Contracts for Innovation: Resource Efficient Automotive Impacts - Assessor guidance for applicants

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. Themes (not scored)

Select one main theme from the specific themes list in the ‘Scope’ section of this competition. You cannot choose more than one main theme.

- reduction in the embodied carbon of vehicles through the use of lower carbon materials
- reduction in vehicle weight
- use of secondary content in vehicles and vehicle components
- repair and remanufacture of vehicles and vehicle components
- design for disassembly, reuse, and recycling
- recovery of materials and components for reuse and recycling

If your project crosses over into more than one theme this can be explained in Question 6.

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 the process of being applied for
- Not applicable

Question 4. International collaboration (not scored)

Does your proposed work involve any international collaboration or engagement?

You must provide details of any expected international collaboration or engagement.

You must include a list of the names and the countries, any international project co-leads, project partners, visiting researchers, or other collaborators are based in.

You must also include details of any subcontractors or service providers.

If your proposed work does not involve international collaboration or engagement, your answer must confirm this.

Question 5. Trusted Research and Innovation (not scored)

You must explain if your proposed project work relates to UKRI's Trusted Research and Innovation (TR&I) Principles, including:

- a list of any dual-use (both military and non-military) applications to your research
- a list of the areas where your project is relevant to one or more of the 17 areas of the UK National Security and Investment (NSI) Act
- whether an export control license is required for this project under the academic export control guidance and the status of any applications
- a list of any items or substances on the UK Strategic Export Control List

If your proposed work does not relate to UKRI's TR&I Principles, your answer must confirm this.

We may ask you to provide additional TR&I information at a later date, in line with UKRI TR&I Principles and funding terms and conditions.

Question 6: Proposed idea or technology

Describe the current state of the target sector and the theme that your proposed idea or technology matches to (you may identify multiple themes if appropriate). Where feasible, relate this to the resource efficiency opportunities and challenges identified within the Unlocking Resource Efficiency report for your target sector.

Provide a description of your proposed idea or technology. Identify the extent to which the solution is expected to contribute to greenhouse gas emissions reductions, where this will occur (scope 1, 2, 3) and whether this contributes to territorial emissions savings, for example, are the targeted activities taking place in the UK.

Include a description of the current state of development or readiness of the idea. You must provide evidence that what you are proposing is already at Technology Readiness Level (TRL) 5 or above. If your technology is below TRL 5, the application will be rejected.

You can submit a single appendix as a PDF containing images and diagrams 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.

This question will be scored against this assessment criterion: How well does the proposal meet the challenge, how well aligned is it with ‘Unlocking Resource Efficiency’ and the Technology Readiness Level?

Question 6: Proposed idea and technology - Assessor guidance and scoring

Scores 9 - 10

The proposal provides a clear description and compelling evidence to show how the proposed idea and technology will meet the challenge or challenges identified in the competition scope. The technology has clear alignment with an ‘Unlocking Resource Efficiency’ solution, with potential for significant UK territorial emissions savings. The Technology Readiness Level is close to being tested in the operational environment (TRL 7) or is already at that level.

Scores 7 - 8

The proposal somewhat explains how the idea and technology will meet the challenge or challenges identified in the competition scope, but further detail is required to give full confidence. The technology has clear alignment with an ‘Unlocking Resource Efficiency’ solution, with potential for moderate UK territorial emissions savings. The Technology Readiness Level is already clearly at TRL 5 or above.

Scores 5 - 6

The proposal provides some information on how the proposed idea and technology could meet the challenge or challenges identified in the competition scope, but a clear and compelling argument is not provided. The technology has some alignment with an ‘Unlocking Resource Efficiency’ solution, with potential for some UK territorial savings. The Technology Readiness Level appears to be at TRL 5 or above.

Scores 3 - 4

Little consideration has been given to how the proposed idea and technology could meet the challenge or challenges identified in the competition scope and it is unclear how the solution will meet the challenge need. Little reference is made to alignment with an ‘Unlocking Resource Efficiency’ solution, with some potential for emissions savings, but unclear whether this will impact UK territorial emissions. The Technology Readiness Level has little evidence for being at TRL 5 or above.

Scores 1 - 2

There is no evidence that the proposed idea and technology will meet the challenge or challenges identified in the competition scope. The Technology Readiness Level is likely below TRL 5.

Question 7: Technical project summary

What are the main technical challenges that you are addressing?

Explain:

- how you will address the challenge
- what the innovation is
- the main technical deliverables
- the research and development that will prove the scientific, environmental and commercial merit of the project
- what might be achieved by deploying the innovation to address the selected challenge

This question will be scored against this assessment criterion: How valid is the technical approach?

Question 7: Technical project summary - Assessor guidance and scoring

Scores 9 - 10

The technical approach is valid and highly relevant to the challenge identified. It provides confidence that technical project deliverables are achievable, giving credibility and merit to both the potential of the solution and works being undertaken.

Scores 7 - 8

The technical approach described is valid and relevant to the challenge identified, but a higher level of detail is required to provide confidence that technical project deliverables are achievable and to determine the merit of the potential solution.

Scores 5 - 6

Some information on key technical deliverables is provided, but the technical approach described is unlikely to be valid for the challenge identified, and it is unclear what the merit of the proposed solution will be.

Scores 3 - 4

The technical approach is poorly described or is not relevant to the challenge identified. No information is provided on key technical details.

Scores 1 - 2

There is very limited or no information given on the technical approach.

Question 8: Current state of the art and intellectual property

Are similar products currently available in the market?

How is your proposed project differentiated from them?

You must include details of:

- any existing intellectual property (IP)
- its significance to your freedom to operate
- novel concepts you develop or employ
- new approaches or technologies you use
- new tools or technologies

You must explain how you would handle any intellectual property (IP) issues which might arise during the project.

If you are working with subcontractors (specialist skills only), include details of how you will maintain freedom to operate and fulfil the IP requirements detailed in the contract.

This question is scored against the assessment criteria: How innovative is this project? How much does the project develop or employ novel concepts, approaches, methodologies, tools or technologies for this area?

Question 8: Current state of the art and intellectual property - Assessor guidance and scoring

Scores 9 - 10

The proposed project is highly innovative, and a strong understanding of nearest state of the art is presented, showcasing how the concepts, approaches, methodologies, tools or technologies detailed in the proposal are novel within this area.

Scores 7 - 8

The proposed project shows some promising new concepts, approaches, methodologies, tools or technologies within this area, but some similarity with existing solutions is evident.

Scores 5 - 6

The proposed project shows some use of novel, innovative approaches but the concepts, approaches, methodology, tools or technology described are very similar to already available products.

Scores 3 - 4

The proposed project shows limited innovation, but it is unclear how the concept, approach, methodology, tool or technology outlined is different to already available products.

Scores 1 - 2

The proposed project shows no innovation and proposed concepts, approaches, methodologies, tools or technologies are already widely available.

Question 9: Project plan and methodology

Describe your project plan and identify the main milestones.

Provide evidence that the technology works, can be made into a viable product and can achieve the proposed benefits.

You must:

- describe resources that will be needed to deliver the project
- describe what the main success criteria will be and define this in terms of a measurable unit, for example: reduction in resource use or emissions per tonne of product produced
- identify the project management processes that will ensure you achieve the milestones
- describe the main technical, commercial and environmental risks and what you will do to mitigate them
- provide a clear plan for your demonstration, including the operational time period, and include this in your milestones, or detail what demonstration has already been done and when
- provide a plan for your project impact validation and include this in your milestones

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

Your milestones must:

- be clear
- be defined using SMART (specific, measurable, achievable, realistic and time-bound) criteria
- be associated with the appropriate deliverables and payments
- indicate your payment schedule by month

This question is assessed against the assessment criteria:

- does the proposal show a clear plan for establishing technical feasibility
- is there a clear management plan
- what are the main technical, commercial, and environmental risks to the project's success
- how will these be effectively managed
- are the milestones and evaluation procedures appropriate
- whether the demonstrator will provide sufficient data for the impact validation report

Note, information from the finances section will be used to support the assessment of this question. Proposed milestones and associated payments stated in this section must match those entered in the finance summary on your application.

Question 9: Project plan and methodology - Assessor guidance and scoring

Scores 9 - 10

The proposal contains a detailed description of a project plan, including all key milestones, and the approach taken gives confidence in successful project delivery. Risks are comprehensively covered, including appropriate mitigation strategies, and are

taken into consideration within the project plan. The demonstrator will very likely provide high quality data about the impact of the resource efficiency solution in real operational conditions for the impact validation report. Extra steps may be included to understand the broader lifecycle impacts.

Scores 7 - 8

The proposal contains a description of a project plan, but more detail is required to show how successful delivery will be achieved. Key risks are highlighted, with some mitigation plans in place, but could be expanded on to give greater confidence. The demonstrator will likely provide good quality data about the impact of the resource efficiency solution in real operational conditions for the impact validation report.

Scores 5 - 6

The proposal contains a high level description of a project plan. Some risks have been identified, but it is unclear how these are reflected in the project plan. The demonstrator will likely provide some data about the impact of the resource efficiency solution in real operational conditions.

Scores 3 - 4

The proposal gives a few details about a project plan and risks. It is unclear whether the demonstrator will provide relevant data about the impact of the resource efficiency solution in real operational conditions.

Scores 1 - 2

The proposal does not contain a plan or milestones. There is no management plan or risks included. The demonstrator is not suitable for providing data about the impact of the resource efficiency solution in real operational conditions.

Question 10: Technical team and expertise

Who is in the technical team? What expertise do they offer?

Provide a brief description of your technical team, including any subcontractors.

Describe:

- how each organisation has the skills, capabilities, and experience to deliver the intended benefits
- how much of their time will be spent on the project

This question will be scored against the assessment criterion: Does the applicant have the skills, capabilities and experience to deliver the intended benefits?

Question 10: Technical team and expertise - Assessor guidance and scoring

Scores 9 - 10

The team described, including any subcontractors where applicable, have the relevant skills, expertise and experience to give full confidence in the successful delivery of the project, including achieving commercial potential.

Scores 7 - 8

The team described broadly hold the skills and experience to be able to successfully deliver the project, but some skills gaps may be identified, or some areas are weaker than others. Subcontractor skills, where applicable, are identified, but more details would give a greater level of confidence in their input to the project.

Scores 5 - 6

It is not clear how the skills of the team will translate into the successful delivery of the project, or significant skills gaps are identified. Some information on subcontractors is provided (where applicable), but it is not clear if they are well placed to contribute to project delivery.

Scores 3 - 4

There is minimal information about the skills, capabilities and experience of the project team, or any subcontractors (where applicable), therefore it is difficult to establish whether the project team are well placed to successfully delivery the project.

Scores 1 - 2

There is no relevant information about the skills, capabilities and experience of the applicant or any subcontractors.

Question 11: Costs and value for money

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

Describe:

- the total costs inclusive of VAT (If applicable) you are requesting in terms of the project goals
- how this project represents value for money for you and the taxpayer
- your expected overall costs

Proposed costs stated in this section must match those entered in the finance summary.

All costs quoted must reflect actual costs at a fair market value and not include profit.

You can submit a single appendix as a spreadsheet in PDF format. It must be a PDF no larger than 10MB. It can be up to two A4 pages and must be legible at 100% zoom.

Note that all payments are made quarterly in arrears on submission of an invoice. The invoice must be submitted within 30 days of the end of each monitoring period for all completed milestones.

Full Economic Cost (FEC) calculations are not relevant for Contracts for Innovation competitions. Contracts for Innovation is a competitive process and applications will come from a variety of organisations. Whatever calculation you use to arrive at your total eligible project costs your application will be assessed against applications from other organisations. Bear this in mind when calculating your total eligible project costs. You can include overheads but remember that this is a competitive process.

The assessors are required to judge the application finances in terms of value for money. They will score your finances against this assessment criterion: Are the budget and costs realistic, justified and appropriate for the aims and methods?

Note: the information from the finances section will be used to support the assessment of this question.

Question 11: Costs and value for money Assessor guidance and scoring

Scores 9 - 10

Project costs are fully justified and appropriate (reflecting fair market value), and there is sufficient detail in the explanation of their breakdown to give full confidence. Fully detailed and justified evidence is provided to demonstrate the project cost efficiency and excellent value for money.

Scores 7 - 8

Project costs are justified and appropriate (reflecting fair market value), but there is not enough detail in the explanation of their breakdown. More detailed evidence is required to demonstrate the project cost efficiency and how value for money is achieved.

Scores 5 - 6

Project costs are somewhat justified but there is insufficient detail in the explanation of their breakdown to determine if they are appropriate. Some evidence is provided to demonstrate the project cost efficiency and value for money.

Scores 3 - 4

Minimal project cost information and justification is provided. It is unclear whether costs represent good value for money.

Scores 1 - 2

No breakdown of project costs is provided and there is no evidence to demonstrate project cost efficiency or value for money.

Question 12: Commercial potential

What is the commercial potential of your project. You must focus on your proposed customer’s needs.

Describe your:

- timescales

- projects commercial potential for a marketable product, process or service
- delivery plan
- expected route to market

Describe the competitive advantage that your project has over existing or alternative technologies that meet market needs.

Describe any existing commercial relationships relevant to the project.

With the focus on your proposed customer's needs, you can also mention the future commercial potential across the public or private sector and international markets.

This question will be scored against the assessment criteria:

- is there a clear commercial potential for a marketable product, process or service
- is there a clear plan to deliver that and a clear route to market
- how significant is the competitive advantage of this technology over the nearest currently available solutions to the challenge identified

Question 12: Commercial potential - Assessor guidance and scoring

Scores 9 - 10

The proposal gives confidence that the solution will be commercially feasible, with a detailed plan showing route to market, as well as strong competitive advantage.

Scores 7 - 8

The proposal gives some indication that the solution will be commercially feasible and provides a high level plan outlining possible route to market. An outline of competitive advantage is shown, but more in-depth analysis is required.

Scores 5 - 6

The solution may be commercially feasible, however there is little confidence in the approach described. Some planning to deliver route to market is shown, but competitive advantage is unclear.

Scores 3 - 4

It is not clear whether the proposal will be commercially feasible. There is little in the way of a plan to deliver to market or competitive advantage.

Scores 1 - 2

The proposal gives no indication that the solution will be commercially feasible. There is no plan to deliver to market and no indication of competitive advantage.