**MARINE CLIMATE CHANGE SCIENCE (MCCS) PROGRAMME**

**FULL PROPOSAL TEMPLATE (FORM A)**

**All information is treated in confidence. The information is furnished to the National Research Foundation and National Parks Board with the understanding that it shall be used or disclosed for evaluation, reference and reporting purposes. Please complete ALL sections, following instructions and prompts carefully. Incomplete submissions may not be accepted.**

1. **PROJECT DETAILS & DESCRIPTION**

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| **General Information** | | | | | | | |
| **Call Topic** *(Refer to Grant Call information sheet)*: **e.g. [MCCS\_V1\_2021-1\_T1] Assessing the carbon storage and sequestration potential of blue carbon resources in Singapore** | | | | | | | |
| **Proposal Title: *The proposal title should be specific and descriptive rather than general but should not exceed 30 words.*** | | | | | | | |
| **Total Budget Requested**:**S$ XX** | | | **Period of Support: XX years** | | | **Host Institution 1: XX** | |
| **List of Project Team Members** *(Please add/delete rows where necessary)* | | | | | | | |
| **Role** | **Name** | **Designation** | | **Department & Institution** | **Contact details (Email address)** | | **% of time committed on the project** |
| ***Lead PI 2*** |  |  | |  |  | |  |
| ***Co-I 3 (1)*** |  |  | |  |  | |  |
| ***Co-I (2)*** |  |  | |  |  | |  |
| ***Collaborator 4 (1)*** |  |  | |  |  | |  |
| ***Collaborator (2)*** |  |  | |  |  | |  |

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| 1 Host institution refers to the organisation (Singapore-based public research institutions (RIs) (e.g., institutions of higher learning (IHLs) and A\*STAR RIs), as well as Singapore-based private sector entities (incl. not-for-profits)) to which the Lead PI belongs, which will provide the primary support for the proposed project if it is funded by MCCS. This organisation will be named in the Letter of Award as the Host Institution.  2 Lead PI refers to Lead Principal Investigator who is the person to be named in the Letter of Award as the Lead Principal Investigator for the project.  3 Co-I refer to Co-Investigator who is the person to be named in the Statement of Acceptance form as a Co-Investigator for the project.  4 Collaborator refers to any company, institution, incorporated body or other industry or academic collaborator, which is not an Institution (i.e., Host Institution or Partner Institution) or an Investigator (i.e., Lead PI or Co-I) but is to be engaged in the project in collaboration with the Institutions or any of them. **A Collaborator is not eligible to receive any part of the funding for the project.** |

1. **DETAILS OF RESEARCH PROPOSAL**
   1. **Important Instructions and Notes**
      1. The following write-ups are required under this section:
2. Introduction
3. Research Methodology and Approach
4. Value Capture/Value Created
5. Research Team
6. Outcomes and Deliverables
   * 1. All essential project information for the abovementioned required write-ups in sections 2.2 to 2.6 should be kept **strictly within a total of 20 printed pages** using a size 12, Times New Roman (or equivalent) font. Additional sheets can be attached to include the applicant(s) CVs (see Annex A for requirements) and selected publications, and the list of cited literature. Please note that proposals would be evaluated based on these 20 printed pages and that additional sheets attached may or may not be taken into consideration.
     2. All proposals will be evaluated against the following criteria and hence, the applicant(s) is encouraged to highlight the information below clearly in the proposal:
7. Research Excellence (30%)
   1. Significance of proposed research, including novelty, extent to which project deliverables address/answer key research gaps/questions in the research area, and the potential for breakthrough/innovation.
   2. Clarity of plans for proposed research project, including proposed deliverables, milestones, timelines, and budget.
8. Innovation and Enterprise Potential (20%)
   1. Potential for application of research project outcomes/solutions to address important challenges/needs in Singapore, as well as globally.
   2. Extent that anticipated project output can be expected to meet significant policy, operational, or commercial needs in Singapore, as well as globally.
9. Strength of Research Team (30%)
   1. Relevance and quality of expertise and experience of the Lead PI, Co-Is and key project team members.
   2. Time commitment of Lead PI, Co-Is and Collaborators in proposed project.
10. Contribution to MCCS Objectives (20%)
    1. Relevance and degree of contribution of proposed research to the stated objectives, outcomes and targets for the Call Topic.
    2. Value for money in relation to deliverables expected and budget required.
    3. **Introduction**
       1. **Research Objectives**

*Clearly state the research question(s) to be addressed, the objective(s) and significance of the project. Omit jargon and acronyms in description.*

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* + 1. **Relevance to Marine Climate Chance Science (MCCS) Programme**

*Explain why the MCCS programme should fund this project. Please refer to the Information sheet for information on the MCCS programme and Call topics.*

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* 1. **Research Methodology and Approach**
     1. **Previous Preliminary Work/State of Current Research**

*Describe all prior work, including those by the applicant(s) (Lead PI, Co-Is and Collaborators), that is related and/or relevant to this proposal and any preliminary results that would help support this proposal. Describe the state of current research for the proposed project within Singapore and for the rest of the world i.e., list researchers who are working in similar areas/projects and highlight their current work (both locally and globally).*

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* + 1. **Proposed Approach and Methodology**

*Include the research approach and explain how it differs from what others are working on. Elaborate why this proposal will be successful and describe the novelty of the research. Highlight the technical challenges and the plans to overcome them.*

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* + 1. **Research Component to Be Done Overseas (if applicable)**

*Specify and justify any research work that is intended to be done overseas, listing the key deliverables and funding required. The funding required for overseas work should be clearly indicated in the “Budget Template (Form B)”. Please note that any research work to be done overseas using the awarded funding must be expressly approved by the Grantor.*

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* + 1. **Declaration of Other Substantially Similar Projects**

Please indicate (Yes/No) if the Lead PI, Co-I(s), or Collaborator(s) have submitted other project proposals, with substantially similar scope to this project, for grant application under other funding initiatives/grants.

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| Yes: |  |  | No: |  |

If yes, please provide the details in the table below. Please note that this project proposal will not be considered until the results from the other funding initiatives/grants are finalised. Please also complete a more detailed declaration of other funding support in the “Budget Template (Form B)”.

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| --- | --- | --- | --- |
| **Funding Initiative/Grant** | **Funding Agency** | **Total Amount**  **(S$ ‘000)** | **Years of Support** |
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* + 1. **Data requirements (if applicable)**

*Describe the specific data that is required for this project, including the source of the data and its availability, and the plans to collect them. Highlight possible challenges in acquiring the data and ways to overcome them. List alternatives if the data is not available/cannot be acquired**. Please note that data collected in the project may be required to be shared with other NRF-funded projects, unless they are commercial data or bounded by non-disclosure agreements (NDAs), to maximise synergies across projects and minimise duplicative works.*

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* + 1. **Approval(s) for work (if applicable)**

*Summarise any regulatory, institutional, or professional approvals required to execute this project, such as site access permits, safety requirements, or ethics reviews.*

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* 1. **Value Captured/Value Created**
     1. **Deployment/Application of Research Outcomes**

*Describe which areas (e.g., physical locations, policies, operational processes, etc.) in Singapore this project could positively impact.*

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* + 1. **Potential Industry Collaboration**

*Describe the industry collaborators that could be involved in or benefit from this project and the possible plans to translate upstream research to downstream implementation. Please indicate N.A. if this section is not applicable to this project.*

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* + 1. **Commercialisation/Export Plan**

*Please indicate the current Technology Readiness Level (TRL) and expected end TRL of this project based on the table below. If the TRL of this project is at TRL 5-7 or TRL ≥ 8, describe the commercialisation plan for the proposed R&D products/solutions and the prospects for successful exploitation (i.e., large international market demand, etc). List the expected intellectual property (in the form of patents and technology disclosures) likely to be generated from this project, if any. Please indicate N.A. if this section is not applicable to this project.*

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| **Current TRL:**  **Expected end TRL:** |

**Technology Readiness Levels**

*Technology Readiness Level (TRL) is a widely used indicator of the degree of development of a technology toward deployment on a scale of 1 – 9.*

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| **Level** | **Stage** | **Description** |
| 9 | Production | Actual system, proven through successful mission operations |
| 8 | Full-scale development | Actual system completed and operationally qualified through test and demonstration |
| 7 | Exploratory development | System prototype demonstration in an operational environment |
| 6 | System/ sub-system model or prototype demonstration in a relevant environment |
| 5 | Component and/ or basic sub-system validation in relevant environment |
| 4 | Technology development | Component and/ or basic sub-system technology validation in laboratory environment |
| 3 | Analytical and laboratory studies to validate analytical predictions |
| 2 | Technology concept and/ or application formulated |
| 1 | Basic principles of technology observed and reported |

* 1. **Research Team**

*CVs of the Lead PI, Co-I(s) and Collaborator(s) should be attached in a separate document (see Annex A for requirements).*

* + 1. **Expertise and Effort Level of Lead PI (not more than 500 words)**

*Please indicate the role and contribution of the Lead PI and describe his/her capabilities and expertise that are relevant for this project. Briefly describe the plans for interaction among the team member(s) and collaborators in achieving the research objectives.*

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* + 1. **Expertise and Effort Level of Co-I(s) and Collaborator(s) (not more than 500 words per person)**

*Please indicate the role and contribution of each Co-I and Collaborator, and his/her capabilities and expertise that are relevant for this project.*

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* 1. **Outcomes and Deliverables**
     1. **Project Deliverables**

*List and describe the expected deliverables for the project, taking into account those described in the Information sheet where applicable. Please also complete the separate attachment “Capability Indicators Template (Form C)”.*

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* + 1. **Project Implementation Schedule**

*Please shade (in grey) time periods occupied by work on specific project activities/milestones and deliverables (see example below). Please add/delete rows/columns where necessary.*

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| **Research**  **Activities/Milestones &**  **Deliverables** | **Year 1** | | | | **Year 2** | | | |
| **Q1** | **Q2** | **Q3** | **Q4** | **Q1** | **Q2** | **Q3** | **Q4** |
| ***e.g., Activity/Milestone 1*** |  |  |  |  |  |  |  |  |
| ***e.g., Deliverable 1*** |  |  |  |  |  |  |  |  |
| ***e.g., Activity/Milestone 2*** |  |  |  |  |  |  |  |  |
| ***e.g., Activity/Milestone 3*** |  |  |  |  |  |  |  |  |
| ***e.g., Deliverable 2*** |  |  |  |  |  |  |  |  |
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1. **SUGGESTED NAMES OF TECHNICAL PEER REVIEWERS**

The applicant(s) is required to submit the names and contact details (organisation and email address) of at least (3) three experts, including at least (1) one international expert, in the field as possible reviewers for the proposal. The proposed reviewer list should not include anyone who may have a conflict of interest in reviewing the proposal, such as former advisers, students, or recent collaborators. It will be the MCCS Programme Office’s decision whether to use the reviewers suggested. Please indicate NIL for sections that are not applicable.

* 1. **Proposed Reviewer List**

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| --- | --- | --- | --- | --- | --- |
| **S/N** | **Salutation/ First Name/ Last Name** | **Institution/ Designation** | **Tel/ Fax/ Address/ Email** | **Relationship** | **Expertise** |
| **1** |  |  |  |  |  |
| **2** |  |  |  |  |  |
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| **4** |  |  |  |  |  |
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1. **DECLARATIONS**

We affirm that all information provided in this proposal is complete and accurate to the best of our knowledge and ability at the time of preparation.

We affirm that we have reviewed and understand the application requirements for the Grant Call. We acknowledge that the submission of this proposal signifies unconditional acceptance of the terms and conditions applicable to the grant.

We, the applicant(s), of the proposal agree that (i) the MCCS Programme Office is under no obligation to accept the proposal, and (ii) the applicant(s) shall abide by the decisions of the MCCS Programme Office.

**PROPOSAL TITLE:**

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| Signature of Lead Principal Investigator (PI): | Organisation: |
| Name (in BLOCK LETTERS): | Contact Number: |
| Lead PI’s Designation: | E-mail Address: |

**(1) Supported by Head of Department or equivalent position holder in the organisation**

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| Signature: | Designation: |
| Name (in BLOCK LETTERS): | Date (DD/MM/YY) |

**(2) Endorsement by organisation (Research Director, CEO, MD or equivalent)**

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| Signature: | Stamp of Organisation |
| Name (in BLOCK LETTERS)/ Designation: | Date (DD/MM/YY) |

**NOTE:**

**Only application forms that are duly signed and endorsed and submitted to the IGMS website within the stipulated period will be accepted for review and evaluation.**

**ANNEX A: CURRICULUM VITAE (CV)**

Please note that Lead PIs must:

1. **Have a minimum of 9 months employment with the Host Institution, starting 3 months from the closing date of the Grant Call;**
2. **Not be debarred from submitting new grant applications for national grants.**

Please submit the CVs of the Lead PI, Co-I(s), and Collaborator(s). Please ensure that the CVs include the following relevant information on the research team:

1. Selected publications in the last 5 years that pertains to the proposed project/ programme
2. Selected other publications (that Technical Peer Reviewers and the Project Evaluation Panel should note)
3. Summary of the most relevant research outcomes from all previous grants (e.g., patents, awards, etc) [please limit to half a page]