UK Government

Evaluation of the Floating Offshore Wind Manufacturing Investment Scheme

Process evaluation – Final report

Department for Energy Security and Net Zero (2025)

This is an independent report produced by Ipsos, for DESNZ, and as such, may not reflect policy views or direction.

Contents

1 Introduction

Ipsos was commissioned by the Department for Energy Security and Net Zero (DESNZ) in September 2023 to conduct a process evaluation of the Floating Offshore Wind Manufacturing Investment Scheme (FLOWMIS) application phase, and to develop a Theory of Change (ToC) and a Value-for-Money (VfM) framework for this scheme.

The primary aim of the process evaluation is to understand the scheme's delivery in practice compared to what was originally intended, what worked well and less well, whether the context influenced delivery of FLOWMIS, and to assess what can be learned from how the intervention was delivered / how delivery can be improved.

The purpose of this work is to produce findings that will feed into ongoing programme management, inform policymaking and shape the development of a future impact and VfM evaluation of FLOWMIS. This document outlines our findings from fieldwork to date.

1.1 Overview of FLOWMIS

The UK needs more investment to facilitate the capacity and capability to deploy, and maintain, the scale of a floating offshore wind developmental pipeline that meets the UK's offshore wind ambitions (in turn contributing to the Net Zero transition). Specifically, to have 43-50GW of offshore wind by 2030.[1] The aim of FLOWMIS is to support the delivery of the port infrastructure to facilitate floating offshore wind activities. While the earlier Offshore Wind Manufacturing Investment Scheme (OWMIS) initiative aimed to directly fund the creation of integrated port hubs for major offshore wind manufacturing and support new manufacturing facilities in the UK, FLOWMIS has a more specific and focused objective of supporting purely floating offshore wind.

Floating offshore wind turbines are largely made of the same components as traditional, fixed bottom offshore wind turbines. This means that a large part of the existing offshore wind supply chain can be used to support the development of floating offshore wind. Consequently, many of the developers and manufacturers overlap and operate across both the floating and fixed bottom offshore wind industrial areas. The OWMIS scheme and its objectives to stimulate the offshore wind industry will therefore intersect with and support the ambitions of FLOWMIS.

The UK government has allocated up to £160m to the FLOWMIS scheme. This funding is to be distributed as targeted investments through grants to successful applicants for FLOWMIS to support essential elements of port infrastructure. Examples of projects potentially funded through the scheme include port infrastructure to support turbine integration with floating wind foundation, floating wind foundation assembly and/or floating wind foundation manufacture.

[1] DESNZ (2025) Clean Power 2030 Action Plan

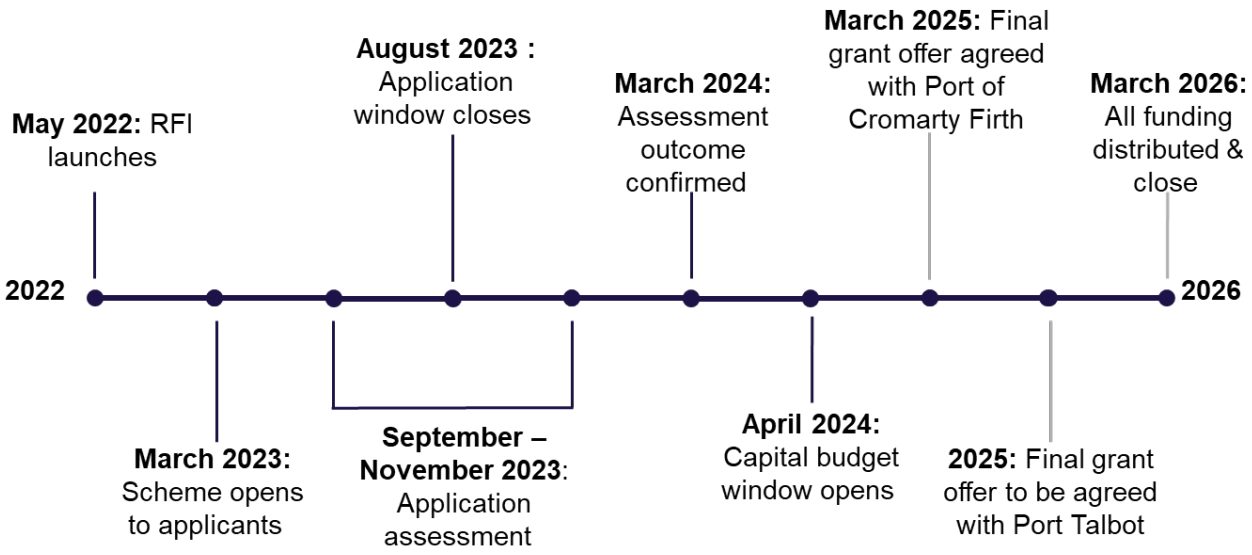
Each successful applicant to the scheme will have objectives made specific to their project, however, the overall aims and objectives of FLOWMIS include:

- **Investment in port infrastructure:** The scheme is focused on addressing the significant space requirements needed for floating offshore wind infrastructure. This issue is one of the most urgent challenges for the sector as it works to develop the capacity for large-scale deployment of floating offshore wind systems. This aim supports one of the Prime Minister's five Missions (making Britain a clean energy superpower, including delivering Clean Power by 2030 and accelerating to net zero).
- **Investments that target cost reduction:** FLOWMIS seeks to target activities that can have a notable impact on reducing Levelised Cost of Electricity (LCOE)[2] and create Gross Value Added (GVA) benefits.
- **Delivery through grant funding to address market failures:** FLOWMIS delivers support through grant funding. This approach targets market failures such as the reluctance of private investors to commit capital due to high upfront costs and higher degrees of uncertainty faced with new to market systems such as floating offshore wind.[3] By offering grant funding, FLOWMIS aims to help reduce capital costs, de-risk the provision of private sector capital, and alleviate challenges like inadequate investment incentives and information asymmetries. This support is expected to subsequently encourage wider investment in port infrastructure projects than would otherwise occur.
- **Investment in jobs and skills:** FLOWMIS seeks to create higher paying jobs when compared to the counterfactual of doing nothing, providing employment and training opportunities at ports and the manufacturing facilities that co-locate there (hence helping to stimulate spillover/agglomeration effects).

[2] LCOE is the discounted lifetime cost of both building and operating any energy generation unit including pre-development costs. Source: DESNZ (2023) Electricity generation costs 2023

[3] It can be necessary for governments to intervene to reduce uncertainties and risks when these challenges are faced in order to achieve policy objectives such as achieving increased energy security and net zero ambitions.

Figure 1: Present and Tentative Delivery Timelines for FLOWMIS



1.2 Methodology

This Final Report is based on eight interviews conducted with ports who registered their interest in FLOWMIS but did not go on to submit an application, ten interviews with ports who applied to the scheme and took part in the assessment process, and ten interviews with internal departmental stakeholders involved in designing and delivering the scheme.

As part of this process evaluation a further 11 interviews were conducted with internal stakeholders with two interviews conducted with successful applicants. These further interviews were conducted between Nov 24- Jan 2025.

Table 1: Interview Timelines and Topics Discussed

Interview Dates	Stakeholder type	Number of Interviews	Topic discussed
Interviews conducted: *Dec 2023- Jan 2024*	Internal Stakeholders	10	Strategic context, views on the competition call and scheme, FLOWMIS delivery, governance, application process, early impacts.
	Non-applicants	8	Strategic context, views on the competition call and scheme, application process, early impacts.
Interviews conducted: *May-Jun 2024*	Applicants	10	Strategic context, views on the competition call and scheme, early impacts.

Interview Dates	Stakeholder type	Number of Interviews	Topic discussed
Interviews conducted: *Nov 2024- Jan 2025*	Internal Stakeholders	11	Strategic context, views on the competition call and scheme, FLOWMIS delivery, governance, application process, due diligence and Final Grant Agreements early impacts.
	Successful Applicants	2	Strategic context, views on the competition call and scheme, FLOWMIS delivery, application process, due diligence and Final Grant Agreements early impacts.

Limitations of the method and approach

The present process evaluation of FLOWMIS was designed to align with the scheme's timelines, which necessitated focusing on specific stages within the application process. While this approach means that the evaluation does not encompass the full impacts of the scheme, it allows for timely and relevant feedback up until the Final Grant Agreement stage with the two successful applicants. This targeted evaluation provides valuable insights into the application process and highlights areas for potential improvement. Despite the time constraints, the report offers meaningful suggestions for enhancing future iterations of similar schemes.

1.3 Report outline

The report begins with a summary of the strategic context and the role of FLOWMIS in addressing the challenges faced by the sector. This is followed by a discussion of the remaining challenges that largely fall outside of the remit of FLOWMIS. The report then discusses the delivery structure and processes of FLOWMIS: the competition call, the assessment process, governance of the scheme, notification of application outcomes, scheme delivery to date including the due diligence process, project progress to date, any early impacts and lessons for future support identified by applicants. A summary of learnings and recommendations then follows.

2 Summary of findings

2.1 Strategic context

The UK's floating offshore wind sector is at a critical juncture. It must address substantial challenges related to scaling-up its manufacturing and industrial base to ensure its future growth and significant contribution to the UK's Net Zero targets and energy security. A key challenge currently facing the sector is the availability of suitable port infrastructure which can cater for the assembly, maintenance, and deployment of very large floating structures. As highlighted in interviews with non-applicant ports, a coordination failure exists because: (a) ports are reluctant to invest in upgrading their infrastructure without confidence that developers of flow projects will utilise it, and; (b) developers of flow projects are reluctant to invest in ports that do not meet their requirements (i.e. they want a port that is ready for them to build out on without having to wait or contribute to land remediation/preparation works). Ports require market visibility and framework agreements to attract manufacturers and inward investment, thus ensuring a reliable supply chain structure.

Capital investment is a significant hurdle for the sector, with projections of up to £4 billion needed by 2040 for port development.[4] Timing mismatches between project delivery and market readiness further complicate investment efforts, as ports struggle to raise capital for upgrades due to the long lead times (time taken for a port to plan, gain consents and build out the necessary infrastructure) and the investment risks associated with as yet untested floating offshore wind projects/route to commercial market.

Additionally, the floating offshore wind supply chain must navigate the challenging balance between acting early enough to gain a first-mover advantage and ensuring that technological developments and market conditions are ready for sustainable and profitable deployment. The UK is projected to be a market leader by the mid-2030s with over 25 GW worldwide forecasted through floating offshore wind.[5] However, there is the risk of being superseded by better-prepared competitors in Europe who gain a head-start. For example, recent and forthcoming allocations in countries such as China, Indonesia and the Netherlands may lead to further challenges.[6]

These asymmetric information market failures and coordination problems delay strategic investments, and as a result provides ‘first mover’ advantages to any overseas competitors who act to move ahead more quickly. This is a familiar strategic intervention justification in public policy.

[4] RenewableUK (2023) Upgrading our ports is essential to kickstart UK floating offshore wind industry
[5] Baringa (2024) Floating offshore wind - The quest for scale
[6] RenewableUK (2025) Global operational offshore wind capacity grows by 15% in 12 months to 80 gigawatts

Role of FLOWMIS

FLOWMIS was set up to provide up to £160m in grant funding to support the development of port facilities for large-scale floating offshore wind deployment. FLOWMIS was launched to tackle the underinvestment in port infrastructure by providing funding aimed at preparing ports for the anticipated future demand from the floating offshore wind sector. The scheme was designed to give ports the financial headroom to undertake necessary upgrades and expansions, thereby overcoming the present market failure in the sector. The scheme is providing financial support to ports, enabling them to enhance their infrastructure in preparation for the anticipated demands of the sector. This provides a level of certainty – something of great value in this nascent new segment of the offshore wind sector – reassuring developers that the correct scale of infrastructure will be in place to allow them to deploy floating offshore wind technologies. By doing this, FLOWMIS seeks to facilitate the growth of the UK's floating offshore wind manufacturing and industrial base and attract manufacturers to establish operations in geographical proximity to these ports. At present, FLOWMIS has generated strong interest and viable applications, showing that the scheme is targeted correctly, and there is confidence in its ability to address underinvestment in port infrastructure. However, delivery is still in the Final Grant Agreement phase for one port, with funding been announced for the second,[7] and the full extent of its impact will be clearer in subsequent phases.

The delivery mechanism for the FLOWMIS scheme, through grant funding, appears to have been successful given the number of applicants (17) and the level of interest that there has been in the scheme. Suggestions for improvement to aspects of delivery were also mentioned in the interviews with non-applicant ports, these included:

- A business case driven funding model that allows for non-prescriptive solutions tailored to the specific needs of port infrastructure projects.
- Contract for Difference (CFD) round-type approach, linking government grants to secured wind farm capacity.
- Profit sharing models to ensure government investment aligns with project success and can therefore recoup costs.

Whilst FLOWMIS has generated interest from ports (as evidenced by the applications received), non-applicant ports have expressed concerns about the clarity and specificity of the scheme's guidelines, specifically related to the technical specifications for floating offshore wind capabilities. This feedback likely reflects the understandable complexity of the industry, which remains highly technical and is still in the early stages of development.

Across the interviews from non-applicant ports, it was mentioned that the magnitude of support from the FLOWMIS scheme does not match the magnitude of port development required across the UK to meet the sector’s needs and to compete with European counterparts in attracting manufacturers, although this was not necessarily the scheme’s intention.

[7] DESNZ (2025) Government unlocks floating offshore wind with major investment for Scottish port

2.2 Remaining challenges facing the sector

In interviews some of the challenges facing the offshore wind and ports sectors, which fall outside of the scope of influence of FLOWMIS were discussed. The majority of interviewees across applicants and non-applicants identified a lack of suitable ports to support floating offshore wind as the biggest challenge facing the sector. There are several drivers to this which are linked to the delivery of broader strategic national priorities for energy security and de-carbonisation:

- **Manufacturing:** FLOWMIS was not designed to fund manufacturers but rather to facilitate their operations by providing suitable port infrastructure, acknowledging that manufacturers will then follow. Enabling port infrastructure is only part of the challenge however, and support for manufacturers, such as provided through OWMIS, may be required in the future. The validity of this assertion will need testing in future industry engagement, including considering any aspects not addressed by the preceding OWMIS support for manufacturing and supply chains.
- **Spatial challenges and technical uncertainties:** It is understood by the ports that an immense amount of space is required to support the construction of floating structures, and that this presents a number of serious technical barriers. It is estimated that around 15-20 hectares of land is required for the pre-assembly of turbines and 10-12 hectares of wet storage areas for storing the floating substructures prior to their final assembly.[8] However, there is still uncertainty at ports over the exact specifications for quay pressures, quay edge specifications and water depth. This uncertainly reportedly prevented some port developers from accurately estimating costs, hindering the development of a business case for infrastructure upgrades. These uncertainties are an inherent part of new to market engineering challenges of this type.
- **Use case:** There is uncertainty over how port infrastructure will be used and how income will be generated in the future once the initial construction phase of floating offshore wind projects are completed.[9]
- **Technological readiness:** There are many variations of floating offshore wind structures which fall into three main categories (SPAR, TLP and semi-submersible[10]) currently in development. However, at this point none have been deployed at scale to evidence their commerciality. Additionally, there is considerable uncertainty regarding more speculative designs and methodologies for both installation and long-term maintenance. Given the current uncertainties, there's little confidence to validate the

[8] Floating Offshore Wind Centre of Excellence (2023) Guide to a floating offshore windfarm, section I.8 Construction port

[9] It is currently uncertain whether and how deployed systems will use port facilities for major maintenance, repairs and future system upgrades.

[10] SPAR = a cylinder that floats vertically in the water (often with ballast tanks in parts of the cylinder volume), constructed of steel, concrete or a combination of both. TLP = a Tension Leg Platform is a foundation that is kept at rest using heavy steel rods anchored to the seabed using suction anchors or suction caissons. Semi-submersible Wind Substructure = a foundation typically comprised of a submerged hull with typically pontoon-type columns joined to the foundation by large tubulars. It is partly submerged to provide station keeping and stability. Source:eSubsea, Floating Offshore Wind Foundations.

methods, despite theoretical assurance in installation techniques, as they haven't been executed on a large scale.

- **Suitable land:** Identifying suitable land in strategic locations that is available to develop has proven to be a challenge for ports. As a result, there is a boom in regenerating previous ship-building yards due to their access to the North Sea. However, surrounding areas are often less than ideal to support necessary infrastructure such as the necessary transport links, skills training for workers or energy supply and grid access.
- **Delivery timelines:** In order to have a thriving floating offshore wind sector in the UK, there needs to be both manufacturing supply chains and ports in operation. This inter-dependence creates a risk, specifically due to the long development times associated with port development, hastening the need for schemes such as FLOWMIS to support the development of ports. Developers are showing interest in using ports in the future, but many are currently unwilling to provide the certainty needed for ports to invest in infrastructure by signing contracts (hence the importance of the coordination failure noted above).
- **Supply chain planning uncertainty:** The current system allows only a limited number of projects to simultaneously bid for port infrastructure, leading to potential bottlenecks and delays. Additionally, the lack of a clear pipeline of future projects beyond 2030 complicates supply chain planning and investment decisions, creating uncertainty around market extent and project viability. Based on a survey undertaken by Baringa, the supply chain constraints are concentrated in floating foundations, export cables, port infrastructure and vessel availability.[11]
- **Localisation Problems:** The logistical complexities of transporting large floating structures are compounded by the lack of localised port infrastructure and manufacturing capabilities. This exacerbates the challenges associated with floating offshore wind projects, as illustrated by an internal stakeholder example in which turbines needed to be towed from Amsterdam to the UK.
- **Grid Capacity and Transmission Bottleneck:** The existing grid infrastructure may face capacity constraints as it adapts to accommodate new renewable energy inputs. Potential bottlenecks in transmission lines could impede efficient energy distribution, necessitating upgrades and expansions.

According to interviewees, without the government support through schemes like FLOWMIS to reduce investment risks, the UK offshore wind industry may have faced significant delays in its progress toward Net Zero targets, potentially hindering the development of the UK's floating offshore wind manufacturing and industrial base, and continuing reliance on foreign supply chains.

The effectiveness of FLOWMIS in addressing challenges

The majority of stakeholders interviewed for this evaluation gave the view that a greater amount of funding is required to support the industry than is currently being provided. However, there are mixed views on this depending on the stage of project and on how existing

[11] Baringa (2024) Floating offshore wind - The quest for scale

FLOWMIS funding is being distributed. Ports that were already further ahead with their project and looking for a small grant to fund an aspect or phase of work, felt that the level of funding available was suitable. Applicants that are still attempting to finance their projects, or in the development phase of major port construction, expressed that funding is not distributed widely enough and is therefore unable to support their plans. Several applicants expected the scheme to share resources across four or five smaller projects in order to support a greater number of projects and spread risk around the UK and one developed a bid accordingly. They also suggest that distributing funding this way would enable the development of a variety of technologies to establish a base to improve deployment. However, there is also a concern that sharing funding across a greater number of applicants to support a greater number of smaller projects would dilute the impact of the scheme and put final investment decisions (FIDs) at risk.

One applicant expressed concern over the number of ports receiving funding (two), as they stated the ports will gain an advantage over other operators in their markets in the future when facilitating and assisting developments. As a result, in a future situation where multiple developers are attempting to deploy their project at a port, developers that are unable to secure a contract at a FLOWMIS funded site (which has received support to develop the site earlier) will either be delayed or will be required to pay the full market cost of port infrastructure.

One applicant expressed concern that the strategic consideration given to projects may not have taken into account early demonstrator projects. Areas near to early investors involved in demonstrator projects who obtained CfD funding already have consents in place and have a connection to the grid in the Celtic Sea. As projects in these locations are not receiving funding, supply chains may not form in time to support such strategically important projects. Despite this, stakeholders involved in FLOWMIS delivery have stated that strategic assessments did consider proximity to potential pipeline projects and funding decisions were made on a combination of technical, economic and commercial factors.

There is an understanding that the scheme is contributing towards creating an environment in which manufacturing supply chains can develop and grow around funded infrastructure. However, one applicant suggests there will need to be an additional support mechanism for manufacturers in the future to provide greater confidence and enable them to make final investment decisions.

Whilst FLOWMIS aligns with the broader objectives of the Offshore Wind Sector Deal and the UK's Net Zero ambitions, its effectiveness in supporting these initiatives has been questioned by the interviewees. In particular, there is a call for a more strategic, collaborative, and flexible approach to funding that caters to the unique challenges of the floating offshore wind sector and supports the UK's broader energy transition goals. However, it is understood that achieving such flexibility may not be wholly feasible due to considerations of robustness and the lack of specificity may make clear assessment and providing guidance to applicants difficult.

Influence of broader government policy relating to energy and Net Zero on business planning and investment decisions

One applicant argued that the UK government needs to provide a clear and consistent policy for renewable energy, particularly regarding the building of offshore wind farms. They suggest that setting unfeasible net-zero targets can be counterproductive and that greater honesty about the challenges faced in reaching these targets is important. The applicant also emphasised the need for a simpler policy that clarifies the benefits of renewable energy, such as job creation and energy independence, to the public.

Applicants interviewed expressed the view that the UK government's announcement to increase offshore wind energy capacity to 43-50 gigawatts by 2030 is a positive development that instils confidence in the industry.[12] However, applicants also emphasised that this ambition alone does not address the overall challenge of investment timelines. Applicants stressed the need for a concrete pipeline of projects with clear timelines to enable final investment decisions (FID).

Additionally, government policies, particularly those related to clean maritime initiatives, have had a notable influence on one applicant port's operational changes, such as the implementation of offshore power and decarbonisation studies.

Method of providing support

The majority of interviewees stated that grant funding is the best approach to help make the return on investment an attractive proposition for developers to initiate projects of this type in an immature market. Trusts ports[13] are especially reliant on grant funding, as they are unable to borrow large sums to invest in infrastructure. Nevertheless, some interviewees recognise there could be alternative ways to provide support such as the creation of a new public fund, or using the National Wealth Fund, to capitalise on the market opportunity whilst recouping funds. Additionally, applicants suggested using a combination of grant funding and initiatives, like the Strategic Investment Model in Scotland, to unlock greater private investment. Alternatively, once infrastructure projects and manufacturers have reached the stage of a final investment decision, a revenue support mechanism or low-cost capital provided by the National Wealth Fund could be offered.

For one unsuccessful applicant, applying to FLOWMIS proved to be useful in defining their project and what the port was trying to achieve, despite the fact they did not receive funding. The applicant has used its FLOWMIS application to inform their involvement in Scotland's floating offshore wind investment model and discussions with investors and developers. Since applying, the applicant is now on the priority list of the Strategic Investment Model, which reportedly is for projects of high relevance and interest to developers.

[12] DESNZ (2025) Clean Power 2030 Action Plan
[13] Trust ports are independent statutory bodies controlled by an independent board; they are not privately owned or controlled by a local authority.

2.3 FLOWMIS competition call (all interviewees)

Respondents learned about the competition call from various sources, including trade press (such as reNews[14]), GOV.UK emails, an announcement on LinkedIn, sector associations (Marine Energy Wales, British Ports Association), attendance at conferences, economic and development teams within local authorities, and through other connections in the offshore wind sector. Many interviewees were also aware of FLOWMIS through involvement in, or awareness of, the preceding OWMIS scheme and other public sector support. The consensus was that these communications were well-publicised, with no interviewee suggesting that FLOWMIS communications failed to generate adequate awareness or provide sufficient information to make a decision to apply. This was supported by the fact that most ports were already aware of the scheme. Interviewees were also pleased with the contact they received from the scheme delivery team who were available to answer clarification questions.

The timing of the competition call had an effect on how ports benefitted from FLOWMIS due to differences in the stage of development of their project concept. Several interviewees suggested the original timeline for submitting an application was too short. For many non-applicants, the timing of the release of the scheme was deemed to be unsuitable for their organisation as they were not in a position to apply (as detailed below). For several applicants that were more advanced in their project ambitions, the long period of time between the scheme announcement and opening, due to a delay in the scheme, negatively impacted operations in a number of ways. For one applicant, the delay meant that maintaining stakeholder engagement and buy-in to the project was more challenging since a large source of funding for the project was the potential grant. As the port progressed with planning and engaged with the construction market, contractors questioned the possibility of the project as time went on, and therefore internal processes became increasingly difficult to progress, slowing down proposed development work.

The delay to the scheme impacted on the finances of a successful applicant who had made a decision to release and spend £10 million in funds with the expectation that the spend could be recovered through the grant if successful. However, the spend was deemed to be ineligible under the scheme rules, as the scheme had not officially launched at the time and therefore the port was unable to recover the funds. However, if the scheme had launched according to the original timelines, then the applicant expressed the spend would have qualified. Another applicant initially decided not to apply as the organisation did not believe it could arrange the information required before the original deadline and spend the funds within the original time period (before March 2025). However, once the scheme was delayed, the applicant felt the new timelines would have enabled them to develop an application and spend the grand funding in time.

[14] Renewable Energy News (2023) UK kickstarts £160m floating wind manufacturing scheme; (2022) BEIS launches £160m UK floating fund

Reasons for not applying

As this section covers the experience of non-applicants, we expect there to be a range of reasons why these ports did not apply to the scheme. Some are related to the nature of the scheme and the policy landscape, whilst others are due to suitability for the scheme. Drawing on themes presented during interviews with port management representatives, the predominant reasons why ports did not apply to the scheme were as follows.

Limitations of FLOWMIS

Several ports highlighted that it was the unsuitability of the FLOWMIS to their current stage of development which prevented them from finalising their applications to the scheme. Their view was that the focus of FLOWMIS was to support with construction of projects that were immediately construction ready where an investment had already been made. The non-applicant ports were at various stages of development in relation to floating offshore wind capabilities, from initial master planning to technical studies to business cases. However, none had committed to significant infrastructure changes directly related to floating offshore wind manufacturing at the time of considering FLOWMIS.

At some ports, the perceived magnitude of the work required to cater for the floating offshore wind sector prevented them from applying to the scheme. The timelines for which successful projects would have to spend the grant was judged as being ‘unrealistic’ by some port managerial representatives, resulting in them not advancing their FLOWMIS application. This links closely to projects not being at the right development stage for FLOWMIS.

Across non-applicants, there was a consensus that the total amount of funding on offer was not sufficient to achieve the port development required for a growing floating offshore wind manufacturing sector. One example provided is that the market for floating offshore wind in the South-west and the Celtic Sea will require two manufacturing ports, costing hundreds of millions of pounds each, and at present there are none.

Commercial factors

For some ports, progress on their floating offshore wind capabilities has stalled, largely due to a lack of commercial commitments from manufacturers. This is despite planning permissions being in place at nearby sites. Manufacturers are reluctant to invest in nearby sites without the assurance/security that the nearby port will be able to cater for their needs, whilst ports are reluctant to invest significant amounts in upgrading their facilities without the confirmation that manufacturers will be using it.

Correcting this coordination failure is an objective of the FLOWMIS scheme, and by providing funding to ports, gives the necessary certainty to manufacturers to invest. For ports which are still in early stages of planning their floating offshore wind capabilities, this is still a prominent issue, and one that should be considered carefully when making future policy decisions.

The absence of FLOWMIS funding has led ports to seek other sources of public funding, albeit with limited success. The reliance on private investment has highlighted the need for a more collaborative approach to funding, potentially involving profit-share or grant funding with contractual commitments from developers. One applicant is continuing to progress their project

but is hopeful that DESNZ may reignite interest towards it, otherwise the future of the project is uncertain due to the scale of support required.

Technical uncertainty

One port highlighted the difficulty in developing their application due to the lack of detailed specifications for floating offshore wind infrastructure. Without precise requirements, such as quay pressures, quay edge specifications or water depth, it was difficult for port developers to accurately estimate costs and therefore develop a business case. This meant that for at least one port, there was uncertainty about the project's ability to meet the scheme's criteria and therefore whether the investment in applying for FLOWMIS was justified. The absence of standardised specifications for floating wind foundations further complicated the application process, as port developers could not confidently propose infrastructure that would meet the future demands of the sector. Although stated as such by some interviewees, it is important to bear in mind that there are new to market systems, hence it is hard, and risky, to be too precise about technical specifications as these may evolve as the design and development of the floating systems is progressed.

Overall, when assessing the impact of technical uncertainty of this kind it is important to account for the 'first mover' benefits which arise from undertaking these interventions in nascent sectors where there is still uncertainty. This, arguably, is a necessary trade off when operating in an internationally competitive context.

Suitability of port

Some ports recognised that they were not able to cater for floating offshore wind manufacturing, largely due to the size and depth of the port and so did not finalise their application. In the case where ports acknowledged they were not suitable to accommodate floating offshore wind manufacturing, they focussed their attention on operation and maintenance, among other ancillary services, of offshore wind farms.

A common theme, which arose from speaking with managerial teams at ports who did not have the capacity to support offshore wind manufacturing, was the need for a funding scheme to support ports who wanted to develop these ancillary services, to allow them to capitalise on the growing offshore wind sector in the UK in ways other than manufacturing.

2.4 Application process (all interviewees)

Application requirements

Overall, ports felt that the application requirements were clear and that they did not require any additional information to make a judgement on whether to apply. In a few cases, applicants reached out to DESNZ to ask clarification questions and were satisfied with the way this was handled. Only one applicant suggested that the application criteria were unclear.

Views on the application process

Applicants to the scheme stated that the information required of them throughout the application process was suitable and they had no complaints over what type of information was required of them. Overall, the scheme was described as ‘smooth’ and ‘as expected’ compared with other similar schemes, with the additional benefit of a generous word limit for some of the questions. Areas of the application process which applicants found challenging included the duplication of requested information due to different delivery staff being responsible for each aspect of the application. However, applicants were made aware of this aspect which made the requirements easier to follow.

Further challenges included sometimes late and unclear responses from the scheme delivery team, as well as a change in personnel within government which made it difficult to know whether applicants were contacting the appropriate staff at times. Applicants were required to commit a large amount of financial and staff resource to develop their bids, which included preparing a Green Book compliant valuation, a full-scale business case in line with government requirements, and a full technical assessment, with one applicant stating that the cost of their proposal was six figures. They suggest the application process should begin with fewer mandatory documentation requests/requirements to reduce resource intensity until a later stage when the applicants who were likely to be considered for funding becomes clearer.

Applicants were also frustrated at the need to show documentation, such as letters of interest, and letters of support, to evidence commercial interest from developers at the application stage. It is acknowledged that the market is undeveloped, and ports are unsure over the type of technology which will be used in the future. Moreover, this uncertainty stems from the fact that there are only a few small demonstration projects that currently exist: “our commercial side was weak, because there weren't any contracts, but I understand nobody has a contract. So, everybody should be in the same position”.

Most applicants interviewed did not require support or guidance from DESNZ to navigate the application process. The majority of those that did contact the FLOWMIS delivery team reported positive outcomes from the process and were satisfied with the support received. However, one applicant stated that it was not clear who was available for advice if needed. The applicant expressed a desire for more interactive support to clarify application requirements as they progressed. They highlighted the difficulty of interpreting expectations without direct communication, citing an example involving a letter of intent: “if they wanted a letter of intent off somebody, we wouldn't have bothered, because we didn't have a letter of intent. But it was our understanding that nobody really had a letter of intent. We couldn't have got that without knowing that you had the investment, nobody is going to give you a letter of intent unless you know you can actually compete the facility for the purpose. So, you feel a little bit as though you are being forced to do something when it's not a good fit for the situation.”

In addition to supporting applicants, DESNZ also needed to assess the level of commercial interest from developers to ensure proposals were aligned with industry needs and that projects were viable. This evidence, provided by all ports that progressed through the assessment, was crucial in determining which projects were suitable for funding through FLOWMIS.

Scheme rules

For the majority of applicants, the scheme's rules were in line with their development plans and therefore did not create any issues. However, one applicant reported that the timeline to spend the grant was not extended even though there was a delay to the scheme. The applicant stated that there is a limited amount of activity and spend that can take place without the project becoming too risky prior to submitting consenting and putting out construction tenders. As a result, the port is being required to ask contractors to complete work faster than usual which has raised prices and placed a huge amount of pressure on the organisation and its contractors. The amount of funding available through the scheme limited another application, as developers wanted the port to build a £300 million expansion, the port was unable to submit a bid at the scale it wanted to. Instead, the port applied to fund Phase One of a potential four-phase expansion.

Any external/additional support required

More than half of applicants to the scheme hired external consultant support to aid the development of their bid. In some cases, consultants supported ports directly with the writing of their application (including business cases) while in others, they focused on assessing environmental impacts and economic benefits. The cost of additional support was reported to be significant, with one applicant hiring two forms of support; one focussing on design and concept and the other focussing on ensuring the bid met policy objectives.

None of the non-applicants interviewed sought additional external support to assist with the development of an application. One organisation was already receiving support from consultants with their business case and suggested that they could have utilised this existing support if the organisation decided to proceed with an application. They also expressed frustration at the resources involved in applying for public funding: "for public funding like this, you find that it's bigger companies with bigger budgets that access the money. I feel like there are smaller companies that are almost excluded from it because they don't have the internal resources and then, they have to go and pay for it."

Non-applicant views on the application process

The majority of non-applicants stated that the decision not to apply was due to the timing of the release and their organisation not being in a position to apply. Several organisations were in the process of developing their business case and would not have completed it within the application window. For example, one port organisation was in the midst of completing their ground investigations when the competition was announced and expected its business case and financial case to be informed by the results. Another non-applicant felt that the timeline for developing a proposal and delivering the project were unrealistic given the size of their planned project. In addition, they stated that a lack of forewarning over the details of the scheme meant the organisation was unprepared for what was required to begin an application.

One non-applicant organisation also objected to the requirement to spend grant funding before the end of March and suggested that for smaller ports like theirs with fewer resources, the tight timeframes were inappropriate for organisations who did not have a project already underway. As a result, for FLOWMIS to have encouraged a greater number of applicants that were

undertaking early stages of project delivery (i.e. scoping, business case development), an extended timeline would have been beneficial. Internal stakeholders acknowledged that the spend timeframe can create challenges, mainly due to the typical expected delays in construction projects. However, they note that these challenges were largely unavoidable from the government's perspective, due to forecasting being limited to a two-year period. Furthermore, while there might be room for negotiation if funds were still needed after the deadline, internal stakeholders stress that the government cannot legally make such a promise upfront.

One non-applicant decided not to participate in the scheme as they stated that DESNZ lack the expertise required compared to industry. They suggested that the application criteria should have been less prescriptive on plans to deliver. This is due to the complexities involved in delivering port infrastructure, providing the organisations possessing the required expertise within the industry with greater flexibility to solve challenges.

Those non-applicants who noted that FLOWMIS did not align with their organisation's capacity or needs had differing views on why this was, including:

- The size of the port controlled by the organisation being too small in terms of dock size, depth, and the amount of immediate line adjacent to the port to meet the initial scope of the funding.
- The scale of the project being too small to be deemed appropriate and the inability to coordinate many large stakeholders. They also noted that potential partners, such as offshore wind farm operators, are unable to provide the long-term commitment needed to be written into a proposal. Moreover, as they can only base their investment on consented wind farms, this presented a challenge when the scheme was launched (and reflects a 'Strategic Fit' issue that is worth considering).
- Lack of expertise and experience in drafting business cases, making it difficult to fulfil this section of the application (despite acknowledging that the application requirements for the scheme were reasonably clear).
- The requirement for support with developing a port rather than capital expenditure (stemming from the view that FLOWMIS was designed exclusively to support capital expenditure, not development expenditure).

While some non-applicants were unsure about the criteria for a successful bid, most recognised the reasons their port would be unsuitable for the scheme and felt that the scope of FLOWMIS was not significant enough to justify the time spent developing an application.

Changes and improvements suggested by applicants

When asked about how the competition call could have been improved, applicants to the scheme suggested that:

- The approach to funding distribution could be outlined to make it clear that the intention was not to divide and allocate funding across the UK in order to guarantee that each region would receive support. This would have provided greater clarity over the level of competition in the scheme and set expectations over the likelihood of receiving funding.

- The spending period could be made more flexible to accommodate project plans would have been useful.
- Reducing the length of time taken to share outcomes on applications would have provided greater certainty to developers and investors.
- The language used when communicating with applicants could have been more cautious, as the word 'imminent' was used on multiple occasions to describe the notification of outcomes, leading ports to believe a decision was going to be shared the following day even though they were not informed until months later.
- More information on the level of commitment to be demonstrated as part of letters of support could have been provided, as applicants did not realise the level of influence this had on the outcome of their application when answering clarification questions until it was too late.
- Keeping applicants updated on what stage of the application process they are in would have been useful, as this would have allowed them to keep stakeholders informed on a timelier basis.

Changes and improvements suggested by non-applicants

When asked about how the competition call could have been improved to encourage their organisation to participate, non-applicants reflected on the complexity of the floating offshore wind sector and proposed a number of suggestions which would have made the scheme more appealing to them:

- One non-applicant proposed the use of additional preliminary funding for the development of ports before a competition call such as FLOWMIS, aimed at 'shovel-ready' projects. This funding would focus on advancing projects through crucial planning stages, including obtaining necessary permits and approvals, to get closer to the construction ready phase of their project. These projects, once fully prepared, can begin construction immediately upon securing funding. By investing in this preparatory work it was felt by non-applicants that organisations can better avoid being unprepared and mitigate the risk of project delays
- It was suggested that Operations and Maintenance (O&M) ports[15] should be included in the scoping of the scheme. They stress the importance of O&M ports and activity in maintaining the functionality of offshore wind over the long term and express concern that not enough attention is being given to this aspect of offshore wind.
- Another respondent mentioned that if the FLOWMIS competition call had guaranteed revenue support, they would have been much more inclined to participate.
- Many non-applicants suggested that the total package of funding provided through the scheme is too small to effectively support the industry. They suggest that a more appropriate level of funding would cover 40% to 50% of the capital cost of the development, which they estimate would require single grants of around £200 million.

[15] These are ports that provide the facilities from which the operations and maintenance of ports or floating offshore wind farms are carried out.

It is recognised by non-applicants that the floating offshore wind sector is in its infancy, creating a need for certain allowances and flexibility for proposals to secure funding. In addition, the scheme requires all applications to be thorough and comprehensive, necessitating detailed information about the applicant's approach. Feedback from non-applicants, suggests that the requirements of the application process were too rigorous, and that the competition call failed to adequately cater to the extensive and diverse needs of the sector. To improve the effectiveness of the competition call, changes could include; less prescriptive project criteria, more time to develop an application, an acknowledgement of tentative bids that may require additional exploration time, and/or explicitly stating that smaller ports could be considered provided their bid was credible.

2.5 Assessment of applications (internal stakeholder views)

This section covers internal stakeholders' views on the assessment of applications. We first discuss the process and effectiveness of evaluating applicants, highlighting the key criteria considered when reviewing project submissions. We then look at the challenges and barriers encountered in achieving project objectives during the assessment phase and conclude with insights into what is working well and the resourcing aspects of FLOWMIS.

The process for assessing applicants

Stakeholders involved in delivering FLOWMIS stated that five key aspects are considered when assessing applications, including: commercial, technical, strategic, financial, and economic assessments. Low scores in any of these five areas results in the applicant's elimination from the process. However, before the first assessment took place, an essential criteria check was undertaken to remove applicants who failed to meet the minimum eligibility criteria. This criteria included checks such as: whether the applicant is a UK-based company or Trust, the port is located in the UK and is able to demonstrate capacity to deliver floating offshore wind. Assessments are conducted by a number of teams who focus on a particular aspect of the applications. Consultation with a legal team takes place throughout the assessment process where the FLOWMIS delivery team receive legal recommendations.

Each applicant is then assessed against commercial criteria, including the level of commercial interest in the port. The commercial case was addressed first to ensure that ports had commercial traction and the grant funding would go to a project likely to generate income. Agreements with developers who intended to use the ports are viewed as a demonstration of this and ports lacking agreements or solid commercial traction were excluded early in the process.

The strategic assessment is also conducted holistically by considering the geographic spread of applicants within the UK rather than each port being considered in isolation to ensure ports do not encroach on serving the same areas. The consideration of broader factors beyond the direct return on investment was a key learning from OWMIS. Two of these key considerations include the locations of floating offshore wind deployment zones, with the Celtic Sea and North Sea off Scotland considered to be two core locations for floating offshore wind in the UK, and the funding window. Ensuring that successful ports align with these strategic hubs ensure projects support the broader UK strategic context and optimise developments. It also ensures

a geographical balance across supported projects, avoiding a situation where all top-ranked projects are located within the same region. The timing of project spend against the amount of funding available is also key. Ports must ensure that their project can be completed and funds can be utilised within the specified timeframe. This allows for the adjustment of project combinations to maximise the use of the total funds available (£160 million). As a result, the strategic case provides decision-makers with the flexibility to maximise the benefits of the FLOWMIS scheme within the limitations of funding and geography.

An assessment against economic criteria and an evaluation of economic benefits such as job creation and effective use of government funds then follows. The element of the economic assessment considers the potential for job creation and wage growth at ports, which is one of the desired outcomes of the scheme and seen as its significant advantage over others. Furthermore, lessons taken away from previous schemes broadened the focus of the economic case beyond job creation to include wider economic benefits such as offshore wind deployment and cost reduction.

The financial case then assessed the applicant's ability to contribute the necessary funds for delivering the project and scrutinised the integrity of the board of directors. It involves analysing the viability of the port (and its parent company if applicable). The company's accounts for the past three years are reviewed, focusing on the level of revenue, profitability, liquidity, and net assets. Forecasts for these metrics are also requested to consider the company's future viability. The financial assessment also considers the company's case for assistance (i.e. why public funding is required / what would happen in the absence of the grant). For example, this case could include a company requesting a specific amount of funding to make their project viable, as demonstrated by a positive Net Present Value (NPV) calculation. The assessment also identifies risks associated with the case which informs the due diligence process. This was then followed by the technical assessment which was conducted by external expert resource.

The technical assessment examined the feasibility of proposed projects from an engineering perspective, considering factors such as capacity of the proposed infrastructure to handle or produce floating offshore wind components, the capacity to dredge the port to the required depth, and potential barriers to turbine deployment such as nearby airports. The assessment also reviewed the capability and experience of the project team to deliver the project at the proposed scale. The evaluation of technical capacity was informed by illustrations, blueprints, and descriptions of the elements that applicants intended to produce or handle in the port, as well as their logistical plans to inform a decision on whether the port will deliver it’s intended capacity. In addition to this, a project delivery plan was required, including the construction of proposed infrastructure and also all prior development work (e.g. applying for planning, design of technical elements, procurement of contractors etc).

For example, a procurement strategy could be submitted as a standalone document outlining the intended use of a specific type of contract, ability to spend funding within the specified timeframe, how the port intends to engage with contractors, and quality assurance plans. The same type of document follows for planning permission whereby ports could describe the stage of application they are in (e.g. whether they have started the process or had already received confirmation from regulators and the authorities). Communication and documentation of

procedures could be attached to a port's submission as copies for further evidence to improve an application's credibility. Once applications and relevant documents were reviewed, additional information was requested to fill gaps and meetings were held with each applicant to seek clarification.

Subsequent activities include a presentation of shortlisted applications to the Industrial Development Advisory Board (IDAB) alongside recommendations, due diligence checks and Competition Market Authority (CMA) assessments before grants are ultimately awarded. Due diligence assessments with the Central Grants and Loans Team took place after the board signed-off on the recommendations they received and the 'primary' and 'reserve' list of applications was created. The primary list consists of applications that are considered to be the most preferable proposals for receiving FLOWMIS funding, whilst the reserve list is made up of applicants who may not have scored as highly but are still strong proposals which could receive funding if a primary list applicants is removed from the list (e.g. fails a due diligence check or pulls out of the application process).

The assessment process: effectiveness and lessons applied

Internal stakeholders involved in the assessment process support the notion that FLOWMIS has allowed for appropriate outcomes in line with the project's objectives, with lessons from OWMIS having been applied. The criteria used in strategic, commercial, financial, economic and technical assessments are directly linked to the objectives of FLOWMIS to varying degrees. Internal stakeholders felt that the strategic assessment could be considered as the most crucial element of the process when ensuring that proposed projects align with the scheme's goals. This element is viewed positively as a result of the consideration given to previous examples of strategic assessments, including Scottish Green Freeports, which contributed to the design for FLOWMIS.

The positive view of the assessment process is partly considered to be due to more realistic timeframes being granted and an agreed-upon scope of assessment, with detailed examination occurring during the due diligence phase. Comparatively, in the OWMIS process, extensive due diligence was performed during initial assessment stage which resulted in greater time being spent assessing applications which ultimately did not progress. In contrast, the FLOWMIS assessment process allocates greater resource to thoroughly scrutinising applications later in the process - after ports unlikely to receive funding have been eliminated. This has helped to manage available staff more efficiently, avoiding the significant pressure on resources experienced during the OWMIS selection process.

Another positive learning taken from OWMIS applied to FLOWMIS, relates to communicating funding timelines more effectively with applicants, and stressing the importance of ensuring public funding is not being used unnecessarily. One stakeholder praised the design of the assessment process and credited key members of the DESNZ delivery team for the application of their industry knowledge and their understanding of the aims of the scheme.

An internal stakeholder who joined the project midway praised the documentation and transition process. They felt that the thorough documentation and maintained audit trail throughout the process provided a better sense of continuity within the team. Notably, no

internal stakeholders mentioned problems related to documentation logistics, which is significant given the volume of documents and information needed throughout the project.

Challenges identified during the assessment process

Nevertheless, when conducting assessments in emerging industries like floating offshore wind, challenges arise as was the case with FLOWMIS. One such challenge was determining 'good commercial traction'. The commercial traction assessment of projects, currently in the testing and demonstration phase and where explicit contracts may not yet be in place, was felt to be a difficult aspect of the process by internal stakeholders. This difficulty arose from the industry's nascent stage, which made it challenging to define what 'good commercial traction' looks like in the absence of established benchmarks or existing commercial projects for comparison.

Noting the inherent uncertainty within the sector, the assessment relied on the level of evidenced interest in the projects from floating offshore wind developers. This included letter of interest, Memorandum’s of understanding and in some instances, more developed heads of terms agreements. The assessment focused on the level of credibility and confidence that the evidence provided. Another challenge lay in the economic assessment, with discrepancies occurring in the Benefit-Cost Ratio (BCR) calculation. Interviewees felt that the BCR calculation process was particularly challenging at times for the projects. One reflection was that the data provided by applicants may not have been fully aligned with the framework for calculating the BCR, which was compounded by the nascent nature and inherent uncertainty of the industry. This created delays in the economic section of the assessment process.

A current issue discussed by internal stakeholders relates to establishing a financial guarantee for ports that are not run by private companies, such as Trust ports or those run by local authorities. These ports therefore do not have a parent company (or sufficient net assets) that typically acts as a guarantee for the loan if the grant repayment fails. A parent company guarantee is considered during the assessment phase to ensure that if a company fails to undertake all the obligations in the Final Grant offer letter, they would be required to repay the grant. If the port is no longer able to repay the grant, or must prolong a portion of the grant, the guarantee can be enforced, requiring the parent company to pay. Many applicants are not private companies, creating uncertainty over how to mitigate this financial risk. A bank or financial institution guarantee can be requested to assume the risk; however, the financial institution would need to be compensated for taking on this risk, thus placing a considerable financial burden on port applicants that are smaller organisations. This issue is currently under review with HM Treasury; however, a wider policy change within government in relation to grants and their associated risks is perceived to be necessary. Despite this, it is suggested that stakeholders remain confident that a solution to this issue can be found, despite it being likely to diverge from conventional methods of granting government funding.

Another challenge related to the technical assessment was the varying interpretations of questions by applicants which led to information gaps. It was noted that applicants had a degree of freedom in their responses and the question criteria was viewed positively by those involved, as it enabled applicants to provide any information that they thought would be needed.

For the second wave of internal stakeholders, many acknowledged the perceived complexity involved in conducting economic assessments for ports, suggesting that these might be more challenging than evaluations for factories. Evaluating the impact of ports, they noted, may require broader considerations, such as facilitating emerging markets and enabling floating wind activity. Some stakeholders reflected that due to this perceived complexity, having more initial discussions could have helped clarify timelines and set clearer expectations.

These initial conversations may have helped alleviate the occasional information gaps that internal stakeholders in the assessment process felt occurred. Alternatively, clearer guidance regarding the inclusion of wider wage premium benefits and the incorporation of specific metrics (such as distance to port or project analysis) could have been beneficial. However, given the complexity and uncertainty with large scale offshore wind projects; largely it was felt that the information at the assessment period was as complete as possible without going into unaccountable detail.

Barriers to achieving outcomes in line with project objectives during the assessment process

One internal stakeholder suggested that geographical location was an aspect of applications that were not given as much attention as originally anticipated. They emphasise the importance of the proximity of ports to leasing areas such as the Celtic Sea and ScotWind given restrictions on towing wind turbines and dependency on the weather. Therefore, they were surprised that some ports which were considered to be well-placed due to their location were not given as much attention as other ports which were considered to be strong applicants, even though they are further away from key areas. Despite these observations, the respondent is generally happy with the geographical location of the current front runners.

Aspects of the assessment process working well in supporting outcomes in line with project objectives

Stakeholders suggested that information shared publicly early on in the scheme helped to facilitate early engagement and improve understanding of what was required of applicants. Early engagement also contributed to the design of the application process as it enabled those delivering the scheme to understand more about potential projects and tailor the scheme to the needs of ports. It was also suggested that it ensured potential applicants were well-prepared. Despite this view, there are still ports who did not go on to apply because of the timing of the scheme and because they were unprepared.

A high quantity of applications was received, indicating a high level of market interest. However, there were mixed views amongst internal stakeholders over the quality of proposals, with one stakeholder surprised by the lower quality of some, compared to their expectations. It was suggested that while the quality of bids may have varied, it wasn't necessarily reflective of the port's financial capacity. Instead, those who had spent considerable time planning their projects and demonstrated robust commercial traction submitted higher-quality bids. It was also highlighted that having close relationships with developers and foundation manufacturers enhanced the quality of bids, as they already possess a better understanding of the design of their port and what is required to construct it.

Resourcing

Those involved in the assessment process faced challenges with their workload although this was said to be a common issue across various departments. Moreover, the majority of internal stakeholders stated that the assessment process was still efficiently managed within those conditions. The assessment team demonstrated flexibility and the capacity to handle diverse caseloads across different departments, overseen by a project manager and two Senior Executive Officers (SEO) on both the project management and policy sides of the scheme.

The main challenges related to resource shortages concerned with the economic assessment. While there were enough accountants to manage the financial aspect, securing enough analysts for the economic assessment proved challenging. Given the number of applications (17), scarce and busy analyst resources were seen as stretched to cover the handling of all elements in the assessment for each application. Although meetings with other assessors were scheduled, not everyone was able to attend consistently due to other obligations. While one stakeholder suggests that the task was somewhat oversized given the number of people involved, another suggested that increasing the team size could have complicated matters, likening it to having 'too many chefs in the kitchen'. The technical assessment team was considered to be well-resourced and adhered to their schedule. Despite initial resource challenges in locating accountants, this issue was ultimately resolved.

Managing timelines has also posed a significant challenge, especially for applicants working within strict schedules with contractors. Delays risked disqualifying such applicants by default and so the assessment of applications needed to take this into account.

Consistency across assessments

Several stakeholders involved in delivering the assessments stated that there were sufficient measures taken to ensure assessments were consistent. This included moderation sessions, particularly for the strategic assessment, which involved an entire day of presenting assessments for each applicant. It is also suggested that the strategic assessment is a more subjective element of the process when compared to other parts and therefore greater involvement across the delivery team was key. Prior to this session, written assessments were reviewed by legal advisors and the delivery team to eliminate any outliers. All participants had access to every write-up involved in the strategic assessment, facilitating an informed decision-making process. One stakeholder emphasised that thorough checking and cross-checking took place at every stage to ensure consistency.

In addition, prior to finalising the commercial assessment, a moderation meeting involving staff conducting the assessment and the legal team was held. This ensured uniformity in the reasoning behind the classifications of 'low', 'medium' or 'high'. Subsequently, alterations were made based on feedback from the legal team.

Another stakeholder suggested there is inherent subjectivity in the assessment process, owing to the specialist expertise of each forensic accountant. This can result in potential inconsistencies, as different experts may evaluate the level of risk differently. However, to maintain consistency, every report underwent a peer review by another forensic accountant and received approval from the head of due diligence. While absolute consistency may be

impossible due to the subjective nature of risk assessment, the established process of peer review assures a level of consistency across all evaluations.

Understanding of the assessment process

According to both internal and external stakeholders, the assessment process was outlined clearly in the scheme guidance and any modifications were promptly communicated to applicants. The team was proactive in informing applicants of any changes in the process, such as completing the commercial assessment before other parts of the process. They addressed applicants' queries during the assessment period and assembled a Q&A list which was published on GOV.UK. The project manager played a pivotal role in coordinating and clarifying the process for case officers, leads, and assessors. Regular meetings were held to outline processes, respond to questions, and manage the assessment process. This open and transparent approach facilitated a clear and easy-to-understand process for assessments.

One stakeholder involved in the technical assessment stated that the process could have been handled more efficiently with greater visibility of other assessment areas. External resource was commissioned to conduct the technical assessment which may have contributed to the perceived lack of visibility of other assessment areas handled within DESNZ. This transparency could have helped contextualise the technical assessments better.

For example, in some of the commercial sections, applicants explained how they wanted to use the proposed infrastructure and their target clients, and this information would have supported the interpretation of the technical documents and drawings. Another example provided involves legal challenges with land ownership, whereby the impact of not being able to purchase land proposed in an application could have been considered in greater detail in technical assessments if the assessors involved were aware of this issue.

Information available during assessments

Stakeholders reported occasional information gaps in applicant submissions. Although these gaps did not significantly impact the assessment outcome, they were noted in reports as areas for improvement, should the applicant advance to the next stage. An example is the lack of procurement strategies in some applications.

Applicants were provided with the opportunity to share additional information or updates since their application was submitted, even when they failed the commercial assessment. Therefore, any beneficial information, which may have not been initially available, was requested at various stages of the assessment process. Stakeholders said that the assessment process did not require additional information from applicants to improve. While more detailed information about ports could be requested early on, introducing this at the initial stage with all applicants could lead to an overwhelming amount of data, causing further delays. Instead, a more detailed due diligence phase is conducted after narrowing down the key ports incorporating greater information and detail at the appropriate stage.

One stakeholder mentioned the necessity of evaluating whether projects would proceed without governmental support. They underlined the requirement for compelling evidence to back applications. It was also suggested that the assessment process did not consider the

private investment a project could attract in enough detail. One stakeholder suggested that although private investment is not considered to be a public benefit in the traditional sense, greater emphasis should be placed on its importance alongside job creation.

Possible risks that may need to be considered include the logistical challenges and issues that ports may encounter when improving and scaling-up their road capacity, as well as the need to manage congestion created by ferries and related accessibility challenges due to increased usage. Further information on these might be helpful.

Support from other stakeholders/departments

The majority of stakeholders interviewed did state that additional support from other stakeholders or government departments would have been beneficial. Much of the management is already handled within DESNZ, and there is existing support in several ways from HM Treasury, due to the financial element of the scheme. A representative from HM Treasury is on the FLOWMIS project board and maintains regular contact with core delivery team members to ensure appropriate resourcing. Given grants awarded through FLOWMIS will result in financial commitments for the future, HM Treasury sign-off is mandatory.

The ability to share applicant information with stakeholders, such as the National Wealth Fund or Scottish National Infrastructure Bank, to check claims made by applicants would be beneficial and is an exercise currently being worked on by DESNZ. However, maintaining the confidentiality of applicants is a challenge, and although attempts to do this without delving into applicant data were made, assessors still encountered difficulties. Consequently, the delivery team are currently devising a data-sharing method with lawyers.

The FLOWMIS delivery team may have benefitted from increased direct interaction across individual assessors when identifying resourcing challenges, thereby improving the overall efficiency and effectiveness of the assessment process. Although broader support and additional data, such as the market reach or geographical scope of each port (relative to future offshore wind projects) were offered, these were coordinated through the lead assessor.

2.6 The due diligence process (internal stakeholder views)

Due diligence process

Once a port is added to the primary list, it undergoes a due diligence process with the Central Grants and Loans Team which entails substantial scrutiny to identify and mitigate any risks. The primary risk is a project requiring more funding than initially accounted for. This creates a viability gap and therefore the due diligence process includes a more thorough examination of the project's financial arrangements and evidence base to verify the funding needs of applicants. It also considers the existence of other funding sources and the project's capability to deliver the benefits it claims it will. Due diligence helps to validate information provided by ports and enables the delivery team to learn more about projects prior to committing any funding, uncovering any potential or emerging risks early.

Continuous engagement with primary-list applicants and clarification discussions between the assessment team and applicants aimed to take place throughout the due diligence process. These actions hoped to deepen the delivery team's understanding of applications and provide applicants with feedback and the opportunity to address any significant concerns. As a result, the due diligence process assists the delivery team by responding to emerging risks and ensuring that the most suitable proposals, with the most appropriate strategic fit, are given the best chance to succeed.

In addition to the due diligence checks that took place during the assessment process, the scheme has designed grant agreement terms to only permit payment upon achieving certain milestones. It also seeks a parent company guarantee to make it easier to recover funds if a project does not progress as planned. These aspects of the scheme aim to de-risk the funding being allocated as much as possible. However, stakeholders recognise that more than financial de-risking is required to ensure the industry is still supported if projects fail, whilst the government may need to find methods to assist with de-risking the projects themselves.

How due diligence contributed to monitoring project delivery

When discussing the extent to which due diligence and quality assurance should contribute to monitoring project delivery, stakeholders suggested the process would help to establish a robust baseline for monitoring progress, such as job creation or deliverable commitments. Before the process had occurred, stakeholders felt that rigorous review processes in place for submissions to the minister and the existence of legal checkpoints at every pivotal phase of the assessment process would be vital in ensuring no risk is overlooked.

In achieving these intentioned goals, stakeholders' views towards the direct impact of the due diligence process were mixed, with the challenges and complexities involved in the process foremost in their feedback. Nevertheless, some internal stakeholders felt the process did indeed help identify key risks early on. This meant that the wider project team could better strategically plan and implement mitigation measures.

In justifying the need for grant funding, the due diligence process was felt to be an important tool for stakeholders to substantiate the financial necessity of government intervention. The financial assessments provided detailed insights into the economic viability of projects which was felt to be important for not only managing risk, but also for enabling stakeholders to make informed decisions about grant allocations. This therefore ensures that funding was directed towards projects with a clear and demonstrable requirement for government assistance.

On the resourcing of the due diligence process, stakeholders stated that the process is very resource-intensive, hence it is only conducted on the most promising applications following an initial selection process. This method allowed the team to concentrate their resources more efficiently, enabling them to respond and give greater attention to emerging risks.

One stakeholder expressed that the due diligence process has equipped the delivery team with a more profound understanding of the floating offshore wind market and its challenges, particularly for ports interested in the sector. This enhanced market awareness, resulting from assessments, is deemed beneficial for dealing with future risks.

Challenges with the due diligence process

Overall, internal stakeholders were understanding and acknowledging of the inherent complexities involved in a process as complex as due diligence for an uncertain industry. However, they still encountered several obstacles and had thorough feedback on the significant challenges faced during this process.

Timelines were a significant concern for internal stakeholders, who felt that tight timelines and lack of flexibility often resulted in increased anxieties. Feedback suggested that unforeseen financial recommendations emerged late in the process, which created difficulties in progressing to subsequent phases. It was felt that these delays could have been anticipated earlier in the process but couldn't have been fully mitigated against and thus a more flexible timeline could have helped with the delays.

These timeline problems were felt to be exacerbated by the politically charged environment surrounding certain projects. Internal stakeholders stated that they felt the pressure of navigating varied interests and expectations and the tight timeliness added to this pressure. This pressure was felt to be a result of the rigid timelines put in place by the Treasury and although internal stakeholders were understanding that these timelines could not have been moved, they still expressed frustration with the inflexibility and its consequences.

However, several internal stakeholders positively remarked on how different teams were able to work together and indeed the whole project team's professionalism and conduct throughout the due diligence process.

Stakeholders also observed that a lack of clarity and occasional communication breakdowns between teams and wider government teams further compounded their challenges, making it difficult to maintain a consistent flow of information across all levels. While understanding the complexities of managing such a multifaceted process, stakeholders expressed a desire for clearer communication channels and earlier clarity on the process of due diligence. This would aim to alleviate some of the pressures and ensure that all parties were well-informed and aligned throughout the project.

Suggested improvement to the due diligence

Improved engagement and communication amongst different teams may have enhanced the setup of the economic assessment. While some original OWMIS delivery team members remained to work on FLOWMIS, others, including those within the economic team, experienced turnover which may have resulted in a lack of continuity and loss of useful contextual knowledge. Greater collaboration to ensure everyone involved is kept informed and updated (both formally and informally) as well as acknowledging when work pressures cause individuals to miss key meetings or discussions, could have improved the due diligence process.

Feedback also suggests that ports were unaware of the extent of the scrutiny given to financial accounts during due diligence. Although it is recognised that projects are in the early stage and there are many unknowns due to the sector being a nascent industry, greater clarity could

have been provided on what due diligence may involve during the competition call so applicants would be better prepared for the level of scrutiny required.

One internal stakeholder highlighted potential outstanding risks, such as wage differentials between industries. They also mention the importance of utilising the skillsets of companies currently involved in the offshore oil and gas industry, as their skills could also be applicable in the floating offshore wind industry. The respondent suggests the need for more proactive outreach with these companies to investigate opportunities for diversification and expansion, as part of a strategy to organically grow the UK's existing company base. These efforts align with broader policies to diversify and grow the UK's industrial base, while also promoting net-zero goals.

Lastly to improve the financial assessment and grant justification processes, stakeholders felt that adopting a more iterative and inclusive approach could have reduced discrepancies and increased transparency. Engaging stakeholders including senior decision makers in more preliminary discussions and draft reviews before finalising reports was felt to ensure potential issues were addressed early.

2.7 Governance of FLOWMIS (internal stakeholder views)

Roles and responsibilities

The roles and responsibilities within the delivery team were clearly defined, particularly in relation to the assessment process. There was a clear distinction between lead assessors and case officers for each of the ports and each team member was aware of which applications they were accountable for and the process they were to follow.

A significant amount of preparatory work was conducted by the scheme's management team to clearly define roles, responsibilities and timelines. A detailed plan assigning specific tasks to individuals within the policy team, economists, accountants, and external consultants was devised to manage the task of assessing applicants with a relatively small team within a short timeframe. This enabled the delivery team to understand their specific tasks, the projects they would be engaging with, and the time required for each task, allowing them to prioritise their work accordingly. Furthermore, they were included in discussions about how the assessment process would be delivered which supported preparations. Regular communication, including weekly catch-up sessions and regular Microsoft Teams conversations facilitated the swift resolution of issues. One internal stakeholder described the approach as 'agile programme management', allowing for the timely resolution of issues as they arose.

Feedback states that the teams involved in the scheme have been allowed to work independently whilst being included in necessary and relevant discussions. This has contributed to a more efficient and effective work environment.

One of the key lessons learned from OWMIS was the critical importance of planning and defining roles and responsibilities clearly. Previously, there was ambiguity over what the different stages of the assessment process would involve and who was to be responsible for each. This issue has been rectified in FLOWMIS, with the team now having a clearer plan and

defined roles. However, it was still suggested that the clarity of roles and responsibilities within the delivery team could be enhanced further. While it was observed that although roles might be officially defined, practical challenges such as limited resources and other commitments often result in individuals not being able to dedicate sufficient time to their roles. This can lead to a reduction in scrutiny and difficulties in managing the project effectively. It was also acknowledged that this is not a challenge specific to FLOWMIS but a prevalent issue in similar government schemes.

Communication was sustained through emails for more formal issues and MS-Teams chats were used within each team involved in the scheme to aid daily operations. Ad-hoc questions raised by the lead assessor were either answered immediately or integrated into the overall assessment report. In addition, information, including materials provided by the applicant and responses to queries, is circulated throughout DESNZ. If an issue were to surface during the assessment process that could pose a risk, such as a company providing inaccurate information, the policy team is alerted once the issue is verified. The forensic accountant conducting the due diligence check was responsible for making the decision to alert the policy team. There is a clear chain of command and process for handling issues, and according to internal stakeholders, this has proven effective in the past when managing potential risks.

Feedback indicates that a greater delegation of tasks could have taken place as there were instances where activities conducted by senior staff were not delegated to SEO where they could have been, which would have provided more opportunities for learning and the development of expertise. If the scheme were to be delivered again, it was stated that there would be greater scope for allowing SEOs to do work that is then reviewed by senior colleagues, rather than having assessments immediately proceed to the next stage.

Governance and decision-making process

The governance and decision-making process has been conducted in a participatory manner, involving all team members in discussions about the projects they were leading. This facilitated consistent assessment of projects and provided a platform for the legal team to challenge decisions. There is a FLOWMIS group meeting that brings together all workstreams, providing clear visibility across all aspects of the scheme. This is further supplemented by a step-by-step process outlined in the guidance, which all delivery team members follow closely to ensure there is no ambiguity or lack of direction. Hence, the decision-making process is “not just a black hole that things go into, there really is a step-by-step process, and we follow it rigidly.”

Feedback states that the incorporation of a preliminary board before presenting to the Industrial Development Advisory Board (IDAB) has improved the governance process. This amendment has increased the delivery team’s confidence in presenting cases to IDAB. The previous process, where six cases were presented at once, did not provide IDAB with adequate time to thoroughly review each case. This time round, stakeholders are confident that what is presented to IDAB will be of higher quality due to the thorough scrutiny given by the preliminary board.

Risk management strategies and project controls

Internal stakeholders were pleased with the risk management strategies in place to manage risks and issues and largely felt this to be satisfactory.

There is a risk register for the scheme which is reviewed at each project board meeting and a greater in-depth review into risks takes place on a monthly basis. Risks have focused on the impacts of the wider political environment so far and any potential risks that could impact an application rather than specific projects at this stage. The risk and mitigation owners are actively involved in updating risk management logs, and these logs are regularly discussed during monthly board meetings where actions have been taken promptly to manage risks.

The role of the Central Grants and Loans Team in the scheme to date

The involvement of the Central Grants and Loans Team is considered by internal stakeholders to be a key factor in FLOWMIS' delivery. They are accountable for due diligence and will administer the scheme, including making grant payments, monitoring delivery, and enforcing the clawback mechanism if necessary. However, their involvement extends across all stages, from scheme design and set-up to the assessment phase. It was noted that the team's expertise in delivering grant schemes was utilised during the design phase and they also assisted with identifying relevant stakeholders within and outside the department when required. The team have been a part of all boards and facilitated regular communication at various levels.

As part of the assessment process, the Central Grants and Loans Team contributed by responding to applicant queries regarding the use of the grant during the initial application phase. The team were also consulted on technical aspects of delivering the grants to enable them to provide comprehensive responses to applicants. During the due diligence phrase, the Central Grants and Loans Team largely operated as expected. However internal stakeholders mentioned the complexity and tight timeliness, which lead to the occasional miscommunication and deviation from best practice.

The role the Central Grants and Loans Team are expected to play in the implementation and early delivery of FLOWMIS

According to discussions with internal stakeholders, the Central Grants and Loans Team are expected to play a role in monitoring during the implementation and early delivery of FLOWMIS. Their role will be essential in ensuring that the companies receiving the grants are fulfilling their obligations, a vital aspect of scheme delivery.

Collaboration with the team and other stakeholders involved in delivery has been progressing smoothly, largely due to their familiarity with each other from work on OWMIS. While it took some time to become accustomed to each other's working styles, teams have now established a good relationship which has been beneficial for the effectiveness of scheme delivery.

Stakeholders emphasise that effective delivery of the scheme will be reliant on the support of the Central Grants and Loans Team. The application of contracts is the responsibility of the Central Grants and Loans Team and therefore, if the team fails to follow the contract's

stipulations and mismanages the funds, projects are likely to not be successful. To support this, the team have developed a good understanding of the scheme, and this understanding is facilitated by the development of a standard contract template familiar to the team, with minor variations to accommodate project specifics. The contract templates used for the scheme's terms and conditions are agreed upon with the legal team, Central Grants and Loans Team and management upfront. This approach ensures that the team has active buy-in and is invested in the process they are overseeing.

Other support

The intensive resource requirements of the application window were noted as a significant challenge. Receiving many detailed applications simultaneously puts considerable strain on the teams responsible for assessing them. Therefore, it was suggested that staggering the application process could alleviate this issue in future schemes.

The application process was viewed by one stakeholder as potentially rushed, with strict timelines that did not always allow for multiple drafts and reviews. They said that more involvement of junior colleagues in the initial stages of work, before it was reviewed or sent to different teams, could have been beneficial.

Another respondent indicated that there have been capacity challenges across the delivery team, including at senior levels. Balancing the delivery of FLOWMIS with the development of the Green Industries Growth Acceleration funding has been identified as a significant challenge due to similar tasks taking place at the same time. Although the delivery team has technical and financial support, there remains a concern over the demands on the team's time and their ability to manage risks proactively.

2.8 Notification of application outcomes (all interviewees)

Applicants were critical of the announcement of successful applicants as it came much later than expected and they suggest there was a lack of communication as news filtered through the industry prior to an official government announcement. One applicant stated that they discovered which applicants had been successful from a trade paper prior to the official letter from DESNZ arriving. However, stakeholders involved in scheme delivery informed each applicant via e-mail the day before public announcements were made and therefore the short timeframe between direct communication with applicants and publicity may not have provided them with enough time to receive and digest the information.

Several applicants were notified that they were placed on the reserve list via letter and were disappointed that they did not receive more information from DESNZ directly explaining what this meant. As a result, there was confusion over whether there was the possibility for reserve list applicants to receive funding in the future regardless of whether the successful applicants passed the due diligence phase. Applicants also would have liked greater communication and information on the outcome of their application and what it means to be on the reserve list in order to effectively shape local stakeholder messaging. The delays to the announcement (from autumn to winter 2023 to mid-March 2024) also made it difficult to manage supply chains, as

applicants anticipated the announcement and acted to ensure they could maximise the spending period before the deadline before each delay.

It was also suggested that the announcement of successful applications should have been a celebration of the UK government investing a record sum of funding in Wales and Scotland but largely went unnoticed in the media.

Feedback meetings

Each applicant received a letter notifying them of the outcome of their application, however, many applicants stated that they would have appreciated being notified during a telephone call. This would have provided an opportunity to engage in the feedback process from the outset rather than it being unilateral. Despite this, many feedback calls have since taken place with applicants to discuss the strengths and weaknesses of applications. The majority of applicants were pleased with the information shared during these feedback meetings (how the application compared with the scoring metrics and the requirements of the application) and stated they understand the reason for the decision made. Several applicants expressed frustration at the reason for being denied funding, with one applicant stating that it was difficult to understand. There was also a frustration that the reasons given for unsuccessful applications were not points raised in clarification questions and therefore the outcome came as a surprise to some applicants. In many cases, applicants were rejected on the basis of not being able to evidence concrete agreements with users/occupiers for the site upon project completion or follow-on investment.

Impacts on investment

Prolonged decision-making on the scheme caused uncertainty and nervousness within port organisations, raising concerns about the government’s commitment to the scheme and whether it would continue. For one organisation, the delay in potential funding being announced has created a financial strain, necessitating a review and adjustments to the project to reduce costs and an increase in future charges to use the berth.

Applicants did not express that the potential for FLOWMIS funding strengthened conversations with future users of port infrastructure, with some indicating that would not disclose their participation in public funding applications unless they are successful. Conversely, a project's lack of success in obtaining funding could potentially harm its chances of securing additional private investment as being declined funding may indicate that the project is not as viable as it appears, according to one applicant. There is a concern that developers might question supporting a project that did not secure funding. However, being identified as a priority port through projects like Strategic Investment Model has led to positive conversations.

One applicant stated that continued support and advice from funding bodies (such as government departments, Offshore Wind Growth Partnership, ORE Catapult) beyond just financial grants, are crucial for the success of projects. They suggest that consistent communication and guidance from these bodies would reassure investors about the project's potential and viability, ultimately increasing the likelihood of securing full investment. They emphasise the importance of bridging the gap between receiving funding and attracting investors by showcasing the project's strengths and addressing any investor concerns.

The proposed deal structure for one project involves securing leases from off-takers[16] before developers make final investment decisions which offers several advantages. Firstly, it accelerates the introduction of private investment into the project. Secondly, it provides certainty to the supply chain, as lease agreements signal the project's viability. This, in turn, allows local businesses within the supply chain to make informed investment decisions based on the increased likelihood of project commencement. The project is likely to be the first of its kind in the region for floating wind at scale and is expected to boost confidence in the sector, encouraging further investment in port infrastructure, manufacturing plants, and other facilities as suppliers gain confidence from the project's progress.

The absence of funding for many of the projects interviewed has increased the risk to the site's development and prolonged timescales. For one port, the potential of FLOWMIS funding had increased the likelihood of securing interested users who had previously expressed interest.

Without the announcement of primary projects arriving when it did, the development of one of the successful ports would have been paused until a stronger market signal. This pause would have lasted until the completion of the Crown Estates seabed auction process in the middle of next year - which would have created a delay of at least one year, risking impacting the final delivery date.

Comparison with European ports

The UK's port ownership structure differs from the traditional model in European nations, however, there is still the potential for competition from European counterparts for jobs and GVA. As European ports tend to be quasi-governmental or state-owned, more generous state aid could be used to support port development in those nations. This could lead to job creation and economic benefits being diverted to those countries, posing a risk to the UK sector. However, initiatives like FLOWMIS are viewed as critical by applicants to mitigate this risk by ensuring the UK has competitive port infrastructure.

The UK's privately owned port model also leads to differences in the application of environmental regulations. In the UK, environmental designations, such as special areas of conservation, often encompass the entire operational area of a port right up to the quay edge, creating challenges for port operations. This differs from the European approach, which typically excludes statutory port areas and hard berths from such designations. Addressing this issue in the UK would require a political decision to align with the European model. However, feedback from interviews that the new infrastructure bill in Wales aims to address some of these regulatory challenges.

There is greater risk of losing opportunities to other nations when it comes to manufacturing. While mechanisms like Freeports and FLOWMIS are contributing to creating attractive locations for manufacturers to invest, additional policy measures are still required. Aligning initiatives such as the Sustainable Industry Rewards,[17] Green Industries Growth Accelerator,

[16] Off-takers agree to buy or sell a product or service before it is completed/ready, making it easier for organisations to obtain financing.
[17] During fieldwork this initiative was called the Sustainable Industry Rewards. As of writing, this is known as the Clean Industry Bonus. Source: DESNZ (2025) New industry bonus opens to support good jobs and low carbon manufacturing factories

and Industrial Growth Plan is crucial to create a compelling commercial case for developers to establish their supply chains in the UK. The conclusion of the Round Five seabed auction will have reignited investment and provides concrete market signals by identifying specific projects and customers to support. This support incentivises investment rather than engaging with developers who lack firm projects.

2.9 Scheme delivery to date (internal stakeholder views)

When our first wave of interviews took place at the end of 2023, the delivery team had finished initial assessments and were preparing to present their preferred applicants (primary list) and reserve list to ministers. At that time, stakeholders stated the scheme was being delivered as expected so far.

Based on our second wave of internal stakeholder interviews between November 2024 and January 2025, the scheme is largely progressing as anticipated. Nevertheless the timelines for delivery have shifted and the urgency of the delivery timeline has increased, with challenges in completing projects within the financial year. There is also the potential of further delays as a lack of finalised financial commitments are reportedly affecting coordination with banks and match funding, raising concerns about meeting project timelines.

In the Final Grant Agreement phase the two successful projects are facing some delays in their progression largely attributed to the wider political context, complex negotiation and financial details. Despite these setbacks, FLOWMIS is still reportedly progressing well, with one internal stakeholder describing the final two projects as showing promising technical solutions and capabilities. Currently, DESNZ are reportedly progressing with the final agreement for one of the two successful projects. Although a definitive signing date cannot be set due to dependencies on Ministerial timelines from HM Treasury and DESNZ.

Feedback was not provided on whether budgeted costs for delivering the programme are being spent according to plan. However, it was suggested that the involvement of external resources commissioned to conduct the technical assessment may have taken place for longer than expected, potentially creating an unexpected cost.

Challenges encountered

One of the main challenges the delivery team has faced is deciding the timeline within which grant funds must be spent to ensure they are operational when required. The initial spending timeline was set for financial years 2023-2024 and 2024-2025 but had to be postponed by one year to 2024-2025 and 2025-2026. This decision was taken to facilitate the involvement of more potentially suitable and preferable ports, as there were concerns that desired ports would not apply due to the tight timelines. Ports would prefer greater flexibility with the spending timeline; however, this is restricted by spending review periods and even after this change, some ports indicated an inability to meet the timelines.

The time-limited nature of the grant funding has consistently been a challenge within FLOWMIS. There are ongoing efforts to investigate alternatives to grant funding and potential collaboration with other government departments and funders. In the future, depending on the

progress of initiatives like the National Wealth Fund and the Strategic Investment Model in Scotland, the preference for grant funding or its scale might change. However, given the current amount of money available and the timeline for its distribution, grant funding was seen as the only feasible option for FLOWMIS at the time.

Initially, the delivery team were also dissatisfied with the funding profile but re-profiled and front-loaded funding, which they said will avoid underspending. This change came from the lessons learned from OWMIS and required extensive negotiation. The number of jobs to be created was also highlighted as an issue, as they are anticipated to be lower than usually expected.

There is a concern that the launch of FLOWMIS may have been somewhat haphazard and rushed, with the implementation of the scheme taking place before the development of a comprehensive strategy. Furthermore, it is suggested that there was a lack of thorough investigation into the timeframes and logistics of port construction, and more rigorous verification processes are required. It is also suggested that the large amount of money committed to be allocated through grants in the scheme may be creating a distorted market dynamic.

One internal stakeholder expressed a preference for more comprehensive policy design, facilitated by workshops and greater industry engagement, and criticises the current approach for being overly simplistic. They mentioned the government's role is to only intervene in cases of market failure, suggesting that FLOWMIS may not align well with this principle (though that viewpoint can be challenged given the coordination failure dimension noted at various points above). They expressed uncertainty over the future outcomes of the scheme and suggest that more considered policy design and strategy development is needed.

2.10 Project progress to date (all interviewees)

We first examined the stage of various port projects when the prospect of applying for FLOWMIS was on the horizon. The focus then shifted to the progress made detailing rough timelines for delivery, the current status of the projects, and any deviations from original plans along with the rationale behind those changes. This section scrutinises the effectiveness of early delivery efforts, the financial difficulties encountered, and the overall success in meeting project objectives. Moreover, we consider the implications of projects that have stalled, identifying the barriers that have hindered progress and how some ports have surmounted significant technical, commercial, and regulatory challenges. The key learnings from these projects feature towards the end of this section.

Port development when considering applying

All projects discussed by applicants during their interview were in an early stage at the time of applying to FLOWMIS. However, the exact stage of each proposal varied. One successful applicant had completed outline designs, developed a business case and conducted £3,000,000 worth of pre-consenting works (including geotechnical surveys). Therefore, although it was not quite shovel-ready, the project was well underway and progressing when the scheme was made public according to the interviewee. The other successful applicant had

started development expenditure and had signed off around £10 million to be spent on the development phase.

The activities of unsuccessful applicants were as follows:

- One was at the conceptual design stage and has not progressed the project since.
- One applicant was identifying a location and design and engaged the construction market to get documents ready for planning throughout the application process.
- Two applicants were progressing through their first phase which involved remediation and the construction of a new quayside.
- Another port had completed its design and all engineering works, including ground investigation works and seabed investigation works and were undertaking the necessary environmental commitments that were being included in the application. The applicant also collated a tender list of contractors and appointed a management company to manage contracts and the tender process itself.

Progress made at point of interviews

The majority of applicants have continued to progress their projects according to the original proposal and timeline submitted to the scheme. The main activities include enabling works (e.g. environmental surveys) and using the development work conducted for applications to FLOWMIS to raise finance. However, some applicants are making changes to introduce economies of scale (e.g. dredging in multiple locations at the same time) to mitigate costs that have risen since the announcement of FLOWMIS and others are uncertain over whether the project will be able to progress after enabling works without additional funding. One applicant has shifted its focus to other projects, whilst another has started conversations with developers over potential investments through the Strategic Investment Model.

A few non-applicant ports have continued their journey in developing floating offshore wind capabilities, despite not receiving funding through FLOWMIS. In some cases, the main barrier to application was that their specific project was not at the right stage to apply for funding. Activities including planning, business cases and economic feasibility studies are still underway at some ports, making them unsuitable for FLOWMIS. These ports are continuing with these early-stage activities in preparation for future development and investment. Where non-applicant ports were able to provide rough timelines for delivering on floating offshore wind capabilities, estimates were centred around 2029.

2.11 Early impacts (all interviewees)

The designation of a successful applicant to the scheme has made it a focal point for the industry in the Celtic Sea. Developers and manufacturers now view the port as a central hub for their operations. The port leverages this status to attract business by highlighting the endorsement and support received from DESNZ, positioning it as a trusted and government-backed facility.

One unsuccessful applicant port has shifted to a two-phase approach to project development, driven by the need to manage cash flow in the absence of funding and accommodate the largest jack-up vessels. They highlight the strategy of securing initial revenue through a smaller first phase, followed by expansion in a later phase, citing a previous project as precedent.

When assessing the early impacts of non-applicant ports, it is important to remember that a number of these ports did not apply to the FLOWMIS scheme because they were still in early stages of planning, and therefore the timelines associated with FLOWMIS were not feasible for them. These ports are not expected to produce any early outcomes, given that they are still in the planning and feasibility stages of development.

Job creation

One successful applicant reported that there are around 20 members of staff spending a significant amount of their time on the project, in addition to an engineering consultancy who are helping with the design and consenting process. As a result, it is estimated that around 50-60 jobs are currently directly related to the DevEx phase of the project. Despite this, one unsuccessful applicant noted that although there is no direct impact from the absence of funding yet, the port worries that the perception of the project's lack of success might create a negative impact and drive investment away from the location, reducing the potential for an increase in jobs.

The majority of applicant and non-applicant interviewees were not able to provide details on early impacts or job creation, primarily due to the status of their project. The primary emphasis is on understanding the technical, commercial, and strategic challenges faced by port development projects in their initial stages and how these challenges may affect the potential for future outcomes, job creation and industry growth, which feature in the next section of this report.

Applicants suggest there is undoubted potential for local job creation in the future if their project still goes ahead, both directly through jobs involved in delivering the project and indirectly through increased business for supply chains. Further data collection and analysis would be necessary to provide a comprehensive overview of the employment impact of these projects.

Skills issue

One applicant based in a remote location reported a critical skills and housing shortage. This poses a significant challenge for projects as attracting skilled workers is difficult when housing is scarce. While bringing in workers from elsewhere is an option, it often proves unsustainable as they may leave due to housing difficulties. The region's small population and the tendency for young people to move south for work exacerbates the problem. Another applicant points out the dual challenge of recruiting and retaining skilled workers on large-scale projects. They highlight that the experience gained on such projects makes skilled individuals highly desirable for other opportunities, making retention difficult.

Anticipated impacts without FLOWMIS' involvement

Interviewees express the view that the location of floating offshore wind investment would differ in the absence of public support through FLOWMIS. Areas that require less spend and fewer upgrades would be chosen, and local supply chains would not grow around these locations as it would be cheaper to sail a vessel with components to the site. They also suggest the UK would have needed to depend on European counterparts to deploy floating offshore wind. In this scenario, the UK supply chain would miss out on the associated socio-economic benefits of developing the knowledge and expertise of how to build, operate and maintain floating structures. It was also suggested that a shift in focus towards fixed-bottom rather than floating wind may have taken place without government support, possibly advancing the volume of these farms.

One successful applicant stated that their organisation would not have continued significant development expenditure according to its proposed timeline which would have further delayed infrastructure delivery and impacted future use of the site. Project delays are the likely outcome for many unsuccessful applicants that are required to find alternative sources of funding, although many recognise there are no guarantees projects will go ahead.

Moreover, the deployment of floating wind projects would have potentially faced both time delays and increased costs. While floating wind is crucial for achieving net zero beyond 2030, it is not immediately necessary for the clean energy targets by that year. The infrastructure required for these projects necessitates substantial baseline investment, which would not have been feasible without FLOWMIS, affecting the industry's growth potential.

The lack of established markets and clear revenues in the floating offshore wind sector underscores the importance of government intervention. Without such support, significant delays in investment certainty and progress towards climate goals might have occurred, potentially setting back the industry by approximately ten years.

2.12 Lessons for future support identified by applicants

One important lesson for future support is the significance of the UK government effectively communicating and maintaining awareness of port infrastructure needs. Consistent communication and engagement was considered to be vital by applicants. In addition to this, applicants praised Civil servants in DESNZ for being knowledgeable, on top of their brief and aware of requirements. According to an applicant, there are individuals in government who recognise the potential of projects and advocate for their progression. Ultimately applicant feedback highlighted that sharing positive project feedback and readily accepting advice can also contribute to overall success, even in the absence of substantial financial aid.

A suggestion was made by an applicant that FLOWMIS, and similar grant support, should be focused on the development expenditure phase of port infrastructure, as this phase is considered the riskiest for port developers. In contrast, factories would benefit more from direct grant injections to support their final investment decision. The applicant emphasises the necessity of financial support during the risk period to ultimately reach the FID stage.

3 Initial learnings and recommendations

The scheme is still progressing through the Final Grant Agreement phase and therefore these initial learnings and recommendations are based on findings to date (up to February 2025). As a result, these recommendations are likely to change. Nevertheless, findings from interviews with non-applicants and stakeholders involved in the delivery of FLOWMIS raise the following potential improvements that could be made to similar schemes in the future.

3.1 Competition call

Concerns have been raised over the clarity and specificity of the scheme's guidelines for applicants, particularly regarding the technical specifications for floating offshore wind capabilities. Although the delivery team have engaged with the market and provided opportunities for queries to be addressed, greater detail on the technical specifications for floating offshore wind capabilities could be published earlier to provide prospective applicants with more clarity and time to consider and prepare to apply.

Based on the feedback from applicants and non-applicants about the FLOWMIS competition call, several areas for improvement were identified for future schemes. A greater lead time for applications to be developed according to the requirements would facilitate well-designed applications. The introduction of preliminary funding could help with port development ahead of larger grant funding, mitigating potential project delays and unpreparedness for opportunities.

Non-applicants also pointed out that the nascent nature of the floating offshore wind sector necessitates more flexibility and allowances in funding proposals. They found the application process rigorous and felt that the competition call failed to address the sector's diverse needs. Suggestions to enhance the application process included less prescriptive project criteria, more time for application development, openness to tentative bids requiring additional exploration time and explicit consideration of smaller ports with credible bids. These adjustments could potentially make future schemes more attractive and effective.

Some felt that the timelines for developing a proposal and delivering the project were unrealistic given the scale of their intended projects. The requirement to spend grant funding before the end of March was seen as particularly problematic for smaller ports with fewer resources. Suggestions for improvement included an extended timeline for early-stage project delivery and less prescriptive application criteria to allow more flexibility in addressing the complexities of delivering port infrastructure.

Several non-applicants of the FLOWMIS scheme cited various reasons for the scheme not aligning with their organisation's capacity or needs. For example, their port being too small in terms of dock size and depth, and the scale of the project being deemed too small to meet the scope of the funding. Some felt that the scheme was designed to support capital expenditure exclusively, not development expenditure. As such, many non-applicants felt that the scope of FLOWMIS was not significant enough to warrant the time spent on an application. These insights suggest that future schemes might benefit from more flexible criteria and additional support for smaller ports and projects.

There was a concern over the expertise of DESNZ, with one non-applicant suggesting that industry has more experience in delivering port infrastructure. To strengthen future schemes,

collaboration with delivery partners recognised by the sector or with trusted industry bodies could be beneficial. While DESNZ led the delivery of FLOWMIS, marking the first time in decades a government department undertook port infrastructure delivery, it also drew on technical assessments from specialist engineering consultants and worked closely with the Floating Wind Sector of Excellence to design the scheme.

3.2 Funding

Ports felt that the scale of support provided through FLOWMIS does not match the extent of port development required to meet sector demands and become a more attractive prospect internationally. Suggestions for improving future schemes to generate further funding include adopting a business case-driven funding model, linking government grants to secured wind farm capacity, and implementing profit-sharing models to align government investment with project success.

The allocation of more funds to support operations and maintenance (O&M) was also suggested to ensure the long-term functionality of offshore wind projects. Furthermore, an increase in the total funding package was suggested to meet the needs of the industry, with respondents believing grants should cover 40-50% of the development's capital cost.

Two alternative models for incentivising investment in ports were suggested as a result of learning from the delivery of FLOWMIS so far. The first is a revenue guarantee to spur investment, similar to a Contracts for Difference but more customised for ports. The second is a special purpose vehicle (SPV) model, where the government assumes some risk through partial ownership. This could lead to greater strategic development of ports as government would have a greater say in decision-making, share more risk and hold a larger stake in the outcome. However, it is acknowledged that this approach would require significantly more funding.

Ports have expressed that a two-year fixed window, synchronised with the spending review rather than port delivery timescales and the wider market, is restrictive and curtails the range of potential projects. Larger projects have attempted to counter this by adopting phased approaches and prioritising early work. However, one stakeholder suggests that a key consideration for the future is to align the availability of funding options with the construction timelines of ports.

Given the concerns raised by the businesses consulted over the prospect of higher floating offshore wind industry development subsidies in Europe, and therefore an asymmetric state aid landscape, it may be worth examining the potential costs and benefits of additional public support from a combined enhanced energy security and national prosperity angle.

3.3 Assessment process

The bids assessment workload was challenging for assessment teams, particularly for the economic assessment. There has also been a need for greater economist resource caused by competing pressures for resource and an additional need caused by issues surrounding the complexity of robustly calculating the precise impact of the proposed projects. Therefore, future schemes could benefit from greater resources to support the economic aspect of the

assessment process, or contingency measures with further economist support on standby if required.

The FLOWMIS assessment process was generally consistent, with measures like moderation sessions and cross-checking at every stage to ensure uniformity. Nevertheless, greater visibility of other assessment areas for assessors could improve efficiency. Increased direct interaction among individual assessors was also suggested as a way to improve the effectiveness of the assessment process.

Most stakeholders did not say that additional support from other departments would have been beneficial. However, the sharing of applicant information with stakeholders such as the National Wealth Fund was seen as potentially helpful.

Applicants suggest requesting less information of ports in their initial application unless DESNZ deem their project to be credible / likely to receive funding, as developing an application was reported to be extremely resource intensive (both financially and by requiring a large amount of staff time). This led many applicants to direct funds to external support in the form of consultants. However, the implication of this, depending on the type and level of information shared, is that it may become more difficult to decide whether projects are credible with less information.

The speculative aspect of information is, according to internal stakeholders, a major factor contributing to the complexity of the programme. For instance, the unpredictability in technological pathways and market demand necessitates a flexible and adaptive approach to port infrastructure development. This is challenging when formally assessing the viability and level of risk in projects, particularly when considering the iterative and speculative nature of floating offshore wind.

A significant aim of FLOWMIS is to mitigate risk and bridge the gap between available technology and its industrial development. To achieve this, FLOWMIS has had to navigate an ever-evolving regulatory and policy environment while relying on assumptions about future market conditions and infrastructure readiness. According to internal stakeholders, this uncertainty has made the delivery of FLOWMIS a challenging and complex project.

3.4 Communication

Whilst feedback meetings were effective in communicating the reasons behind the outcomes of applications, the announcement of successful applicants could be improved in the future. The timing of the announcement was unknown and created uncertainty for stakeholders involved in projects. In addition, many of the applicants reported discovering the outcome of their application through informal sources. Applicants would appreciate being notified prior to a wider official government public announcement earlier. This would support their own marketing and communication of their project.

3.5 Conclusion

The evaluation of FLOWMIS highlights encouraging progress in addressing the significant challenges faced by the UK's offshore wind sector. Through the strategic deployment of grant funding, the scheme aims to bolster port infrastructure, thereby facilitating the development of floating offshore wind capabilities crucial for achieving the UK’s Net Zero targets. Despite the challenges, particularly those associated with the nascent nature of floating offshore wind and tight timelines, DESNZ has announced funding for one successful applicant and is currently advancing with the completion of the Final Grant Agreement, marking a significant step in the delivery phase of the initiative. The scheme's emphasis on fostering infrastructure readiness and reducing market uncertainties has laid a strong foundation for future growth in the sector.

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