**Connecting Innovation**

**High Impact Project Advert Template**

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| **Company Name** | Holtex Limited |
| **Company Address** | Unit 1, Skelmanthorpe Technology Park, Station Road, Huddersfield, HD8 9GA |
| **Company Contact** | Neil Dickinson - 01484 684001 |
| **Description of Company Activity**  | Technology and manufacturing company |
| **Objective of the proposed project (Please explain what is required in the project) (max 250 words)** | Project VELAR is based on using water cracking to generate HHO gas (this is a mixture of H2, O2, HHO and electrically expanded water) which can be used for ship lubrication (to reduce drag on the water) and as a fuel / fuel additive in the engine to reduce the emissions of the engine and increase efficiency.This gas could be created at point of need / use which would give two distinct advantages1. There would be no requirement for gas storage thereby minimising the potential for accidents whilst storing dangerous gases.2. By creating the gas under the vessel (at point of use) there would be no requirement for pumping the gas at high pressure under the vessel which would therefore make it more efficient.Based on our proof-of-concept trials, we believe that this technology is at TRL3. A successful project would lift this to TRL6 where we would be able to undertake a much larger project to commercialise the process alongside an original equipment manufacturer. Achieving TRL6 will be in part down to having the correct equipment to be able to move from proof of concept to demonstration and further investigation. We will also require a level of assistance in the positioning of the gas bubbles relative to the vessel’s geometry and we would like the successful supplier to be able to offer this expertise.We intend to design and produce a demonstrable unit which is capable of measuring the reduced drag on the vessel. |
| **Tenders are Invited from suppliers who can provide the necessary skills and expertise to deliver the specification****Successful applicants should be aware that this project is part-funded by the England European Regional Development Fund as part of the European Structural and Investment Funds Growth Programme 2014-2020 and the Local Growth Fund.****Successful applicants should be aware that award of the contract is reliant on the successful issue of a grant funding agreement following the close of the tender process.** | Suppliers are invited to provide tenders to uplift the existing project to TRL6. This will include providing: 1. Consultancy around the marine applications of lubrication (drag) and engine management. This would consist of a report based around the anticipated requirements for the system to be able to make an impact as well as the engine management system.
2. Design and manufacture of an HHO cell power source capable of supplying the cell with the required power to function. This would need to have a maximum voltage of 48V DC with the ability to supply pulsed DC power (up to 1000A) with variable pulse shapes and sizes. This control will be used in the tests of the HHO cell and the design needs to be rugged, robust and able to withstand the environment that tests would be run (not laboratory, but industrial). We will need this power system to be manufactured and commissioned on our HHO cell at our site in Huddersfield.
3. Material design and supply for monitoring the output of the system. This includes the monitoring of drag as well as power input and the carbon footprint of the system.
4. Specific design of a proportionally accurate model vessel that can be tested using items 1-3. Only the designs are required, the manufacture of the model will be completed by ourselves.

There will be no access to site prior to tender. It is crucial that the suppliers of the external services are able to work within the timeframe of the project. The ability to work virtually for design tasks is crucial as we don’t have internal space to accommodate. The deliverables will be specified within the response to any company that declares an interest in supply.Upon appointment of the successful supplier, a non-disclosure agreement would be expected to be signed between ourselves and the supplier. |
|  | The project is due to start in August 2022 and run for 7 months (with an end date of 10th February 2023) |
| **Total Anticipated Project Value****(Please note that the procurement will only go ahead to contract once the funding has been agreed)** | The anticipated project value is £99,400 net. |
| **Required response date (this must be at least 10 working days from posting of advert)** | We would need to have all responses for consideration before 16:00 on 29th July 2022 |
| **How to apply?**  | Applications will be submitted through Contracts Finder, through the link below*[Insert link to contract Finder]* *For any further questions around the procurement opportunity please contact Neil Dickinson via the email address below**neil@holtex.co.uk* |
| **Criteria for decision making** **(Examples of Assessment Criteria could include:****Price****Expertise fit****Timing Fit****Suitability of proposed methodology)****Weighting of the criteria to be determined by SME** |

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| Criteria | % |
| Price | 30% |
| Experience (in vessel design and hydrodynamic film theory) | 20% |
| Experience (in power supply and switching units design and delivery) | 20% |
| Timing (the project is to be delivered within 8 calendar months) | 30% |
| Total | 100 |

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| **Scoring** | **Price**The lowest priced tender will score full marks and other tender scores will be calculated on the basis of their deviation from the lowest. For every 1% a price is higher than the lowest, 1% of the score will be deducted from that tenderer’s score. The minimum score will be 0. For example:

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| Lowest gets full marks - all others 1% off the score for every 1% higher than lowest |
| Tenderer | Price | Score | % difference |
| Tender A | £50,000 | 30 |  - |
| Tender B | £58,000 | 25 | 16  |
| Tender C | £75,000 | 15 | 50  |
| Tender D | £82,000 | 11 | 64  |
| Tender E | £100,000 | 0 | 100  |

**Quality**Quality related criteria will be scored on the basis of the following scale:

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| 100% | In respect of each element of the Services identified in the question, the proposals fully explain how the relevant element will be delivered to the standards required, throughout the term.The proposals are clear, precise and robust.The explanation is sufficient to give a high degree of confidence that all of the relevant aspects of the specification will be delivered. |
| 80% | In respect of each element of the Services identified in the question, the proposals explain how the relevant element will be delivered to the standards required, throughout the term.The proposals are clear, precise and robust.The explanation is sufficient to give a high degree of confidence that the relevant aspects of the specification will, for the most part, be delivered. To the extent that the explanation is not sufficient to give that high degree of confidence, the explanation does not raise concerns. |
| 60% | In respect of each element of the Services identified in the question, the proposals explain, to some extent, how the relevant element will be delivered to the standards required, throughout the term.The proposals are clear, but there are some concerns around precision and / or robustness. The explanation is sufficient to give confidence that the relevant aspects of the specification will, for the most part, be delivered. To the extent that the explanation is not sufficient to give that confidence, the explanation raises one or more concerns but no material concerns. |
| 40% | In respect of each element of the Services identified in the question, the proposals explain, to some extent, how the relevant element will be delivered to the standards required, throughout the term, but for certain elements the explanation is very limited.There are concerns around the clarity, and around the precision and / or robustness, of the proposals. The explanation is sufficient to give confidence that the relevant aspects of the specification will be delivered to some extent. To the extent that the explanation is not sufficient to give that confidence, the explanation raises one or more concerns, one of which is a material concern. |
| 20% | In respect of one or more elements of the Services identified in the question, the proposals fail to explain to any extent how the relevant element will be delivered to the standards required, throughout the term; and / or the proposals are mainly or wholly unclear; and / or the explanation is insufficient to give confidence that the relevant aspects of the specification will be delivered and / or the explanation for any one or more of the elements raises multiple material concerns. |
| 0% | No response or response is irrelevant to the question asked. |

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| **Date for Contract Decision (i.e. how long before the SME will inform the successful respondent)** | We will make a decision on successful applications by close of business on the 5th August 2022. |