

Clean Maritime Demonstration Competition 6: Smart Shipping

This document contains the guidance and scoring used by the Assessors when reviewing your application. Assessors will review your answers for each scored question and mark each of them between 1 and 10 (1 being the lowest and 10 being the highest).

Any questions that are not scored will not be reviewed by the Assessor.

Question 1. Applicant location (not scored)

You must state the name and full registered address of your organisation and any partners or subcontractors working on your project.

We are collecting this information to understand more about the geographical location of all applicants.

Question 2. Animal testing (not scored)

Will your project involve any trials with animals or animal testing?

You must select one option:

- Yes
- No

We will only support innovation projects conducted to the highest standards of animal welfare.

Further information for proposals involving animal testing is available at the [UKRI Good Research Hub](#) and [NC3R's animal welfare guidance](#).

Question 3. Permits and licences (not scored)

Will you have the correct permits and licences in place to carry out your project?

We are unable to fund projects which do not have the correct permits or licences in place by your project start date.

You must select one option:

- Yes
- No
- In process of being applied for
- Not applicable

Question 4. Need or challenge

What is the business need, technological challenge, or market opportunity behind your innovation?

Explain:

- the main motivation for the project
- the project objectives
- the project deliverables
- how your project will support the transition to zero emission shipping and Smart Shipping technologies
- how the project will support the adoption of technology which will reduce the level of lifecycle greenhouse gas (GHG) emissions, when compared to conventional fuels and propulsion
- how the project relates to the maritime sector, what parts of the sector the project addresses, and how the project outputs will impact on them
- the business need, technological challenge or market opportunity
- whether you have identified any similar innovation or training initiative and its current limitations, including those close to market or in development
- any work you have already done to respond to this need, for example, if the project focuses on developing an existing capability or building a new one
- the wider economic, social, environmental, cultural or political challenges which are influential in creating the opportunity, such as incoming regulations

- how this project might support or enable the development of regulation, including engagement to date with relevant regulatory bodies and development of assurance systems
- how the project will further the understanding of the current gaps in knowledge on the technical aspects of the technology

Question 4. Assessor guidance and scoring:

Score 9 - 10

There is a compelling motivation for the project. There is a detailed understanding of how the project will support the adoption of technology that will reduce the level of lifecycle GHG emissions or improve air quality (when compared to conventional maritime technologies). A clear and compelling case for how the project will support the transition to achieve zero emission shipping and overcome existing barriers to adoption of technologies or alternative fuels for clean maritime applications, including but not limited to supporting the development of regulation and furthering understanding in areas where gaps in knowledge exist. The applicant has shown, if applicable, how the project will build on previous relevant work.

Score 7 - 8

There is a good motivation for the project. There is an understanding of how the project will support the adoption of technology that will reduce the level of lifecycle GHG emissions or improve air quality (when compared to conventional maritime technologies). There is a case for how the project will support the transition to achieve zero emission shipping and overcome existing barriers to adoption of technologies or alternative fuels for clean maritime applications, including but not limited to supporting the development of regulation and furthering understanding in areas where gaps in knowledge exist. The applicant has shown, if applicable, how the project will build on previous relevant work.

Score 5 - 6

The project motivation is good, however further clarity is required as to how the project will support the adoption of technology that will reduce the level of lifecycle GHG emissions or improve air quality (when compared to conventional maritime technologies). There is a case for how the project will support the transition to achieve zero emission shipping and overcome existing barriers to adoption of technologies or alternative fuels for clean maritime applications, including but not limited to supporting the development of regulation and furthering understanding in areas where gaps in knowledge exist.

Score 3 - 4

Project motivation is poorly defined or not relevant to the applicant or team. Limited references to how the project will support the adoption of technology that will reduce the level of lifecycle GHG emissions or improve air quality (when compared to conventional maritime technologies). Limited case to support the transition to achieve zero emission shipping and overcome existing barriers to adoption of technologies or alternative fuels. Clean maritime applications are broadly referenced but are not well defined or are not relevant.

Score 1 - 2

There is little or no relevance to the competition objectives. References to how the project will support the adoption of technology that will reduce the level of lifecycle GHG emissions or improve air quality (when compared to conventional maritime technologies) are not offered. Very little case to support the transition to achieve zero emission shipping and overcome existing barriers to adoption of technologies or alternative fuels for clean maritime applications.

Question 5. Approach and innovation

What approach will you take and where will the focus of the innovation or training and skills project be?

Explain:

- the technical detail and approach of your proposed project, with reference to barriers that the project seeks to overcome
- how you will respond to the need, challenge or opportunity identified
- how you will improve on any similar innovation or training initiative that you have identified
- whether the project will focus on existing technologies in new areas, the development of new technologies for existing areas, or a totally disruptive approach
- the technology or skills development or progress that will be achieved by the project, including defined success criteria
- for non-training projects, the estimated level of 'well-to-wake' greenhouse gas emission savings and air quality improvements resulting from your technology, including both direct and indirect savings from the future demonstration project itself and any subsequent commercial deployment, stating any assumptions and evidence where possible

- how your project is tailored to maritime applications, and how you have considered the environmental, operational and practical challenges of innovation in the marine environment
- how your approach has considered the regulatory landscape and challenges to implementing the technology, you must demonstrate a clear understanding of the regulatory context and any assurances that need to be included
- how your project will engage with relevant regulatory authorities to progress both the innovative and non-innovative elements of your project, for example, vessel structure, stability and marine equipment
- the freedom you have to operate
- how this project fits with your current product, service lines or offerings
- how it will make you more competitive
- the nature of the outputs you expect from the project, for example reports, demonstrator, know-how, new process, product or service design, and how these will help you to target the need, challenge or opportunity identified

'Well-to-wake emissions' is defined as the emissions associated with production, distribution, storage and usage of energy.

You can submit one appendix to support your answer. It can include diagrams and charts. It must be a PDF no larger than 10MB. It can be up to two A4 pages and must be legible at 100% zoom.

Question 5. Assessor guidance and scoring:

Score 9 - 10

The approach is clear and designed to deliver clean maritime solutions with clear definition of the outcomes and success criteria for the project. There is a clear understanding of the regulatory landscape and challenges to implementing the technology or training initiative with a clear plan of how the project will engage with the relevant regulatory authorities to provide the assurance required to enable the project to proceed. The project will deliver or prepare for future projects to deliver high 'well-to-wake' greenhouse emissions reductions or air quality improvements. Strong evidence is presented to show how the innovation and project outputs will be additional to those already available. The project is significantly innovative either commercially or technically and will make a substantial contribution to the field. Solid evidence is presented to substantiate the level of innovation and freedom to operate.

Score 7 - 8

The approach is addressing the need to deliver clean maritime solutions with outcomes and success criteria for the project defined. There is an understanding of the regulatory landscape and challenges to implementing the technology or training initiative with a plan of how the project will engage with the relevant regulatory authorities to provide the assurance required to enable the project to proceed. The project will deliver or prepare for future projects to deliver medium to high 'well-to-wake' greenhouse emissions reductions or air quality improvements. Evidence is presented to show how the innovation and project outputs will be additional to those already available. The project is sufficiently innovative either commercially or technically and will make a contribution to the field. Evidence is presented to substantiate the level of innovation and freedom to operate.

Score 5 - 6

The project may address the need to deliver clean maritime solutions with some reference to outcomes and success criteria. There is little awareness and consideration of the regulatory landscape and challenges to implementing the technology or training initiative. The project will deliver or prepare for future projects to deliver low to medium 'well-to-wake' greenhouse emissions reductions or air quality improvements. The level of innovation or freedom to operate is not strongly backed up with evidence. Innovation focus is plausible and shows a link to improvements in clean maritime technology, fuels or training.

Score 3 - 4

The approach is poorly defined with an unconvincing link to the development of clean maritime solutions to deeply decarbonise the sector or result in air quality improvements. Improvement in clean maritime technology, fuels or training is not very convincing. Little to no mention of project outputs or success criteria.

Score 1 - 2

The approach is not well defined or inconsistent with the development of clean maritime solutions to deeply decarbonise the sector or result in air quality improvements. There is no identification of how this will improve clean maritime technology, fuels or training.

Question 6. Team and resources

Who is in the project team and what are their roles

Explain:

- the end user in your team and how they are meaningfully contributing to the project
- the roles, skills and experience of all members of the project team that are relevant to the approach you will be taking
- the resources, equipment and facilities needed for the project and how you will access them
- the details of any vital external parties, including subcontractors, who you will need to work with to successfully carry out the project
- the current relationships between project partners and how these will change as a result of the project
- any roles you will need to recruit for

You can submit one appendix, with a short summary of the main people working on the project to support your answer. It must be a PDF no larger than 10MB. It can be up to two A4 pages and must be legible at 100% zoom.

Question 6. Assessor guidance and scoring:

Scores 9 - 10

The consortium is well placed to carry out the project and has the capability to exploit the results as per the approach described in Question 5. There is a clear plan to obtain all the resources, equipment and facilities they will need, particularly in the light of any continuing supply chain issues. There is strong evidence that the consortium will work well. The applicant has identified any gaps - such as skills - within the project team and has highlighted how they will be filled in time to deliver the project by the 31 March 2026. A team member responsible for regulatory aspects has been identified.

Scores 7 - 8

The consortium makes sense given the approach described in Question 5. The applicant indicates how access will be obtained to all the resources, equipment and facilities they will need, particularly in the light of any continuing supply chain issues. The consortium is likely to work well. The applicant has considered where support may be required. A team member responsible for regulatory aspects has been identified.

Scores 5 - 6

The consortium has most, but not all, of the required skills and experience required. It is unclear whether or not the consortium will work well together. A team member responsible for regulatory aspects has been identified.

Scores 3 - 4

There are significant gaps in the consortium with little or no information about how these will be filled. There may be some partners with little relevance to the project activities. A team member responsible for regulatory aspects has been identified.

Scores 1 - 2

The consortium will not be capable of either carrying out the project or exploiting the results.

Question 7. Market awareness

What does the market or markets you are targeting look like? For training and skills projects, this is the market for which you will be developing skills.

Describe:

- the markets and sub sectors you will be targeting in the project, for example, crew transfer vessels, short sea ferries or any other potential markets, either domestic, international or both
- the size of the target markets for the project outcomes, backed up by references where available
- the structure and dynamics of the target markets, including customer segmentation, together with predicted growth rates within clear timeframes
- the target markets' main supply or value chains and business models, and any barriers to entry that exist
- the current UK position in targeting these markets
- the size and main features of any other markets not already listed

If your project is highly innovative, where the market may be unexplored, describe or explain:

- what the market's size might be

- how your project will try to explore the market's potential

Question 7. Assessor guidance and scoring:

Score 9 - 10

The target market size, drivers and dynamics are well understood (to the level of sub-sectors where relevant), fully quantified and evidenced. Where the market is new or unexplored, possible routes are identified based on precedents or relevant research. Relevant secondary markets are substantiated and described in brief. The UK supply chain is well understood. The project has significant potential application to a large range in the markets and sub-sectors.

Score 7 - 8

There is a good awareness of the target market's drivers and dynamics. The market size is quantified with some evidence (to the level of sub-sectors where relevant). For a new market, a good attempt is made at describing the possible routes to market and estimating the market size. Relevant secondary markets are described showing good awareness. The UK supply chain is understood. The project has some potential application across the markets and sub-sectors.

Score 5 - 6

The general market size and dynamics are understood but the addressable market is poorly quantified. Secondary markets are mentioned but little information is offered. The UK supply chain is referenced but not well understood. The project has limited potential application across the markets and sub-sectors.

Score 3 - 4

Some information about the general market is offered but the extent of the addressable market for the project is not described. Secondary markets are barely mentioned. The UK supply chain is not referenced. The project has niche potential application in the markets and sub-sectors.

Score 1 - 2

The market is poorly defined or is irrelevant to the motivations of the project.

Question 8. Outcomes and route to market

How are you going to grow your business and increase long term productivity as a result of the project?

Explain:

- your current position in the markets and supply or value chains outlined, and whether you will be extending or establishing your market position
- your target customers or end users, and the value to them, for example, why they would use or buy your product
- your route to market
- how you are going to profit from the innovation or training initiative, including increased revenues or cost reduction
- how the innovation or training initiative will affect your productivity and growth, in both the short and the long term
- how you will protect and exploit the outputs of the project, for example through know how, patenting, designs or changes to your business model
- your strategy for targeting the other markets you have identified during or after the project

Describe how your project will be exploited for the benefit of the UK supply chain in the future, including:

- the route to commercialisation for your technology or uptake of training after the project, including further development activity in the UK
- the potential benefits of future commercialisation or uptake of training within the UK
- the potential benefits from export of the technology or training
- how you will anchor intellectual property (IP) generated by the project in the UK and how this IP will be exploited for the benefit of the UK supply chain in the future
- how the project provides the UK with a competitive advantage over other countries

If there is any research organisation activity in the project, describe:

- your plans to spread the project's research outputs over a reasonable timescale
- how you expect to use the results generated from the project in further research activities

Question 8. Assessor guidance and scoring:

Score 9 - 10

A clear value proposition to the UK supply chain is identified and evidenced. A plan to anchor IP is presented and credible (if applicable). The routes to commercialisation and the potential benefits to the UK are clear, significant and credible. The protection, exploitation or dissemination of the main project outputs and outcomes are well defined.

Score 7 - 8

A value proposition to the UK supply chain is identified. A plan to anchor IP is presented (if applicable), but more detail is required to understand credibility. The routes to commercialisation and the potential benefits to the UK are identified and have some significance. The protection, exploitation or dissemination of the main project outputs is outlined.

Score 5 - 6

The UK supply chain is referenced but the value proposition to it is not clear. There is some information about routes to commercialisation and there are limited potential benefits to the UK and plans to protect, exploit or disseminate the main project outputs.

Score 3 - 4

There is some information about the UK supply chain but there is little about the value proposition or how the project will benefit it.

Score 1 - 2

The applicant provides little or no information about the UK supply chain or about how the project will benefit it.

Question 9. Wider impacts

What impact might this project have outside the project team?

Describe and, where possible, measure the economic benefits from the project such as productivity increases and import substitution, to:

- external parties
- customers
- others in the supply chain
- broader industry
- the UK economy

Describe and, where possible, measure:

- any expected impact on government priorities including economic growth around the UK, boosting productivity and creation of jobs, describing specifically any high skilled job creation
- any expected environmental impacts, other than greenhouse gas emissions such as air quality, either positive or negative
- any expected regional impacts of the project

Describe any expected social impacts, either positive or negative, on, for example:

- quality of life
- social inclusion or exclusion
- jobs, such as safeguarding, creating, changing or displacing them
- education
- public empowerment
- health and safety
- regulations
- diversity

Question 9. Assessor guidance and scoring:

Scores 9 - 10

There are significant positive impacts on others outside of the team which are well understood, for example, supply chain partners, customers, broader industry. Political, economic or environmental impacts, as well as wider social impacts, such as diversity and inclusion, regulations and quality of life are considered. Expected regional impacts are described with compelling evidence to justify claims. Any possible negative impacts are limited and outlined and fully mitigated where appropriate. There is clear distinction between the impacts resulting from this project and impacts related to potential further projects featuring the technology.

Scores 7 - 8

There is good awareness of how the project may impact others outside of the team and have some significance. Social, economic or environmental impacts have been identified. Expected regional impacts are described. Any possible negative impacts are limited and partially mitigated where appropriate. There is distinction between the impacts resulting from this project and impacts related to potential further projects featuring the technology.

Scores 5 - 6

There is basic awareness of how the project could impact some others outside the project. Some relevant stakeholders are not considered. Little mitigation is offered where there may be negative impacts. There is little distinction between the impacts resulting from this project and impacts related to potential further projects featuring the technology.

Scores 3 - 4

The applicant provides some information about possible impacts but significant gaps remain. There is no distinction between the impacts resulting from this project and impacts related to potential further projects featuring the technology.

Scores 1 - 2

There is no information about how the project might impact others or how the project could be beneficial to other UK interests.

Question 10. Project management

How will you manage your project effectively?

Explain:

- the main work packages of your project, indicating the lead partner assigned to each and the total cost of each one
- your approach to project management, identifying any major tools and mechanisms you will use to get a successful and innovative project outcome
- the management reporting lines
- your project plan in enough detail to identify any links or dependencies between work packages or milestones

You must submit a project plan or Gantt chart as an appendix to support your answer. It must be a PDF no larger than 10MB. It can be up to two A4 pages and must be legible at 100% zoom.

Question 10. Assessor guidance and scoring:

Scores 9 - 10

The project work packages are defined with the leading partner and total cost provided for each one. The approach to project management is described and is relevant to the project. The plan is well designed to meet the objectives of the project in a realistic and efficient way. Any links or dependencies between work packages and/or milestones are identified. Possible impact of continuing supply chain issues, if applicable, are comprehensive and clearly accounted for.

Scores 7 - 8

The project work packages are outlined with the leading partner and total cost provided for each one. The approach to project management is stated. The plan seems appropriate to the project objectives and achievable in the timeframe provided. Any links or dependencies between work packages or milestones are identified. Possible impact of continuing supply chain issues are accounted for.

Scores 5 - 6

The project work packages are outlined but there are some details missing. The project plan seems reasonable but not tailored to the objectives of the project. Possible impacts of ongoing supply chain issues are identified but more information is needed on how these will be dealt with.

Scores 3 - 4

The plan has serious deficiencies or major missing aspects. The plan has little chance of meeting the objectives of the project. The applicant offers no information on how supply chains or any other external issues may affect the project management.

Scores 1 - 2

The plan is totally unrealistic or fails to meet the objectives of the project.

Question 11. Risks

What are the main risks for this project?

Explain:

- the main risks and uncertainties of the project, including the technical, commercial, managerial and environmental risks
- how you will mitigate these risks
- the timeline for delivery of your project before March 2026
- any project inputs that are critical to completion, such as resources, expertise, and data sets
- any output likely to be subject to regulatory requirements, certification, ethical issues and other requirements identified, and how you will manage this

You must submit a risk register as an appendix to support your answer. It must be a PDF no larger than 10MB. It can be up to two A4 pages and must be legible at 100% zoom.

Question 11. Assessor guidance and scoring:

Scores 9 - 10

The key risks and uncertainties of the project are clearly considered and the mitigation strategy is realistic and appropriate to each risk. Critical inputs to the project are identified. Relevant constraints or conditions on the project outputs (regulatory requirements, certification or ethical issues) are identified. The risk analysis is appropriate and professional and relevant to the objectives of the project. There is comprehensive presentation of the risks associated with delivering the project before 31 March 2026 and credible mitigations are put forward.

Scores 7 - 8

The key risks and uncertainties of the project are considered with appropriate mitigations. Relevant constraints or conditions on the project outputs are identified. The risk analysis is relevant to the project. Risks associated with delivering the project before 31 March 2026 are presented and credible mitigations are put forward.

Scores 5 - 6

Most major risks have been identified but there are some gaps, or the mitigation and management are insufficient to properly control the risks. Risks associated with delivering the project before 31 March 2026 are presented and some mitigations are put forward.

Scores 3 - 4

The risk analysis is poor or misses major areas of risk. The mitigation and management are poor or not relevant to the project. Risks associated with delivering the project before 31 March 2026 are presented, but with no mitigation strategy.

Scores 1 - 2

The risk analysis is superficial with minimal mitigation or no risk management has been suggested.

Question 12. Knowledge sharing and clean maritime market development

How will this project enhance the UK's position as a world leader in clean maritime technology through shared learning, dissemination and knowledge exchange?

Describe:

- what processes you will adopt for ensuring that lessons are learned across the clean maritime sector, including input from stakeholders and potential customers
- how you will ensure that your project takes account of other relevant work, for example, successful and unsuccessful clean maritime projects, previous government funded or EU funded work in the UK, and academic studies
- what knowledge sharing arrangements you will put in place and how you will ensure that information is disseminated effectively, including considerations such as timeliness and means of communication
- what evidence and data will be collected, including how and when this will be done and who will be responsible
- the types of information you plan to share with other stakeholders which you have identified
- how your project offers learning and development in relevant clean maritime technologies and enables research and innovation across the wider supply chain
- the scalability and replicability of your project, and how you will build on experience to support future market development and cost reduction

Question 12. Assessor guidance and scoring:

Scores 9 - 10

There is a very clear and detailed explanation for how the project will share its learnings and findings with the clean maritime sector and wider industry and stakeholders. Knowledge sharing is at the heart of their approach and the bid states what can/will be shared and when. The bid states what information will be shared, to which stakeholders and who is responsible in the project team for doing that. Benefits of sharing their findings with the wider supply chain are stated clearly.

Scores 7 - 8

There is a good explanation for how the project will share its learnings and findings with the clean maritime sector and the wider industry. Knowledge sharing is at the heart of their approach and the bid states what can/will be shared and when. The bid gives a

good description of what information will be shared, to which stakeholders and who is responsible for doing that, but there are some gaps in their description. Benefits of sharing their findings with the wider supply chain are not clearly defined as for a 9-10.

Scores 5 - 6

There is an outline explanation for how the project will share its learnings and findings with the clean maritime sector and wider industry but there are some significant gaps. Knowledge sharing is mentioned but not at the heart of their approach and the bid states what can or will be shared and when, with some key details missing. The bid gives a satisfactory description of what information will be shared, to which stakeholders and who is responsible for doing that but there are some key gaps. Benefits of sharing their findings with the wider supply chain are not clearly defined as for a 7-8.

Scores 3 - 4

There is a poor explanation for how the project will share its learnings and findings with the clean maritime sector and wider industry but there are some significant gaps. Knowledge sharing is poorly mentioned and not at the heart of their approach, and key details are missing. The bid gives no description of what information will be shared, to which stakeholders and who is responsible for doing that.

Scores 1 - 2

There is a very poor and unconvincing explanation of how the findings and the learnings will be shared with stakeholders. The project does not intend to or give confidence that it will share its findings with others in the industry.

Question 13. Added value

How will this public funding help you to accelerate or enhance your approach to developing your project towards commercialisation? What impact would this award have on the organisations involved?

Explain:

- what advantages public funding would offer your project, for example: appeal to investors, more partners, reduced risk or a faster route to market
- the likely impact of the project outcomes on the organisations involved
- what other routes of investment or means of support you have already engaged with and why they were not suitable
- how any existing or potential investment or support will be used in conjunction with the grant funding
- what your project would look like without public funding
- how this project will reduce your need for public funding in the future
- how this project would change the R&D activities of all the organisations involved

Question 13. Assessor guidance and scoring:

Scores 9 - 10

There is a compelling case for the positive difference funding will make. Alternative sources of support have been considered and are described with an explanation of why they are discounted or used in conjunction with the grant funding. The project will directly and significantly increase the industrial partners' R&D spend during the project and afterwards.

Scores 7 - 8

The arguments for public funding are good and justified. The project will significantly increase the industrial partners' commitment to R&D.

Scores 5 - 6

The public funding arguments are acceptable, but the difference made by the grant will be modest. The project will improve the industrial partners' commitment to R&D.

Scores 3 - 4

The funding arguments are poor or not sufficiently justified. There is not likely to be any improvement to the industrial partners' commitment to R&D.

Scores 1 - 2

There is no justification for public funding and/or no reason why the applicant should not fund the work themselves.

Question 14. Costs and value for money

How much will the project cost and how does it represent value for money for the team and the taxpayer?

In terms of your project goals, explain:

- your total eligible project costs
- the grant you are requesting
- how each partner will finance their contributions to your project
- how this project represents value for money for you and the taxpayer
- how it compares to what you would spend your money on otherwise
- the balance of costs and grant across the project partners
- any subcontractor costs and why they are critical to your project

Question 14. Assessor guidance and scoring:

Scores 9 - 10

The project costs are entirely appropriate for the research and development work described and represent excellent value for money compared to alternative approaches outlined (including doing nothing). The partners have a clear idea of how they will finance their contribution. The balance of costs and grants between partners and use of subcontractors is justified and costed correctly, as well as reasonable for the proposed project.

Scores 7 - 8

The project costs are appropriate and should be sufficient to successfully complete the project. The balance of costs and grants between partners and use of subcontractors seems reasonable based on the work proposed. The project represents good value for money compared to alternative outlined approaches (including doing nothing).

Scores 5 - 6

The project costs seem broadly correct, but the justifications are not clear. The balance of costs and grants between partners is acceptable. Little information is offered about alternative approaches and the value for money this project offers.

Scores 3 - 4

The project costs seem too high or too low given the proposed project. The split of costs and grants between partners is unbalanced, or inappropriate use is being made of subcontractors.

Scores 1 - 2

The costs are not appropriate or justified. The balance between partners and subcontractors is not justified.