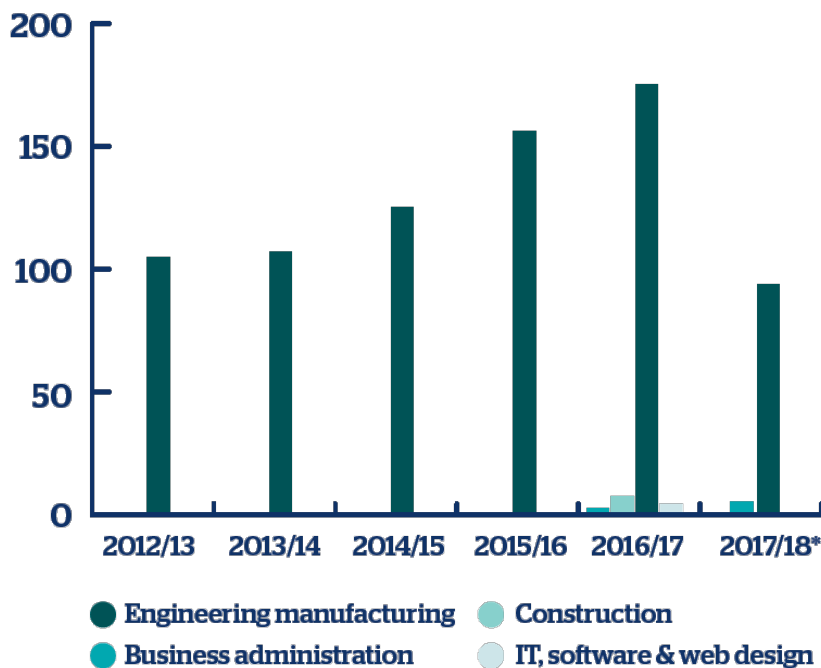
**Figure A2.13: Upskilling Training Recipient location (University of Hull, no date<sup>27</sup>).**



By 2017/18, wage subsidies had supported 780 apprenticeships improving the skills of local workforce. The majority of apprentices (85%) were between 18 and 19 years old and received an engineering apprenticeship (see Figure A2.14).

<sup>27</sup> Green Port Growth Program Upskilling. Available at: <https://gia.hull.ac.uk/>

**Figure A2.14: Qualifications of apprentices by type and year** (University of Hull, no date<sup>28</sup>, \* Data for 2017/18 is partial)



The GPHP further supported the establishment of a ‘Green Port Hub’<sup>29</sup> at the Central Library in Hull to “*help residents and businesses access information on the region’s emerging renewable energy sector*” (University of Hull, 2017b). Besides a business support and information centre the Hub is also home to an exhibition offering insights about working at the Siemens development and is equipped with IT pods to support jobseekers. A Siemens recruiter is on-site at the Hub once a week.

Led by Hull City Council, in collaboration with Job Centre Plus and educational and training providers, a training and skills package was put in place aiming to “*improve employability and skills levels within Hull and the East Riding*” achieving the “*maximum benefit from the Siemens Gamesa investment by securing jobs for local people*” (University of Hull, nd<sup>30</sup>). A skills group has been formed by GPH to that purpose.

More recently, in order to improve the diversity of beneficiaries, the following additional programmes were developed:

- Pathway Plus Project (Disadvantaged Groups): Supporting a group of 7 young participants with special educational needs and disabilities through a work placement building up to a supported internship and “*with the ultimate*

<sup>28</sup> Skills and Employment impact. Available at: <https://gia.hull.ac.uk/>

<sup>29</sup> [https://greenporthull.co.uk/uploads/files/The\\_Hub\\_Business\\_Leaflet.pdf](https://greenporthull.co.uk/uploads/files/The_Hub_Business_Leaflet.pdf)

<sup>30</sup> <https://greenporthull.co.uk/jobs-training>

*aim of securing full-time employment with Siemens and its service suppliers at the Alexandra Dock site.”<sup>31</sup>*

- Women into Manufacturing and Engineering ([WiME](#)): Encouraging women to pursue engineering careers through dedicated networking events and WIME Careers Open Days<sup>32</sup>.
- Training Hub: An extended collaboration between local authorities, The University of Hull, colleges and training providers across the wider Humber aiming to create a sustainable pool of skilled workforce<sup>33</sup>.

### **GVA and Local economy**

The University of Hull impact assessment estimated the direct employment by Siemens contributes up to £71.3m to the GVA of Hull. However, the economic impact on the local economy is estimated to be much higher due to multiplier effects - for every £1 of investment, an additional 47 pence is estimated to be generated in the disposable income of the local economy of the Humber.

Such impacts are spread through the supply chain. Figure A2.15 shows the distribution of suppliers during the construction phase of the Siemens-Gamesa blade manufacturing facility.

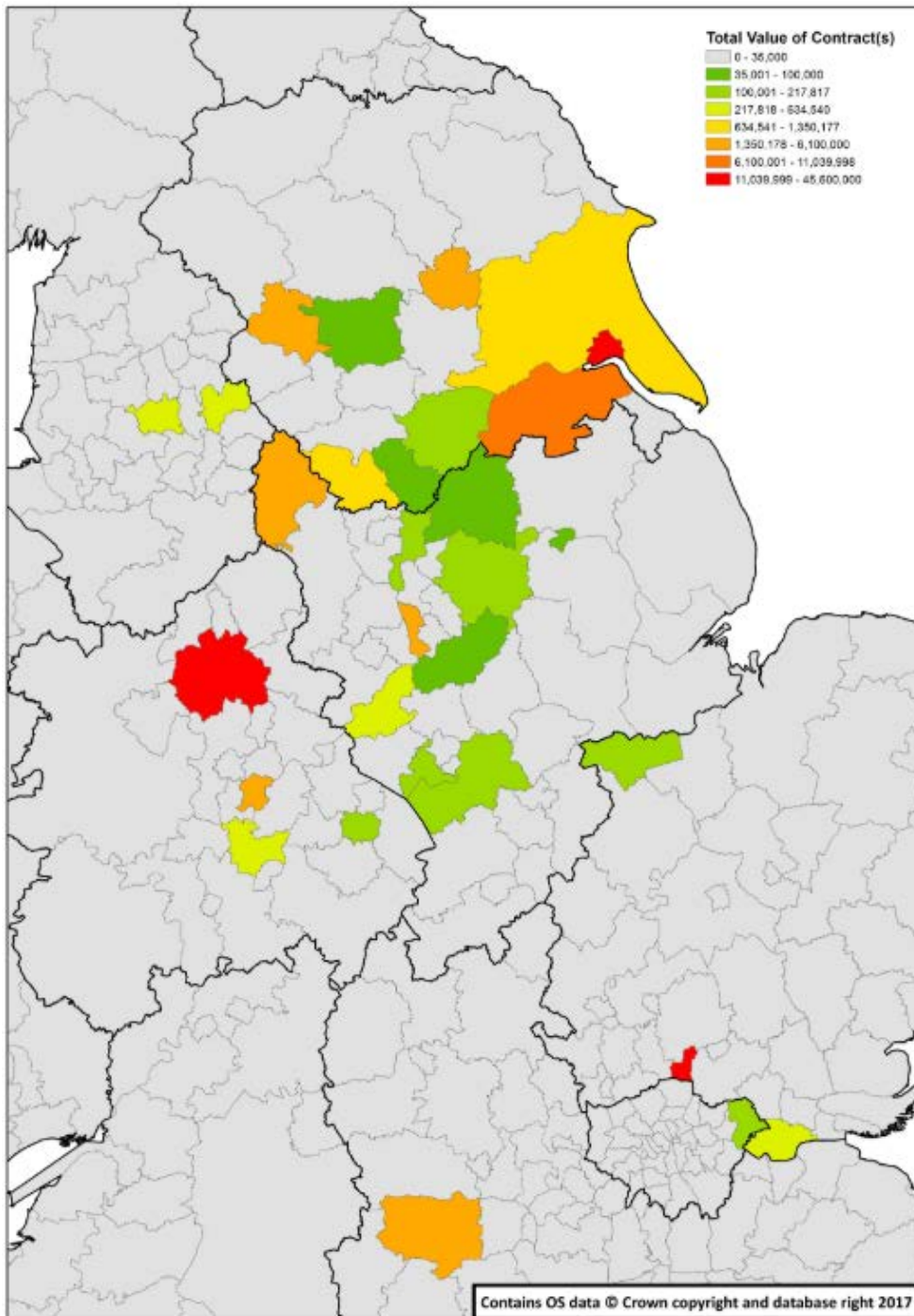
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<sup>31</sup> Green Port Hull (2017) Siemens puts young people on pathway to employment and independence. Available online at: <https://greenporthull.co.uk/news/siemens-puts-young-people-on-pathway-to-employment-and-independence>

<sup>32</sup> Green Port Hull (2017) Women set to be inspired by engineering careers at Green Port Hull event. Available online at: <https://greenporthull.co.uk/news/women-set-to-be-inspired-by-engineering-careers-at-green-port-hull-event>

<sup>33</sup> <https://greenporthull.co.uk/jobs-training/traininghub>

**Figure A2.15: Supplier distribution and value of supply chain contracts (University of Hull, no date3)<sup>34</sup>.**



Interim evidence from the GIA (University of Hull, 2017a) further identified the following benefits to the local supply chain and economy:

- **Supply chain:** GPH was reported to have supported the creation of 1282 jobs in the local supply chain and 503 companies were registered on the Green Port Supplier Directory.

<sup>34</sup> <https://gia.hull.ac.uk/SupplierMapping#>

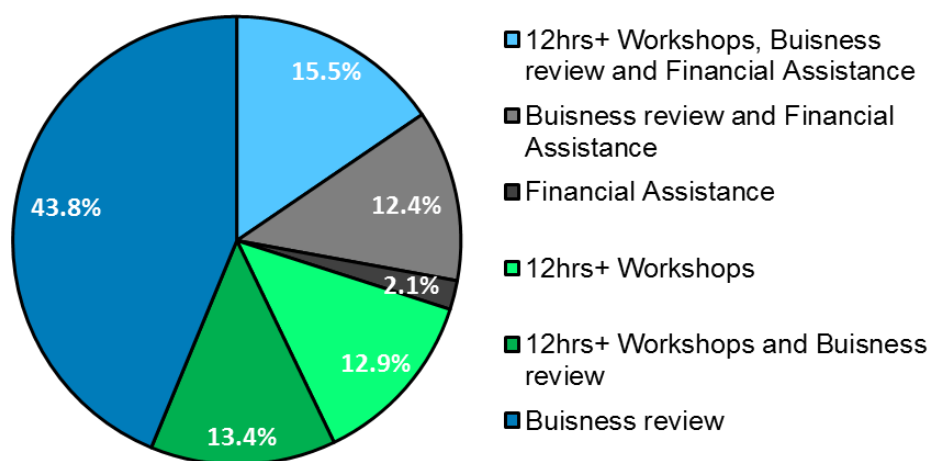


- **Business income:** Companies in the region won renewable energy contracts of a total value of £175.9m. The 2015 performance Regional Growth Fund (RGF) review anticipated that the target of increasing the business income of the local area (GVA) by £300m was attainable although no monitoring data were available.
- **Inward investment:** GPH secured £115m private sector investment and £19m public sector investment
- **Local development:** Utilising £450k from the funding from the RGF a total of 445 hectares of land in strategic sites across Hull and East Riding have been brought forward for development. According to the RGF performance update this referred to the remediation of 145 hectares of brownfield land and 300 hectares of greenfield sites.

### Business support

Direct support was provided to a total of 194 businesses in the form of workshops, business review and financial assistance between 2012-2017 (University of Hull, 2017). Figure A2.16 provides a breakdown of the form of assistance received by businesses. The majority of these businesses were in the Manufacturing (76 out of 194), Construction and Building Services (44) and wider Business Services (24) sectors. Business support led to the direct creation of 124 jobs across Hull and East Riding (in total between 2012-2017), 25 of which were temporary and the rest permanent.

**Figure A2.16: Support received by businesses between 2012-2017** (Source: University of Hull, no date<sup>35</sup>).



Another 138 businesses were estimated to indirectly benefit through the provision of information, advice and news (University of Hull, nd4).

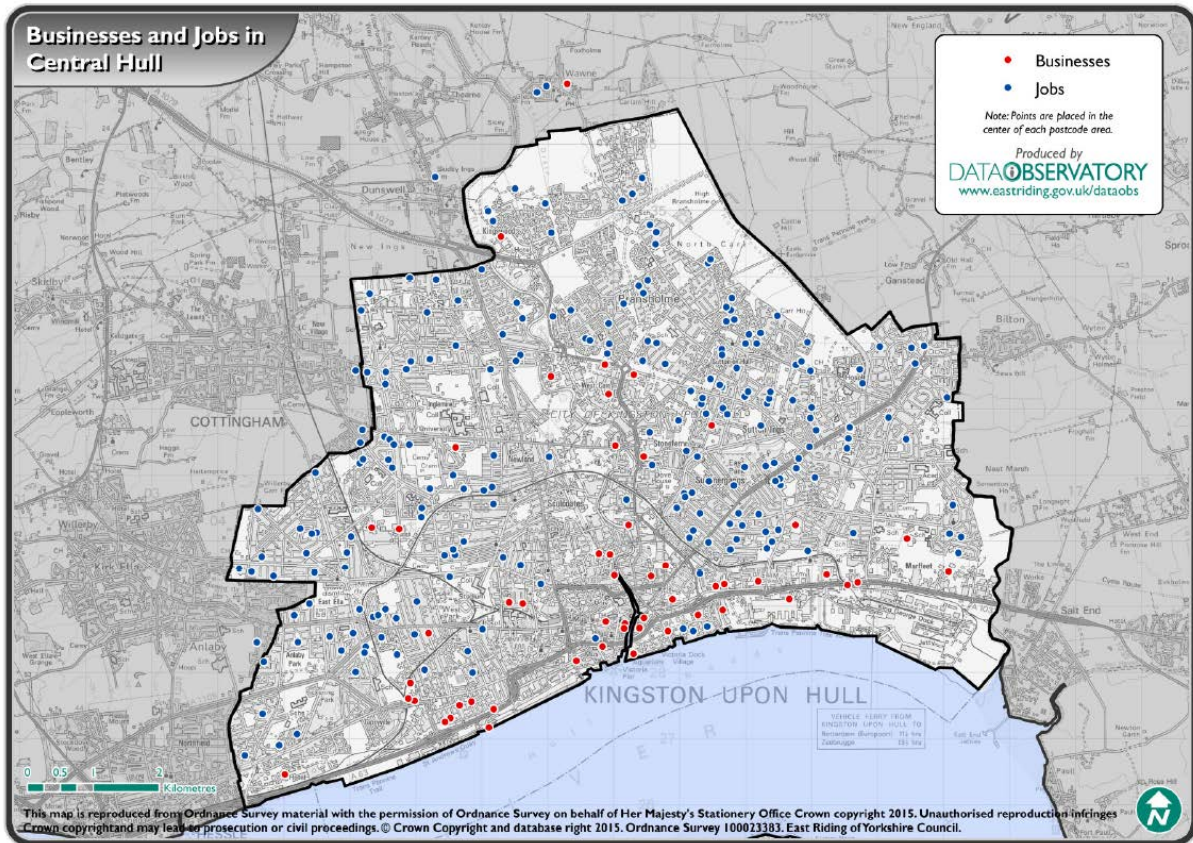
Similarly, the RGF Programme Performance Update (2015) refers to the Programme having overall “assisted in excess of 300 local businesses through a range of business support services, including wage subsidies, and business reviews and grants for new machinery and/or specialist consultancy support...” Despite being

<sup>35</sup> <https://gia.hull.ac.uk/BusinessSupport/DirectOutputs>



slightly outdated<sup>36</sup> the heat map presented in Figure A2.17 illustrates the distribution of jobs and businesses supported in Hull in 2015.

**Figure A2.17: Businesses supported and jobs created in Hull (Green Port Hull, 2015).**



## Wider economic impacts

### Prior to construction

**Business relocation:** Prior to construction of the Siemens-ABP plant, approximately 10 local businesses located at Alexandra Dock were relocated mainly within Hull (URS, 2011)

### Following construction

**Attracting additional development:** Beyond the impacts identified above, there is some evidence to suggest that GPH has supported further investment in the area, providing a successful example of an established renewable energy business and bringing credibility to the City Council’s plans of turning Hull into an “energy city” (City Plan Hull, nd). A range of other key factors exist that attract renewable businesses in the area including the enterprise zones and Local Development Orders, so it is not possible to establish the exact impact of GPH in isolation, but the Hull Local Plan to 2032 identifies the renewable energy sector and GPH as “major drivers of economic growth”. The Plan further notes that impacts on the supply chain

<sup>36</sup> An overarching estimate reports “support provided to more than 560 local businesses” (University of Hull, 2017a), however there is a lack of clarity as to what other type of support this figure might incorporate.

from the GPH development are “*still to fully emerge*” though they also identify potential development pressures in the future.

## Community impacts and perceptions

### Impacts on community assets

#### *During construction:*

- **Restoration of historic buildings:** During construction at Alexandra Docks ABP commissioned restoration work to maintain three protected and Grade II listed buildings on the site (University of Hull, 2017b)
- **Public footpath diversion:** A public footpath on site was re-routed to “*allow for safe transporting and loading of turbine components*”. Prior consultation with a number of local interest groups ensured there were no objections – which was understood as a sign of ‘good will’ and a reflection of the community’s understanding of the importance of the development (University of Hull, 2017b). Resulting from a collaboration between ABP, HCC and a local arts company, the diverted Public Right of Way at Alexandra Dock is now hosting five sculptures created by local arts students (Green Port Hull, 2016).
- **Likely impact on property value:** Although no impact is established as yet, research carried out as part of the Hull Local Plan to 2032 identifies an expected increase in property values adjacent to the Port as demand from supply chain companies that support the GPH development rises (Hull City Council, 2017).

#### *During operation:*

- ABP has been supporting Hull and East Yorkshire Children’s University, a local charity which enables children across backgrounds to participate in a range of educational activities organised by the charity. Amongst these is a cruise along the Humber estuary hosted by ABP annually offering the opportunity to circa 250 primary school children to learn about the history of the estuary and the work carried out by ABP (ABP, 2019).

### Community impacts / experiences of impacts

An online local resident survey<sup>37</sup> (n=74), carried out as part of the GIA in 2017, explored the impacts of the Siemens development and operation on the local community. The majority of respondents to the survey were residents of the area adjacent to the development: While results are not representative of the wider area – and relate to the initial operational phase of the development, they do offer useful insights.

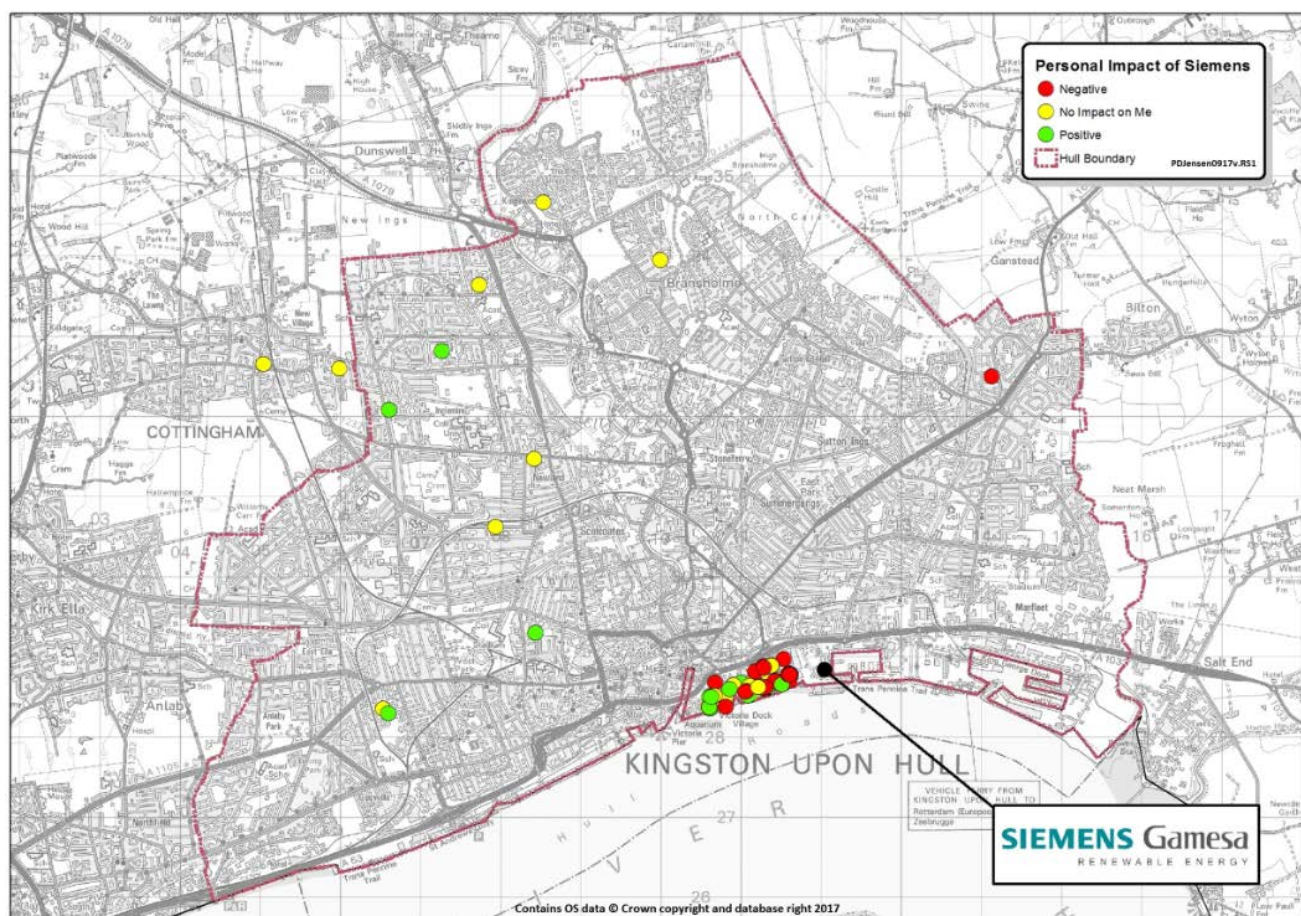
Across responses received 59% stated that the development had either no impact or a positive impact on them personally. Of those identifying a positive impact, employment opportunities and positive prospects for Hull were the most commonly mentioned benefits, while some suggested the development was ‘good use of land’ and a couple noted a rise in property value. The remaining 41% identified some negative impact (see Figure A2.18). Concerns were primarily raised by respondents close to the development site.

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<sup>37</sup> <https://gia.hull.ac.uk/Environment/CommunityImpacts>



**Figure A2.18: Personal impact from the development (responses to online resident survey)** (Source: University of Hull, 2017c).



The following specific impacts were also identified:

- Air quality: The majority of participants (82%) did not notice a change in local air quality
- Noise pollution: 65% of respondents (all living adjacent to the development site) noticed an increase in average noise levels
- Traffic: 48% of respondents reported increases in the volume of traffic in their neighbourhood
- Scenery: 62% of respondents suggested a negative impact on their view of the Humber

### A2.2.5 Implications for the case study approach

The review of relevant literature identified a significant volume of information emerging primarily from the recent impact assessment. Subsequent research further explored how these socio-economic impacts identified were experienced by the local community in Hull and whether these have changed over the course of the development. We note that the Resident’s Survey took place in 2017 at the early operational stages of the development.

More specifically, primary research engaged local residents in better understanding their experience of living near the GPH and the impact the development had / has on them as individuals and their local community.

Areas we seek to explore therefore, related to:

- Concerns of the local community, current or past. Have these changed over time and why / how?
- Explore / query unidentified or unexpected impacts (positive or negative) i.e. the extent to which all socio-economic impacts to the local community have been identified in previous research
- Community knowledge / awareness of activities identified in the case study profile relating to the local community (e.g. Green Port Hub or Art installation)
- Identification of the pathways through which impacts occur – e.g. direct through employment or indirect through the development of the local economy, supply chain etc.
- The extent to which these concerns have been addressed by GPH / the City council or others and how?
- Community engagement relevant to the development: knowledge / experience of opportunities provided and engagement preferences
- Any differences in perceptions between those who live closer as opposed to those who live further to the development
- Perceptions around community engagement in major development and the role of government.

The above questions, along with queries emerging during the case study profiling, necessitated carrying out a small number of interviews, namely with the University of Hull and Hull City Council, prior to being further explored with local residents.

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## Annex 3 Stakeholder interviews – Hayle

### A3.1 Introduction

Stakeholder interviews were conducted as part of the case study on Wave Hub. Interviews sought to explore the impact of Wave Hub on the local community of Hayle, and local community experiences, perceptions and attitudes of those impacts, considering the following:

- What have been the business investment-related impacts on the local community (e.g. has there been any investment on community projects or training for local workforce?)
- What were the impacts of development on the local community?
- How are these impacts spread across the community? Do they vary depending on the social groups and people?
- What have been the local community's perceptions and experience of the development and its impacts?

### A3.2 Approach

Seven interviews were conducted between 3<sup>rd</sup> and 14<sup>th</sup> June 2019. Interviewees were chosen based on their involvement with local community, business and government organisations. Interviewees were associated with or had previously been associated with Cornwall Council, the Hayle Town Council, the Chamber of Commerce and the Hayle Harbour Advisory Committee.

A draft list of organisations to contact was provided to MMO and a final list was agreed before interviewees were contacted – out of 15 contacted, seven agreed to interview. A semi-structured schedule of questions and prompts was developed based around the study objectives and the initial findings from the desk research. This was provided to the MMO for review and a finalised version was agreed before interviews commenced. The final list of questions used in interviews is included in A3.5.

Interviews were undertaken by telephone, lasted between 30-45 minutes and were recorded and transcribed. Interview transcriptions were then coded using NVivo. The results of this coding has been used as the basis for this summary.

### A3.3 Key findings by theme/research question

#### A3.3.1 Hayle's history

When asked to describe the local community, most interviewees began by describing it in terms of its past. Hayle was described as “*a very old community, a former industrial community*”, “*the centre of the universe up until about 1870*” and “*a focal point of the industrial revolution in Cornwall*”. Hayle was historically a major centre for building steam engines and mining, with two major foundries and an industrial base that continued until the mid-20<sup>th</sup> century.

Interviewees named several events that contributed to Hayle's decline, pointing to the close of: the foundry in 1905, the power station in 1970, the chemical works in 1973 and the metal perforator (J&F Pool) in 1980 and also to the selling of the harbour in 1982.

Discussing Hayle's more recent history, interviewees characterised it as a dormitory town, supplying workers to other localities and described variously as "*ignored*", "*fairly derelict*" and "*fairly deprived*". In addition to supplying workers for other areas, employment in Hayle and the surrounding areas was described as lacking, with many of the existing jobs focused on the tourism industry and much of the work being seasonal and low paid. There are no dominant or main employers in the area, with the town home to a large number of small and micro businesses. Although unemployment rates are not significantly higher than the national average, several interviewees described unemployment as an issue. One interviewee involved with the council noted that although employment rates were good, the challenge was to bring "*meaningful, highly paid, permanent jobs into the town*".

One of the key challenges mentioned by several interviewees was the lack of a functioning harbour. The harbour in Hayle had historically been in use, but since the harbour was sold and began to pass through the hands of different owners in the 1980s, it has fallen into disrepair. It is now only usable by smaller vessels at certain points in the tide – greater use would require significant dredging. There is a strong desire among the local community to see the harbour operable again and there have been attempts to raise funding locally to see this happen, although this has not been successful. There is a general belief among residents that a renovation of the harbour would bring significant economic benefits. However, up to this point, no progress has been made.

Some interviewees also characterised Hayle as a community that had suffered a series of disappointments over the years: where promises of housing and jobs had been made by developers but never materialised. This theme of broken promises was reflected in much of the discussion around Wave Hub and its impacts, with one interviewee describing the general feeling among residents as "jaundiced".

In addition to Wave Hub and the Marine Renewables Business Park, interviewees confirmed that Hayle has also been the site of other recent regeneration and development projects. This includes the opening of an ASDA store on the South Quay and a recent renovation of historic areas of the town for the development of office space. All interviewees also mentioned these other projects, using them to either contrast or complement the discussion of Wave Hub. The ASDA development was notable as it also involved repairs to the quay wall and sluicing gates, therefore bringing about some improvements to the harbour area. In some instances, these other examples of development appeared to be of more interest to interviewees, even in the context of questions about Wave Hub. This could be due to Wave Hub's location far offshore, which was mentioned by several interviewees. As one interviewee put it:

*“There is an insanity and illogic fallacy in calling it the Hayle Wave Hub, because yes it comes ashore here, but actually Hayle has very little to do with it, it seems.”*

### **A3.3.2 Benefits associated with Wave Hub**

Interviewees appeared to have a shared understanding that Wave Hub has not delivered the benefits initially promised. Several interviewees referred to it as a “*damp squib*” or a “*white elephant*”, although this was not necessarily stated as a criticism. In fact, several interviewees stated directly that they thought Wave Hub had seemed like a very good idea at the time and that they did not criticise the government for investing in it, despite the eventual lack of success. As put by one interviewee:

*“I think it's more of a case of lost opportunity. [...] There hasn't been any anger or any negativity against the Wave Hub project. I think probably now it's just disappointment.”*

Despite the acknowledged lack of success of the testing site, several interviewees did view Wave Hub as a catalyst or as totemic for other types of local development. This includes the Marine Renewables Business Park, which all interviewees saw as being directly related to Wave Hub. One interviewee, who was involved with the Town Council at the time, explained that the Business Park came about in part because some local residents campaigned for the investment—arguing that no benefit had come to Hayle from the Wave Hub despite initial promises.

The development of the Marine Renewables Business Park and the associated development of infrastructure around the North Quay was seen as a significant positive impact by some. As one interviewee described it:

*“Well I mean Wave Hub—the gaining of Wave Hub in this position and its establishment, if you like—was very much a catalyst for the focus of Hayle on marine renewable energy and that's what's going forward the idea: that we are a base—not the only base in Cornwall, but a linked base—where we can develop the marine renewables industry. So the Wave Hub was the first element of that and we've gone on to develop further with an enterprise zone dedicated to marine renewables and the Marine Renewables Business Park.”*

For some interviewees, the legacy of Wave Hub for Hayle is a sense of renewed optimism, focus and hope of future economic gains through marine renewables. Whilst a renewed sense of optimism and a belief that Hayle is “*pulling itself up by its bootstraps*” and no longer a “*declining town*” appeared to be universal, interviewees differed in the extent to which they included Wave Hub as part of this narrative. Some interviewees included Wave Hub as part of this, noting that it has helped to make local residents “*feel better about Hayle*”. Other interviewees qualified Wave Hub's contribution to this as fairly minimal, or noted that feelings had changed over time. As put by one interviewee:

*“Unfortunately, I think at first it was like “Well this is a good idea, that's great”. You know, let's do something with it. This could have had an impact on Hayle*

*and then the information stopped and the perception is, as I said earlier, "What Wave Hub?" What does it do? What benefit do we get from it? And there's lots of questions with no answers at the moment."*

Some interviewees noted that there would have been no benefit to Hayle from Wave Hub even if the testing site had been a success. This is in part because of the lack of navigability in the harbour, which would mean that any devices would need to come around from Falmouth, and benefits associated with the maintenance and transport of such devices would therefore be felt in Falmouth rather than in Hayle.

## **Employment**

### *Wave Hub*

The Wave Hub testing site itself was not characterised by any of the interviewees as having had any employment impacts on Hayle. In terms of employment, one interviewee was able to confirm that Wave Hub has only two full time staff.

### *Downstream effects*

Some employment impacts were mentioned in terms of downstream effects. During the construction of Wave Hub, there was a minimal boost for some local businesses, such as food and retail businesses, and some members of the community were able to supply vessels to help with construction. One interviewee also mentioned that at the time of construction, some people associated with one of the Universities had put together a detailed list of suppliers from Cornwall who could support with the Marine aspects. No information was available on the extent to which this list was used.

### *Marine Renewables Business Park*

In addition to some minimal effects at the time of construction, all interviewees mentioned the development on the North Quay, including the Marine Renewables Business Park, as an endeavour which had been able to generate some employment. According to one interviewee involved with Cornwall Council, the funding for this development (which came from the EU, Cornwall Council and Central Government) was "*predicated on the eventual creation of 450 jobs*".

The impact thus far has not been to this extent and although no interviewees were able to provide numbers for the jobs created through the business park, it was not considered a significant source of employment or particularly relevant to the residents of Hayle. Interviewees noted that most people in the community would not know what businesses are even based in the park. Several interviewees speculated that employees were unlikely to be local to the area, with one stating that "*because [marine renewables] is a fairly high tech and specialist business, I don't suppose anybody from Hayle has been employed there in one of the better jobs*", implying that most residents in Hayle would not have the skills required for such work.

The other problem noted by interviewees with the Marine Renewables Business Park was that the source of funding had tied its use to businesses associated with marine renewables. This was a source of frustration for some local businesses when opening, as they were not able to access the space. Moreover, the Business Park contains both office and industrial space, with the intention that marine technology firms would have access to industrial space alongside harbour access. However,

due to the lack of navigability of Hayle's harbour, this is not possible. As a result, although the office space in the Business Park is fully occupied, the industrial space is not and some interviewees felt that this would soon need to be opened to other local businesses.

### *Initial projections*

This lack of impact is despite the fact that initial projections of both direct and indirect impacts associated with the Wave Hub test site development forecasted that it would lead to significant employment and value creation for both Hayle and the southwest. This was recognised by interviewees, one of whom described the initial projections as “*appalling rubbish*”. Another explained:

*“... the jobs that were promised never materialised. Most locals will tell you that that always happens. [...] The actual promise of the number of jobs for the citizens of Hayle was very, very badly overestimated. It was too rosy a picture and too many aspirations were built up.”*

### **The Fishing Community**

Fishing in the context of Hayle refers largely to the shellfish industry. Interviewees differed in terms of their assessment of the fishing fleet in Hayle, with some stating that it was prospering, and the fleet had increased and others stating that it was in decline and insignificant. Official figures suggest that the live weight of fish landed at the port of Hayle decreased year on year between 2013 and 2017, but increased in 2018; whilst the value of landed fish has fluctuated across the years.<sup>38</sup> However, the extent to which any displacement from the exclusion has effected landings of the fleet is not clear. Some interviewees suggested that the exclusion zone enforced by Wave Hub may have brought benefits to local fishing, as exclusion zones can help to encourage population growth and prevent overfishing. However, there was no evidence available on this point. Most interviewees knew of the concerns the fishing community had during the time of development related to the exclusion zone, although this was no longer considered by anyone to be an issue<sup>39</sup>.

Two interviewees pointed out that the fishing community had received financial compensation related to the Wave Hub development, although the information provided on this differed between interviewees. One claimed that:

*“...there was the initial complaints about exclusion and they were given a sum of money as a compensation. That wasn't a huge amount, something like £100,000 or so. And they used that for improving the facilities they had on the North Quay. So they had some cold storage facilities and some loading dock facilities built.”*

However, information provided by Cornwall Council indicated that although a single fund of £240,000 had been established based on an initial estimate of likely losses to the fishing industry, no agreement has ever been reached on the use of the funds.

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<sup>38</sup> Figures available through MMO data: <https://www.gov.uk/government/statistical-data-sets/uk-and-foreign-vessels-landings-by-uk-port-and-uk-vessel-landings-abroad>

<sup>39</sup> Interviews with members of the local fishing community were sought, but were in all cases declined.

## Community engagement

Interviewees held differing opinions as to the engagement of Wave Hub with the local community at the time of development. As many interviewees were part of local community groups, they had participated in some of the initial engagement activities. Some felt that Wave Hub did quite a lot, others felt that engagement efforts were minimal or superficial.

Most interviewees did seem to agree, however, that engagement since the initial development occurred has been lacking. As one stakeholder explained, *“it’s been a big black hole of silence for a couple of years now”*.

## Visual impact

Although the testing site itself has not had any visual impact on Hayle, the Marine Renewables Business Park and the associated development on North Quay were mentioned by some interviewees as part of wider regeneration activities that had led to significant visual improvements to Hayle.

The site where the Business Park is located was described before the development as a *“bleak site”* and a *“bit of a wasteland”*, and the changes were described as significant. As one interviewee explained: *“if we showed you pictures of what it looked like on the North Quay before Wave Hub and what it looks like now, it’s like two different worlds”*.

## A3.4 Conclusions

In general, Wave Hub has had minimal impact, either positive or negative, on Hayle as a community. Interviewees agreed that the Wave Hub testing site has had little to no direct and tangible benefits on the community of Hayle. Where Wave Hub has had a role, it has been:

1. As a catalyst behind the development of the Marine Renewables Business Park, which was mentioned by interviewees in terms of having a small impact on employment and bringing visual improvements to the North Quay.
2. As a contributor to a renewed sense of local optimism in terms of Hayle’s potential. Although most interviewees mentioned the renewed sense of optimism in Hayle, only some saw Wave Hub as part of that narrative.

Despite the lack of impact, interviewees nevertheless pointed to various pathways through which small impacts were felt. These included: some downstream effects at the time of construction, Wave Hub as a catalyst for attracting further marine renewables businesses to the area, positive visual impacts arising from the Marine Renewables Business Park, some potential positive impacts to the fishing community through a reimbursement scheme, and the contribution to a sense of local identity. Interviewees also suggested that a more significant impact would have been felt had the Wave Hub development also involved investment in improving the infrastructure around the harbour.

The interviews also pointed to the importance that history and context can play in how a development and its impacts are perceived by the local community. In the case of Hayle, an industrial past and a long period of economic decline alongside a

history of broken promises from developers and struggles with the local harbour, have led to a particular narrative around Hayle. Discussions with interviewees suggested that for some, the initial overestimation of economic impact associated with Wave Hub has become part of this narrative.

This research was limited by the nature of interviewees: all individuals interviewed were active and engaged members of the local community, meaning they likely have higher levels of awareness and different perceptions from residents who are less involved or engaged. Moreover, many of the interviewees were involved with advocating Wave Hub and associated development through their roles with Cornwall Council and the Hayle Town Council, which may have contributed to some positive bias toward the developments. Additionally, interviewees representing some relevant groups declined to participate.

### A3.5 Interview Questions

Research questions	Sub questions	Interview Questions
<b>Further describe the local area characteristics (economic, demographic, deprivation conditions and social wellbeing)</b>	a) What are the existing data/evidence describing the demographic and socioeconomic characteristics of the chosen case study areas? Consider population, employment by sector, unemployment, deprivation indices, as a core set, and include any wider social wellbeing evidence. b) What other regeneration activities take place in the local area (or have taken place in recent years)?	1. How would you describe the general characteristics of Hayle as a community? <ol style="list-style-type: none"> <li>Who are the main employers?</li> <li>What challenges do residents/the community face?</li> <li>How does this compare to the surrounding areas?</li> </ol> 2. Wave Hub is identified as one of the main regeneration activities in Hayle's Neighbourhood plan. What is Wave Hub's role in the plan? How well is Wave Hub fulfilling its role within the Plan?
<b>Provide an overview of the economic activity of the emergent sector</b>	a) What was the investment in the particular development? b) What has been the estimated / expected impact of the industry / development in the case study area? (e.g. ex-ante impact assessments,	1. Has the implementation of the Wave Hub generated the sort of levels of activity that were expected? Why / why not? What do you think could be the role of marine planning and licencing in enhancing the outcomes of Wave Hub? 2. Has Wave Hub contributed to attracting additional development / regeneration in the area? How so?



	<p>planning permission information etc.)</p>	<p>Prompt: What about the associated business park?</p> <ol style="list-style-type: none"> <li>3. I understand early projections of the impact of Wave Hub on employment were in the range of 100 - 700 jobs depending on the source of evidence. Do you know what the current levels of employment linked to Wave Hub are? Is there any up-to-date assessment or formal documentation/webpages on the companies, investment and jobs at Wave Hub and the business park?</li> <li>4. What are your expectations for Wave Hub [OR similar projects] going forward? Are there up-to-date projections? Is there a role for the MMO to support the development going forward?          Prompt: Wave Hub is part of Hayle's Town Plan and is expected to have future impact on the community – what are these estimates based on?</li> <li>5. What is the legacy of Wave Hub – i.e. what has Wave Hub done for the community now and going forward?</li> <li>6. Are there lessons that can support the future planning and development of emerging marine sectors in terms of how to maximise positive and minimise negative impacts on local community?</li> </ol>
<p><b>Explore the impact of the sector on the local community</b></p>	<ol style="list-style-type: none"> <li>a) What have been the business investment-related impacts on the local community (e.g. has there been any investment on community projects or training for local workforce?)</li> <li>b) What were the impacts of development on the local community (e.g. any mid-term or ex-post evaluation).</li> <li>b) How are these impacts spread across the community? Do they vary depending on the social groups and people? And those living close to</li> </ol>	<ol style="list-style-type: none"> <li>1. To what extent has the local community been engaged / consulted as part of the Wave hub design and delivery (prior, during or after construction) – and how? Prompts: Was engagement at the right level / time? Was it fit for purpose?</li> <li>2. In your experience, how has the local community perceived the development? (Probe for positive/negative perceptions). Why? How do you / the local community 'feel' about the future of Hayle (optimistic, pessimistic, indifferent) and to what extent has that been influenced by the Wave Hub development (and decommissioning)?</li> <li>3. Have there been any particular impacts of the development during the building</li> </ol>

	the physical development site and those living further away?	and operation phase on the local community? Have these affected some groups or neighbourhoods more than others? Prompts: How and what these impacts were, and why that happened?
<p><b>Explore local community experiences, perceptions and attitudes of local economic growth and its impacts</b></p>	<p>a) <i>Where available</i>, what have been the local community perceptions and experience of the development and its impacts?</p>	<p>4. Are there any projections of impacts related to decommissioning?</p> <p>5. Have there been any impacts where the effects were greater/ less than originally expected? Prompts: What is your view on the impact of Wave Hub on</p> <p>6. Employment: Has Wave Hub delivered what was expected in terms of employment? Were new jobs created (how many) and were those taken by locals (how many)? Why not? Has there been any supporting for local residents to gain employment in Wave Hub, or related businesses e.g. training, apprenticeship support, etc? What is the local opinion regarding the employment generated by Wave Hub? Has this changed over time?</p> <p>a. Wider regeneration: Has Wave Hub contributed to the development of other businesses / regeneration projects in the area? Do you feel there's greater economic potential in the area now because of Wave Hub? How so? Do you think that this has affected local community perceptions of the area – how/in what way?</p> <p>b. Has there been any investment in the local area related to the Wave Hub project – such as in community projects or wider regeneration investment? What benefits have these brought for the local community?</p> <p>c. Particular population groups: What have the impacts been on the fishing community/the surfing community? Are these in-line with their expectations?</p>

		<p>What effect do these impacts have on the fishermen – prompt: income, safety, stress, etc?</p> <p>d. Any other impacts expected or unexpected? E.g. visual impact, skills, identity, house/property value</p> <p>7. Have there been any unforeseen / unanticipated outcomes or developments?</p> <p>8. Have perceptions around these impacts changed since the development / over the last years? How / why?</p>
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## Annex 4 Focus group report

### A4.1 Introduction

ICF and partners were commissioned by the MMO to undertake research on the impact of emergent maritime sectors on local socioeconomic deprivation, and the perceptions of affected individuals and / or communities.

The aim was to provide an improved understanding of the potential for new maritime economic activity to affect socioeconomic deprivation in coastal communities, and hence support future marine planning policy design and assessment. In particular, the MMO is interested in better understanding the pathways through which impacts occur on local communities and how these are perceived and are experienced by individuals/communities.

The primary objective of the research was to examine the impacts of emergent sector development in deprived areas. Two ex-post evaluation case studies were selected in consultation with the MMO: Wave Hub (Hayle, Cornwall) and Green Port Hull (Kingston Upon Hull, Humber). Each case study drew on data available in order to evaluate the extent to which the economic activity of an emergent sector may have benefited individuals and communities in deprived areas. Interviews and a focus group with members of the public further explored how the expected and recorded benefits were experienced/perceived by the local community.

The research objectives were addressed through:

1. Preliminary research and conceptualisation of the topic and evaluation frame;
2. Case study evidence review and profiling (including secondary analysis of socioeconomic data and indicators, where these are available at the right scale);
3. Interviews to examine local socioeconomic linkages;
4. Focus group to explore local community experiences.

This report presents the results of the local focus group with members of the public in Hull discussing the impacts of GPH.

This report is organised as follows:

- Approach to the focus group research including purpose, recruitment strategy, summary of focus group plan, and approach to the analysis;
- Key findings organised by theme/research question, and;
- Conclusions.

### A4.2 Approach

The purpose of the focus group was to:

- explore impacts of GPH as perceived by the local community;
- understand how these influence people's perceptions on the wider positive and negative impacts of the development;

- understand how impacts identified influence participants' daily lives and the extent to which they enhance or diminish their quality of life, wellbeing, pride, community cohesion, etc;
- provide insights on how impacts might be managed - understanding how things might have been done differently, or what could be done to accentuate the positives or mitigate the negatives.

Focus group participants were City of Hull residents. They were selected for a number of reasons: Hull has higher deprivation than surrounding areas, and as they lived closest to the development, city residents were considered more likely to have experienced impacts and be able to contribute to the discussions. The focus group was held in a local community hall on 19<sup>th</sup> June with 12 members of the public.

The participants were recruited by a professional market research company, based on pre-established criteria:

- All participants were residents of the City of Hull;
- Quotas were used to ensure a spread of participants in terms of distance of their residence from the physical developments associated with Green Port Hull<sup>40</sup>;
- All participants were familiar with the development in the Port of Hull, referred to as Green Port Hull<sup>41</sup>;
- Balance of participants in terms of gender;
- Mix of ages;
- Mix of employment situations: including full-time work, part-time work, unemployed (seeking work), not in employment (not seeking work);
- Mix of educational levels: including NVQs, GCSEs, A-levels, Degrees and PhD.

See A4.5 for a summary of the characteristics of focus group participants.

A schedule of questions and prompts was developed to draw out themes identified in the literature review and case study profiling and to guide participants through a discussion on:

- Green Port Hull: understanding and initial reactions;
- Local community awareness and engagement around Green Port Hull
- Impacts on local area / community;
- Overall reflections on the development and its overarching impact.

The full focus group schedule can be found in A4.6. An audio recording and professional transcript of the focus group discussion was made available to the research team to ensure an accurate record and support subsequent analysis.

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<sup>40</sup> Three categories were used: Less than 2 miles; Less than 4 miles; Less than 6 miles from the development

<sup>41</sup> Note: A description / definition was provided as part of the screener questionnaire used by recruiters

## A4.3 Findings

### A4.3.1 Perceptions and knowledge of Green Port Hull (GPH)

When asked about Green Port Hull (GPH), focus group participants mainly associated it with the wind turbine blade manufacturing plant and associated facilities located at Alexandra Dock and identified as the 'Siemens factory'. All interviewees were aware of GPH and were of the opinion that awareness was widespread across City of Hull residents. GPH was noted as something people spoke about, at work or amongst friends and acquaintances.

Awareness of GPH and GPH activities is at least in part stimulated by local news, with multiple participants referring to hearing or reading about GPH on the TV news or in newspaper articles. A number of participants also referred to a wind turbine blade that was erected in the city centre as part of the City of Culture activities. As part of that installation a group of GPH volunteers were on site providing information to members of the public walking by.

Although the wind turbine in the city centre was considered to be memorable, other projects supported by GPH were less known. Some mentioned the Hull Street Race, an electric closed road race that occurred in April of 2019, although only some participants knew that this was supported by GPH. Other initiatives identified through desk research, including the training hub at Hull Library and art installations put in along the footpath, were not known to any of the participants. Nor were participants able to identify community projects delivered by GPH, with the exception of educational school trips across the Humber offered by ABP.

The majority of participants suggested that if they wanted to know more about GPH then they would search the internet for further information, with one of the participants noting that the GPH webpage tends to offer "*the most recent news*". There was overall, an interest in knowing more about "*the other things that Green Port Hull were doing*" besides the Siemens development, which was according to one participant what "*people are more familiar with*". Hull City Council and local news were trusted as sources of information, although participants noted that using the internet and social media is a more effective way of sharing information. Other GPH information identified as of interest included available jobs, community projects and potential public visits to the Siemens site (which a number of people would be keen to see made possible).

### A4.3.2 Job creation

Job creation appeared to be the most significant impact of GPH, according to participants. Participants noted that GPH had increased the availability of jobs, and that these jobs were suitable for a range of people.

Some noted that job creation was especially positive for young people and that opportunities for progression were available. As put by one participant: "*a lot of apprenticeships are taken on there so, and if you're starting off at an apprenticeship and you like it, you could possibly be there for the rest of your life.*"



Others noted that the jobs available were not only addressed to high-skilled workers, but that there were also low skilled jobs available, making jobs available to those who did not have the time or ability to receive training or pursue further educational qualifications. Another noted that Siemens also offered some flexible working arrangements, making it appropriate work for people with young children. Participants also felt that these jobs were available to people locally in Hull and that the focus on skills and education would help to keep it that way.

The jobs created were considered to have good pay and offer good opportunity for growth because they were within a large company. When asked about their personal knowledge of people who had taken jobs at GPH, however, responses were mixed. One participant noted that she knew someone who worked night shifts at GPH but that it did not seem as though the pay was very good. Another mentioned that they knew someone who had a job at GPH but ended up leaving because of long hours and uncomfortable working conditions. However, a few participants mentioned generous employee benefits and discounts.

The wider “*knock on effect*” of GPH to the local economy was mentioned, noting that because of GPH there is more income available to locals who tend to reinvest it in the local area. Another participant mentioned that lower unemployment and a more competitive pool of employees could drive salaries up.

### **A4.3.3 Skills**

Participants noted the contribution GPH had made to skills and saw this as separate to job creation. GPH was seen as being very engaged with schools, both encouraging students to consider and pursue engineering jobs and through offering apprenticeships.

Some participants expressed concerns that the apprenticeships and skills offered might be too niche, with one stating: “*You’re trained in one skill, if that skill suddenly disappears what do you do? ... You’re not employable*”. One participant related this back to Hull’s history with the fishing industry, noting that: “*It’s like when we had the docks and people were learning how to fillet fish. When the docks left, you’ve got thousands of fish filleters and no fish to fillet ... so (...) it was massive unemployment across the city. It’s the same with this. If they were to leave you’d be in the same boat wouldn’t you?*”

Participants concluded that a lack of transferability of skills was a risk, but it was a risk worth taking considering layoffs across industries and the benefits of the job. Many also noted that this was a challenge across industries, as certain jobs and technologies are becoming obsolete. The extent of Siemens’s investment in Hull also seemed to provide some confidence in the longevity of the industry with participants agreeing with the following comment “*...when a company is investing a billion pounds in an area, I don’t think it’s got any intention of moving*”

### **A4.3.4 Environmental impacts**

Most participants had not considered whether there might be environmental impacts associated with GPH, assuming that there were not any significant impacts or that the benefits outweighed the positives. This was attributed in part to trust in Hull City

Council's focus on green planning and in part to trust in Siemens as an environmentally-friendly company. As one participant put it: *"I think with it being such a green company they'll be trying their best to keep emissions low ... because otherwise they're just contradicting what they're going for."*

Participants did indicate that this would be something they would be keen to have more information on.

#### **A4.3.5 Air, dust pollution and traffic**

Participants did not seem to be aware of any significant issues with air or noise pollution. One participant mentioned that there would likely be some air pollution due to the increase in shipping traffic and poor emissions standards for ships, however this was not something other participants were aware of. The same participant argued that any issues in terms of pollution would be for the Government to resolve through regulation of shipping and *"not Green Port's fault"*.

One participant had recently moved home and now lived very close to the plant. She noted that her new house, as compared to her old house, was very dusty, although she did not know whether that could be attributed to the plant or some other factor.

Queried about traffic, participants argued this was certainly an issue, but one that was relevant to the wider City of Hull. To help mitigate the issue some mentioned that factories in the city had adjusted employee shift patterns so that they differ from other local businesses, however participants felt the issue of traffic remained and required improvements in road infrastructure. With reference to GPH's contribution to the issue it was not thought to *"make any difference"*. One participant mentioned that going back to the time when the first wind blades were produced, those were transported in the afternoon creating *"quite a bit of traffic"*. However, the issue had now been rectified with wind blades being transported during the night or more commonly on ships via the Humber.

#### **A4.3.6 Visual impacts**

The visual impact was mentioned by many participants, but perceptions on this were mixed. Most felt that they would not usually see the GPH development day-to-day, only when in the area, and when they did pass by, they considered it something interesting or positive to look at. However, as noted by one participant: *"it's a positive thing, but I wouldn't say that if it was outside my window."* Other participants agreed with this point and noted that property prices in the immediate area around the development had gone down, including the prices of some waterfront homes that had previously been considered very desirable.

The overarching opinion was that unless it is in someone's daily and immediate view it would not be of consequence with the benefits of the development significantly outweighing any negative visual impact. In addition, it was noted the area around GPH is already industrialised with a BP power station and steel factory amongst the developments in the vicinity, so it is the sort of development that was *"expected"*.

#### A4.3.7 Access and public footpath

Participants appeared somewhat uncertain around public access footpaths that are available in the vicinity of the GPH development. One participant suggested, and some agreed, that *“all footpaths are closed”*, however, others were aware of the diversion of the footpath with five participants to the workshop having used the footpath for walking or jogging. The same participants mentioned the path is commonly used by people leisure walking or walking their dogs. Although characterised as a pleasant walk, one person mentioned the visual impact of the wall adjacent to the GPH development as *“not exactly pretty to look at”* while a number of participants noted an unpleasant odour from the river.

Overall, it was suggested that the path is predominantly used by those living nearby: *“I don’t think many people know about it unless you live on this estate”*. The diversion of the public footpath did not appear to have impacted participants to the workshop, and any impact is likely limited to residents in close proximity to the footpath.

#### A4.3.8 Effects of changes in population

Participants noted that infrastructure and services provision in Hull had not kept pace with population growth. GPH was mentioned as just one driver of population growth, alongside for example Hull being the City of Culture.

Participants discussed increased pressure on the school systems, particularly in the last three to four years, noting that this meant that children were frequently being sent to their third or fourth choice schools and that these were often far away. This was thought to further contribute to problems with traffic. Participants also noted increased difficulty in accessing medical care.

Increased demand for housing, reconstruction and regeneration of the wider Hull were also mentioned by participants, but only a couple of participants referred to the impacts it had on the local character of the area with one participant noting that the new developments in the local area lacked in character compared to the old houses they replaced: *“I think there’s less character, there’s no character there”*. However other participants noted newbuilds addressed a market demand and were *“good for new people”*. Asked about how these changes make local residents feel, participants argued that *“[change] is a part of life”* and that overall life in Hull is better now. No impact was noted on participants’ sense of belonging or attachment to Hull.

#### A4.3.9 Overall assessment

Despite some of the negative impacts brought by GPH, participants were overall positive on the impacts brought by GPH. Speaking of Hull’s previous history with unemployment, one participant stated: *“I’d rather be in the situation that we’re in now - struggling with a bit of traffic and having to take your kid to a school a little bit further away than have a partner or husband or wife who can’t get a job.”*

Recent regeneration in Hull – both GPH and the City of Culture – were also seen as responsible for *“putting Hull back on the map”*, with one participant commenting that people from elsewhere now knew where Hull was.

Positive views were expressed on the impact of GPH on prospects for the future, with participants noting Hull has “*changed for the better*” and that “*people have more reason to stay in Hull than leave now*”.

#### **A4.4 Conclusions**

Impacts of the GPH as experienced by the local community related primarily to improvements around the availability of jobs and opportunities for training and development of skills. Some negative impacts identified were only thought to insignificantly contribute to underlying / wider issues, such as pre-existing issues around traffic in Hull.

The availability of jobs offered by GPH was a positive, despite people identifying risks in specialisation and possible substandard working conditions. Clear links were drawn by participants to Hull’s not so prosperous economic past and persisting issues of unemployment. Hull’s past, including both the prominence of the fishing industry, the loss of the fishing industry and subsequent unemployment were mentioned by participants at several points during the focus group. These were almost always brought up in conjunction with discussions around the economy, employment and opportunities for young people in Hull.

Participants reflected that members of the public were content with improvements to their city and Hull’s reputation, resulting from GPH, and were hopeful about the future.

No impacts were identified on people’s daily lives – even by those living closest to the GPH development. Any references to an influx of people and changes to the local character of the area as a result of development, did not seem to have any impact on people’s sense of belonging.

Participants appeared to have good awareness of GPH, recognising it included more than the Siemens development, although they were not able to provide information on other relevant businesses or activities.

The main limitation of this Focus group study was the difficulty in disentangling the source of the impacts discussed, with a few participants appearing less clear on the subject due to wider regeneration that has taken place in the city over the same time period. Hull’s status as the City of Culture 2017 appeared to influence many of the responses. Participants noted that this coincided with developments in GPH, that both had brought prosperity, and that in some instances it was difficult to tell whether impacts had come from one or the other.

## A4.5 Characteristics of Focus Group Participants

**Table A4.1: Characteristics of Focus Group participants**

Gender	Age group	Employment status	Distance from development	Education
Female	18 - 24	Full Time	<6 miles	NVQ2
Female	25 – 34	Full Time	<6 miles	NVQ3
Male	45 – 54	Unemployed	<4 miles	GCSE
Female	35 – 44	Part time	<6 miles	NVQ3
Male	18 - 24	Full Time	<4 miles	A level
Female	35 – 44	Part time	<2 miles	GCSE
Male	25 – 34	Full Time	<4 miles	Degree
Female	45 – 54	Part time	<2 miles	A level
Male	55 or over	Retired, Not seeking work	<6 miles	PhD
Male	25 – 34	Full Time	<4 miles	NVQ3
Male	25 – 34	Full Time	<2 miles	Degree
Male	25 – 34	Full Time	<4 miles	NVQ2

## A4.6 Focus Group schedule

**Length of Focus Group:** 2 hours (evening session)

Session
<p><b>Introduction to the day (5 minutes)</b></p> <p>Good evening. Thank you very much for making time to come to this meeting on the impacts of development of new economic activities on local communities. My name is [name] and this is [name]. We will be taking you through today's session.</p> <p>Our organisation, ICF, is doing research for the Marine Management Organisation on the socioeconomic impacts of development, such as the Green Port Hull, on local communities. The Marine Management Organisation (MMO) is the public authority that licenses and regulates marine activities in the seas around England and Wales so that they are carried out in a sustainable way.</p> <p>The aim of today's discussion is to gain a better understanding of the impacts related to the Green Port Hull as felt by the local community. These impacts might include local economic prospects, such as the availability of jobs, the effects it has had on the character of the local area through impacts on views and less tangible impacts on people's experience of living in Hull.</p> <p>This information will be used to help the Marine Management Organisation to better plan in the marine environment and understand the effects of growing maritime sectors, such as offshore renewables, on local communities.</p> <p>All of you may experience things very differently and there are no right or wrong things to say. Our role is to guide the discussion and if there is anything you don't understand or don't feel comfortable about, please do say so.</p>

We will be taking notes throughout the session so that we have a record of what is discussed but we will not use anyone's names when we write up our report for the Marine Management Organisation or in any other information we produce based on this research. We will also be recording the session - this is just to make sure we properly capture what is said. Please try not to interrupt or talk over other people as that will make it difficult to hear and understand what everyone is saying.

### **Green Port Hull: Ensure common understanding (10 minutes)**

You have all indicated you are aware of the Green Port Hull and related development at Alexandra Dock. We would like to briefly introduce it to ensure we all have a common understanding of what we mean when we are referring to Green Port Hull in today's session.

Green Port Hull is a partnership between the East Riding and Hull City Council and ABP (Associated British Ports) to promote Hull and the wider area and attract renewable energy sector investment. The main investment associated with Green Port Hull is the Siemens Gamesa – ABP investment resulting in the construction of the wind blade manufacturing plant and associated facilities located at Alexandra Dock (not far from where we are today). Throughout today's discussion when we refer to Green Port Hull we are referring to the development at Alexandra Dock and associated facilities and projects developed by Green Port Hull in support of attracting renewable energy businesses and building the local skillset and capacity in the wider renewables industry.

- Can I please ask as to the extent that this description matches your understanding of Green Port Hull?

*Prompt: Encourage people to share opinions. Ask if others have a similar understanding: Does this fit with what others think? Any different opinions or anything to add to what has already been said?*

### **Individual introductions and Icebreaker**

Let's start by introducing ourselves. We've all usefully got a label with our first names, so we don't have to worry about remembering all the names. Could you just say:

- Who you are (your name – so that we get the pronunciation right) and where you live in relation to GPH e.g. you can see it from our house, you are a 20 minute drive away etc.

### **Icebreaker (15 minutes)**

**Characterise the development:** Please write down the first word that comes to mind when you think of Green Port Hull and associated development.

*Prompts: What are the words that come to mind in terms of Green Port Hull, its characteristics, effects or how it makes you feel?*



**Roundtable:** Ask everyone to share and say a few words (no more than a sentence) for each.

*Prompt: Depending on the nature of what they are saying ask them to justify: Why do you think that? / What is the cause of it? / How does it/that effect you? / How significant is it? / When did/does it occur?*

- Was there anything you heard that you didn't include in your words but particularly resonates with what you think of Green Port Hull? Which one?
- Was there anything others included that you didn't expect to hear? What/why?

**Local community awareness and engagement (10 minutes)**

- How do you know about Green Port Hull?  
*Prompt:*
  - Can you remember when you first heard about Green Port Hull or the Alexandra Docks development?
  - Where did you find this information/where did you hear about that? If you wanted to find more information where would you get it from?
- As far as you are aware or can remember, was the local community informed of the development and asked about their opinions on it? If you lived here at the time, can you remember if local people had any concerns about it?
  - Was that prior to, during or after the development?
  - Have you been personally involved in any way?

**Impacts on local area / community (Part 1: Break out session) (20 minutes)**

We will now break into 2 groups (random allocation by facilitator) to discuss the impacts of Green Port Hull on the local area and community. Each group will discuss and come up with a list of up to five ways in which they think the local community has been affected by Green Port Hull. We will then come together as a single group to further discuss these.

- What do you think are the impacts of GPH and its activities on the local area and community?

*Prompts:* These can be positive or negative and of different scales – across the city as a whole or in your local community. You might have personal experience, or it may be something that you are aware of / have read about in local press or has come up in discussions with your family, friends or neighbours. It may also be something that has changed over time, so it used to apply but no longer does – e.g. used to be indifferent but then came to appreciate it for the jobs created

*Facilitator to prompt – ensuring everyone states their opinion. Nominate someone from the group to write down impacts as they are being discussed and agreed. Then prompt an identification of the top 5 – no need to rank.*

**BREAK (5 minutes)**

**Impacts on local area / community (Part 2 Plenary) (45 minutes)**

*Facilitators to introduce the issues raised by the 2 groups one by one (see below), asking participants' contributions based on previous discussions, particularly in cases where an issue was raised by only one group. In those cases, a follow up question will be included:*

- Were there any impacts identified by the other group that you didn't expect to see? Which one(s) / why? Did Group 1 also discuss impact x?

*The discussion will explore all impacts identified across the 2 groups. We have prepared some questions based on impacts already identified from our Case study review. If any of these are not picked up by respondents, they will be prompted at the end of the session – i.e. How about x?*

### **Employment and skills**

#### ***Prompt type #1 – the impact pathway***

- How has Green Port Hull impacted employment / job opportunities in Hull?
- Who has benefited from improved job availability? Why /why not?
- Are residents in Hull able to pursue the new employment opportunities? Why / why not?

*Prompts: Are the new job opportunities desirable? Are there barriers to people accessing the benefits? What is the cause of it? Do you have any suggestions as to what would help to overcome these barriers?*

- Have there been any negative impacts on employment, for example on any particular sector(s)?

#### ***Prompt type #2 – lived experience***

- Has the impact on jobs affected you personally? Have you seen effects on you friends/neighbours/ local community?
- What do you think about it / How does it make you feel? Why is that important?
- Has the impact on employment changed over time?
- (For negative impacts) As far as you are aware have these concerns been raised with Siemens, GPH or the Council? What has been their response? Has there been any improvement action / mitigation as a result?

#### ***Prompt: Skills***

- What has been the impact of Green Port Hull on the skills of the local workforce?
- How would you assess the opportunities available for training?  
*Prompts: Is training accessible / available to most? Why is this important?*
- Do you see any barriers to people accessing training? Do you have any suggestions as to what would help to overcome these barriers?
- Has the impact and/or how you feel about it changed over time and how/why?

### **Impact on the local area and community**

#### ***Visual impact***

- How has the development at Green Port Hull impacted views of the estuary/coast?

- How would you assess the quality of the view now compared to what it used to be?  
*Prompts: In what ways does this affect you / What do you think about it / How does it make you feel?*
- How frequently do you visit the area? Has that changed since the development of Green Port Hull? How so? How does that make you feel? Has that changed over time and how/why?
- (For negative impacts) As far as you are aware have these concerns been raised with Siemens, GPH or the Council? What has been their response? Has there been any improvement action / mitigation as a result?

### **Access to the coast / Public footpath**

- What has been the impact of Green Port Hull on access to the area and the waterfront?
- Has the development altered the things you are able to do?  
*Prompts: How often would you use the public path before? How often do you use the diverted path now? What do you think of it? What has changed? In what ways does this affect you?*

### **Community projects – i.e. anything that has been done to benefit the local community**

- Are you aware of any community projects related to Green Port Hull? If so, what do you think of them?
- To what extent do these benefit residents across Hull?

### **Query known projects:**

- Are you aware of the Green Port Training Hub located in the Hull Library / the arts installation in the public footpath adjacent to the development / the educational cruises in Humber for schoolchildren, The Campus?

### **Follow up questions depending on answers**

- Have any of you visited any of these?
- What did you think of them? Prompts to vary depending on answers
- What would you like to see for your local area in terms of community projects?

### **Traffic, air pollution and noise**

- What has been the impact of Green Port Hull on traffic and air pollution?
- What is the extent of that impact? Is it local to the area or does it affect the wider city of Hull?
- Have you personally experienced an impact? Prompt: Has the development altered the things you do? E.g. the route you walk or drive around in Hull?
- Have these impacts changed over time? Prompt: Did they relate to a particular time in the construction or to a particular time of the day/night?
- How does that make you feel?

### **Noise levels**

- What has been the impact of Green Port Hull on levels of noise?

- Have you personally experienced an impact? What do you think of it? How significant is it?

### **Environment**

- As far as you are aware have there been any other impacts on the environment?

### **Across noise – air pollution – traffic:**

- As far as you are aware have these concerns been raised with Siemens, GPH or the Council? What has been their response? Has there been any improvement action / mitigation as a result?
- How do you think these impacts could be mitigated?
- Has the impact and/or how you feel about it changed over time and how/why?

### **Local character of the area and the community**

We have talked about a number of impacts we would like you to think about how these might have affected the local character of the area and your personal attachment to Hull.

- Has the development of Green Port Hull altered the character of the local area? In what ways?  
*Prompt: both physical changes, changes to the local population characteristics, historical or cultural/heritage associations*
- Has there been a change in access to public services and facilities? How so? E.g. improved public transport or too crowded services. How does that make you feel?
- Has there been a change in the population make up e.g. through new people coming in or people whose jobs disappeared moving out?
  - How has that affected the community? How does that make you feel?
  - Does it impact on your attachment to the local area or your sense of identity or belonging with the community? If so, in what ways?
  - Are there any particular groups you think are being left out or marginalised?
- (For negative impacts) As far as you are aware have these concerns been raised with Siemens, GPH or the Council? What has been their response? Has there been any improvement action / mitigation as a result?
- Has the impact and/or how you feel about it changed over time and how/why?

### **Overall reflections (Plenary) (5 minutes)**

Looking back to our discussion today a number of positive and negative impacts of Green Port Hull were discussed.

Please take a minute to think about your overall impression of Green Port Hull.

- How does the development make you feel about life in Hull and the prospects for the future?

*Prompt: Overall thoughts and feelings and whether these have changed over time. If so, how?*

- Before we close today's discussion is there anything else that you would like to tell us about your experience of the GPH development and how it impacted you or your local community?

Would you like to be more engaged? If so, how and by whom? What sort of information would you like to receive? e.g. social initiatives in the local areas, getting more jobs for local people in GPH, to discuss issues about the management of the site that may impact on local people, etc.

**Thanks and close (5 minutes)**

Thank you very much for your participation in this group and all the valuable information you have given us. As mentioned at the start, your contributions will be used in a report for the Marine Management Organisation (to be published at the link provided in your copy of the Consent form) but we will not use anyone's names in the report or in any other information we produce based on this research. Before you go please sign your name to the form held by [name] who will hand out your thank-you payment.

If you have any questions, please ask either of us now, or contact us using the email address that is on the copy of the consent form you were given when you arrived.

You can also use these email addresses to provide any feedback on how you found the session so that we can improve future sessions like this one.