Demonstration of Innovative Technology and Business Model for Efficient and Clean Cooling in the Pacific

GUIDELINES FOR SUBMISSION OF PROPOSALS FOR GRANT AND TECHNICAL ASSISTANCE

Call for Proposals

January 2019
I. INTRODUCTION

Markets for efficient and clean cooling technologies in the Pacific are small and scattered among different remote islands. Virtually all technologies to meet demand for efficient and clean cooling in various end-user sectors in the Pacific are imported, and technology choices available to end-users in the region are limited to what is being offered by the suppliers. In other words, adoption of efficient and clean cooling technologies /business models has been driven by suppliers’ push rather than customers’ demand (market pull). In addition to these market characteristics, greater adoption of innovative technologies /business models for efficient and clean cooling in the Pacific has been hampered by lack of awareness on economic and environmental benefits of innovative efficient and clean cooling technologies /business models; lack of knowledge and experience on feasible efficient and clean cooling options; and lack of resources to support promotion, development and implementation of innovative efficient and clean cooling technologies /business models.

The Demonstration of Innovative Technology and Business Model for Efficient and Clean Cooling in the Pacific project (Cooling Demo Project) is funded by the Kigali Cooling Efficiency Program (K-CEP)\(^1\) aims to enhance awareness and knowledge of policy makers and private sector organizations in Pacific island countries and territories (PICTs) on innovative technologies /business models for efficient and clean cooling applications in commercial, retail, agricultural and government sectors.

The Cooling Demo Project seeks high quality proposals to support demonstration of innovative efficient and clean cooling technologies /business models in PICTs. Such demonstrations must include actual installation and operation of efficient and clean cooling technologies, or adoption of business models, and meet the requirements outlined in this Guideline. The Cooling Demo Project provides financial support and technical assistance to these demonstrations to mitigate barriers pertaining to initial investment costs and knowledge which constraint greater adoption of efficient and clean cooling in the Pacific.

II. ELIGIBILITY OF APPLICATION

Eligible Applicants

Government agencies, authorities, private companies and NGOs are eligible to apply for the financial and technical assistance available from the Cooling Demo Project. Applicants can partner with other organizations to meet human resource requirements, technical capacity and financial capacity to implement the proposed project. The applicant, or one of the applicant’s partners, must have a registered office in one of PICTs. Collaboration among PICTs and between PICTs and other countries is considered as the key advantage of the proposal. Note that an applicant can be a lead applicant in only one (1) proposal, however a lead applicant of one proposal can also join an unlimited number of other proposals as a partner. If an applicant submits more than one proposal as a lead applicant, all proposals submitted by this applicant will be disqualified.

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\(^1\) More information on K-CEP can be found at [www.k-cep.org](http://www.k-cep.org)
**Type of Project Activity**

The Cooling Demo Project will focus on installation, commissioning and operation of innovative efficient and clean cooling technologies, as well as adoption of business models that facilitate the use of such technology. The proposed demonstration should help enhance local knowledge and experience, prove the cost effectiveness of these technologies in saving energy and operating costs, help inform policy, financing and other supporting mechanisms to address market barriers (e.g. policy, regulatory, financing, capacity) and subsequently drive market demand which would in turn result in the creation of new efficient and clean cooling businesses and employment opportunities.

**Geographical Coverage**

The proposed demonstration must be implemented in any one of the following 22 PICTs: American Samoa, the Cook Islands, the Federated States of Micronesia, Fiji, French Polynesia, Guam, Kiribati, the Republic of Marshall Islands, Nauru, New Caledonia, Niue, the Northern Mariana Islands, Palau, Papua New Guinea, the Pitcairn Islands, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, and Wallis and Futuna.

**Endorsement by National Energy Efficiency and Ozone Unit**

Applicants shall inform the national Energy Efficiency and Ozone Units in the respective target countries of implementation about their intention to demonstrate of innovative efficient and clean cooling technologies. Endorsement by the national Energy Efficiency and Ozone Units in writing can be submitted after the pre-screening process of the initial application form.

**Technical Focus**

The technical focus of innovative and clean cooling technologies and business models must be the refrigerant- and non-refrigerant-based cooling and refrigeration products/systems, including but not necessarily limited to the following technologies:

- Cooling and refrigeration products/systems for agricultural, dairy and meat products;
- Cooling and refrigeration products/systems for medical applications;
- Cooling and refrigeration products/systems for residential, government commercial and industrial facilities.

The above innovative cooling and refrigeration products / systems can either be powered by grid-electricity or stand-alone renewable energy systems or a combination of both. In case a refrigerant-based cooling/refrigeration product/system is proposed, the refrigerant shall be zero or reduced Global warming potential (GWP) refrigerant. A list of some potential innovative efficient and clean cooling technologies is available on the Cooling Demo Project website ([http://iiec.org/coolingdemo](http://iiec.org/coolingdemo)). The Cooling Demo Project has no specific technical focus for a specific PICT, however applicants must ensure that the proposed demonstrations do not duplicate existing efforts already supported by other donor/international development agencies, but rather generate synergies with the existing ones.

**Duration**

The implementation period for demonstration activities shall be from 1st June 2019 and completed before 30th June 2020.
**Expected project results and impacts on people and environment**

Applicants shall describe how the proposed demonstrations contribute to the achievement of the following:

1) Increased government and private sector stakeholders’ awareness and knowledge on efficient and clean cooling technologies and business models;
2) Estimated energy savings and GHG emission reductions;
3) Benefits for livelihoods and employment.

**III. K-CEP CONTRIBUTION AND CO-FINANCING**

**Grant and Technical Assistance Support**

K-CEP has provided up to USD 100,000 to support demonstration of efficient and clean cooling technologies in the Pacific, and, under this available funding, the Cooling Demo Project provides grants and technical assistance to successful applicants in the demonstration of innovative efficient and clean cooling technologies or business models. The maximum grant support per demonstration project is USD 20,000. In case, multiple demonstration projects are implemented in a specific country, the total grant support for all demonstration projects in one country shall not exceed USD 20,000. The project grant support cannot be used to cover costs of business-as-usual activities of the applicants. In addition to the grant, the Cooling Demo Project also provides the following technical assistance:

- Business matching between international suppliers of innovative efficient and clean cooling technologies and potential partners in PICTs;
- Verifying cost/benefits of demonstration projects;
- Training (with expected contribution from international suppliers);
- Documenting and marketing lessons learned

Applicants shall justify the need for the requested grant and technical assistance and describe how the grant will contribute to the successful implementation of demonstration activities.

**Co-financing**

Applicants shall demonstrate their in-kind or cash contribution (in USD equivalent) to implementation of the demonstration projects. This is considered as one of the key requirements for eligibility for the project grant support. There is no minimum requirement of the share of co-financing in the total cost of a demonstration project.

**IV. PROPOSAL SUBMISSION AND EVALUATION PROCESS**

Each proposal shall be prepared in English based on the application form downloadable from the Cooling Demo Project website (http://iiec.org/coolingdemo), and electronically submitted to coolingdemo@iiec.org. The proposals shall include all relevant information about the demonstration activities and tentative work plan and applicants’ background supported with relevant references (e.g. technical specifications of innovative efficient and clean cooling technologies or descriptions of business models, letter to the government).
Information on the Cooling Demo Project is available on the Project website (http://iiec.org/coolingdemo), and the proposals shall be submitted before 6pm, U.S. Pacific time (GMT -7) on April 30th, 2019 to ensure that sufficient duration is given to implementation of each demonstration. IIEC will respond to any inquiries regarding the proposal preparation and submission before the submission deadline.

Submitted proposals will be pre-screened for completeness and basic eligibility. After the pre-screening process, IIEC will work with each qualified applicant to understand expected impacts of the proposed demonstration, readiness to implement, strategy for scaling up/replication and endorsement by the National Energy Efficiency and Ozone Unit. Once all information and supporting documents are completed, the proposals will be reviewed by the technical evaluation team, consisting of technical experts from the International Institute for Energy Conservation (IIEC) and K-CEP, in consultation with the national Energy Efficiency and Ozone Units of the country of implementation. Successful proposals may be requested to provide more details including, but not limited to, detailed work plans and MOU between project partners; and a grant agreement will be signed between IIEC and the successful applicants. A list of the successful proposals will be published on the Cooling Demo Project website after signing of the grant agreements.

The tables below show the criteria on which the technical evaluation team will follow in pre-screening and evaluation of the applications.

<table>
<thead>
<tr>
<th>Screening Criteria (Must comply all the criteria)</th>
<th>(YES/NO)</th>
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<tbody>
<tr>
<td>1 Does the applicant or one of its partners have a registered office address in PICTs?</td>
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<td>2 Does the proposed demonstration target one of the 22 PICTs?</td>
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<td>3 Does the application promote innovative efficient and clean refrigerant- or non-refrigerant-based cooling and refrigeration products or systems?</td>
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<td>4 Does the proposed demonstration show co-financing contribution?</td>
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<td>5 Is it relevant to the objectives of the call for proposal?</td>
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<td>6 Is it relevant to the particular needs and constraints of the target country related to efficient, clean cooling policies?</td>
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After the pre-screening process, each application will be evaluated, and a 0-5 score will be given against each criterion shown in the evaluation matrix below.

- **Fail** Does not meet criterion
- **Very Weak** Addresses criterion but no evidence/justification is provided
- **Weak** Limited supporting evidence/justification provided
- **Satisfactory** Meets criterion with adequate evidence/justification
- **Strong** Exceeds criterion with strong evidence/justification presented
- **Very Strong** Extremely clear evidence/justification
## Evaluation Criteria

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Weighting (total = 100)</th>
<th>Score (0 – 5)</th>
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<tr>
<td>Project or business idea (e.g. level of implementation readiness, viability, innovativeness regarding to technologies and new business approaches, linkages, financial instruments, etc.)</td>
<td>40</td>
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<td>Experience and capacity in implementation of demonstration activities</td>
<td>20</td>
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<td>Co-funding contribution (in cash and / or in kind)</td>
<td>10</td>
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<td>Strategy for scaling-up/replication</td>
<td>10</td>
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<td>Impacts (e.g. social economic benefits to the target population including poor households, women, job/ livelihood creation, improvements of living standards etc.) and as well as synergies to the relevant ongoing projects and national clean cooling policies</td>
<td>20</td>
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IIEC has no obligation to select any application and reserves the right to amend this set of guidelines.