Welcome to Jurong Island Renewable Energy RFP Industry Briefing







- 1. The microphone, chat and camera functions of the webinar have been disabled. If you have any questions during the briefing, please post them on Slido. You may access the Slido webpage by scanning the QR code or by the following link: https://app.sli.do/event/mgp8pc0m. Alternatively, you may also go to the Slido main website and enter the event code, 137300.
- 2. JTC and EMA will attempt to address the questions during the briefing session. Any unanswered questions will be addressed through a written corrigendum, which will be published on jirfp.innovation-challenge.sg/
- 3. If you are experiencing any technical difficulties, please try to log off and sign in again. If the problem persist, please wait for the recorded briefing to be published online. We will address all questions received through the FormSG.
- 4. Please do not share this webinar invite with any third party.



Jurong Island Renewable Energy RFP





EMA & JTC, supported by ESG

November 2021

Introduction

- Under the Paris Agreement, Singapore aims to peak its emissions at 65 million tonnes by 2030, halve that to 33 million tonnes by 2050, and achieve net-zero emissions in the second half of the century.
- In 2018, Singapore generated 52 million tonnes of carbon emissions. The industry sector, which includes Jurong Island, contributed 46.7% of the primary emissions.
- As part of the Singapore Green Plan, Singapore targets to achieve 2GWp of **solar power** by 2030 and at least 200MW of **energy storage** beyond 2025.
- Singapore is also looking into emerging **low-carbon solutions** that can potentially help reduce its carbon footprint.
- This RFP seeks to solicit proposals to deploy and test-bed innovative technologies of high TRL at Jurong Island to lower its carbon footprint and contribute to the Singapore's Energy Transition.



Topics



1. Renewable Energy (RE)

- a) Innovative RE technologies suitable in Singapore's context (e.g. novel PV materials)
- b) Innovative RE deployment options that tap on existing infrastructure and space on and around Jurong Island (e.g. pipe racks, storage tanks, sea space)
- c) Mobile RE solutions
- d) Energy conversion technologies (e.g. solar to steam and solar to hydrogen)



2. Energy Storage Systems (ESS)

- a) Innovative solutions to improve energy density, performance, fire safety and/or land footprint
- b) Innovative ways to utilise ESS in supporting the grid



3. Low Carbon Solutions

- a) Hydrogen
- b) Carbon capture, storage and utilisation (CCSU) technologies
- c) Other low carbon solutions that are relevant

Note that technologies are to demonstrate financial sustainability in commercial operations

General Pointers

Please refer to the information document for more information.

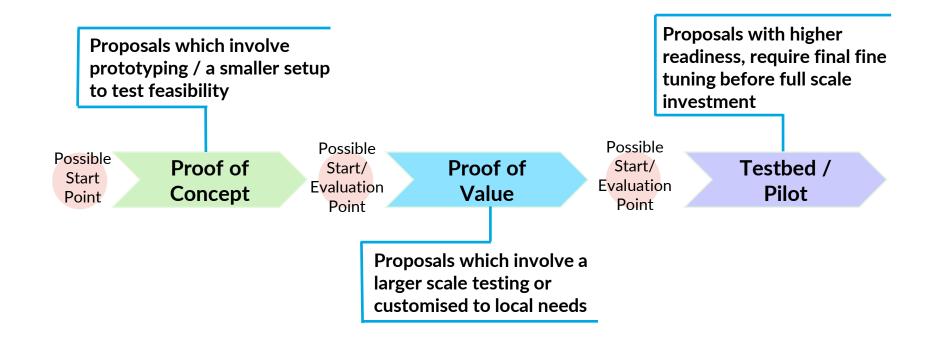
- Funding pot by EMA (with support from ESG) and JTC
- The Applicant shall be <u>led by a private sector company</u>. Local SME involvement is encouraged and favourably assessed.
- <u>Up to 70% funding support</u> for SME-led awardee, and <u>up to 50% funding support</u> for non-SME-led awardee. Refer to information document for the supportable costs.
- The project team and R&D activities must be based in Singapore to ensure development of local capabilities. Funding awarded shall not be used to support overseas R&D activities.
- The project may include research collaborations with local or overseas organisations. However, contracting out the whole or substantial part of the research work is not permitted.
- All assets acquired using the funding must be located in Singapore and maintained within the control of the awardees during the duration of the project.

Project Duration and Assessment Criteria

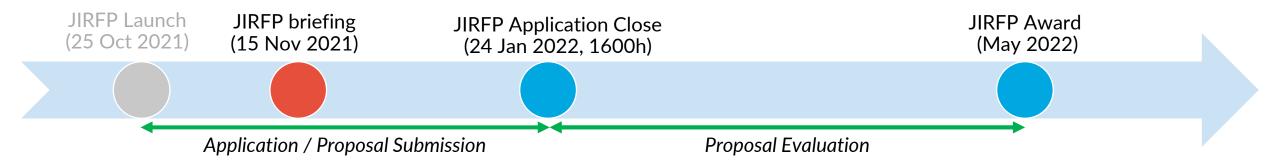
- Project Duration: Up to 2 years, with maximum extension ≤ 6 months on a case by case basis.
- Assessment Criteria:
 - 1. <u>High-technical-merit research and innovation</u> that is novel, internationally competitive and directly addresses the identified challenge(s).
 - 2. <u>Economic benefits to Energy and Chemical Sector</u> in terms of capabilities and manpower development, and system level benefits to Jurong Island ecosystem.
 - 3. Strong and clear demonstration of potential <u>commercial viability and advantages</u> of the proposed solution over existing technologies and practices.
 - 4. Excellent execution by an experienced research team with a **good track record** and whose members have the **relevant and complementary expertise**.

Supportable Project Stages

- This RFP targets the development of innovative, mid to high TRL technologies for onsite trial and deployment at Jurong Island.
- Proposals with higher levels of development readiness (e.g. **POV and Testbed**) will be favourably assessed. Project will only proceed to the next stage upon successful & satisfactory completion of the previous stage.
- Consortium members should arrive at the IP arrangement before the point of award by JTC and EMA



Timeline



Q&A Session







- 1. If you have any questions during the briefing, please post them on Slido. You may access the Slido webpage by scanning the QR code or by the following link: https://app.sli.do/event/mgp8pc0m. Alternatively, you may also go to the Slido <a href="mailto:m
- 2. JTC and EMA will attempt to address the questions during the briefing session. Any unanswered questions will be addressed through a written corrigendum, which will be published on jirfp.innovation-challenge.sg/



Thank you









