PROJECT NAME: Transitioning Remote Communities to Renewable Energy

- 1. Project duration: 34 months (The implementation periods of the activities might differ from what is described in this document)
- 2. Budget: C\$500,000 (Including operational and administrative costs)
- 3. Short statement of the issue(s) under this topic, need/gap identified, the project objective(s) and activities to address the issue, and expected outcomes and benefits/beneficiaries (max. 200 words):

Providing access to affordable, reliable and clean energy to all is a global challenge. In North America (NA), isolated and remote communities often rely on small, mainly diesel-based, mini-grids for their electricity supply. These are inefficient, unreliable, expensive to operate and contribute to pollution that affects public health and the environment. Technology advancements in renewable energy sources and enabling technologies (e.g., storage), as well as their decentralized nature, represent available and realistic options for supplying access to low-cost and sustainable electricity in these communities. The International Renewable Energy Agency (IRENA) is developing a *Multi-stakeholder Platform for Transitioning Remote Communities to Renewable Energy* that will enable a global discussion among countries about transitioning remote communities to clean energy. In the framework of this initiative, the CEC will compile case studies to consolidate best practices and identify the common and contrasting elements that have allowed long-term community ownership of clean energy projects across the North American region. The project aims to identify and share common metrics and indicators, which have allowed the continuity and permanence of clean energy generation projects in diverse North American socioenvironmental landscapes and understand their local impacts. These case studies would provide models and strategies for countries around the world facing similar challenges.

4. Select the strategic pillar(s) from the 2021–2025 Strategic Plan that the project addresses:

- Clean Air, Land and Water
- Preventing and Reducing Pollution in the Marine Environment
- Circular Economy and Sustainable Materials Management
- Shared Ecosystems and Species
- Resilient Economies and Communities
- Effective Enforcement of Environmental Laws

5. Describe how the project uses strategic cross-cutting approaches in its implementation: Innovative and Effective Solutions and/or Diverse and Inclusive Stakeholder Engagement and Public Participation (including gender and diversity effects and opportunities, and youth) (max. 100 words):

The CEC-IRENA initiative will employ a collaborative approach, actively engaging the case study communities at all stages of project implementation. Identification and engagement of key community stakeholders will allow understanding each location's energy system choice, and the main drivers for implementation and technology adoption. Moreover, IRENA's multi-stakeholder platform will foster the exchange of experiences between countries and communities by recognizing the global nature of these challenges. Sharing each country's approaches, priorities, technologies, and challenges on the deployment of renewables in the wide range of North American landscapes will help other regional and global remote communities to build on the learned lessons and help to increase their climate resilience and sovereignty.

6. Explain how the project can achieve more impact through trinational cooperation (max. 100 words):

North America has demonstrated leadership in this area, with Canada, Mexico, and the United States all advancing different strategies to ensure communities have access to clean and reliable sources of electricity. Given the diverse nature of North America's communities, these established transition strategies offer valuable insights for communities across North America and would also provide models and strategies for other countries facing similar challenges.

7. Describe how the project complements, or avoids duplication with, other national or international work (max. 100 words):

The project aims to highlight North American case studies for transition to clean and renewable energy in IRENA's global platform, and in this way, add visibility and value to national efforts. While there are a number of different initiatives in Canada, Mexico and the United States aimed at deploying clean energy off-the-grid solutions in remote and underserved communities, this project represents the first coordinated North American effort to share knowledge and information on successful efforts, not only amongst the North American countries, but with countries around the world.

8. Describe how the project engages traditional ecological knowledge (TEK) experts or Tribal/First Nations/Indigenous communities, if applicable (max. 100 words):

The project will prioritize the selection of case studies in remote areas, which are often Indigenous communities.

9. Describe how the project engages new audiences or partners, if applicable (max. 100 words):

The project represents an opportunity to create synergies and foster partnerships and share North American experiences through IRENA's International Off-grid Renewable Energy Conference (IOREC). This can translate into potential alliances and collaborations with organizations outside North American borders. On a regional scale, identifying community-based success experiences of transitioning to renewable energy, can open opportunities for community-to-community dialogue to enhance and disseminate this type of solutions and to take the next step towards achieving energy security in an inclusive, clean, and just transition.

10. Identify the designated partner agencies or organizations committed to implementing this project, as well as other organizations that could be involved, or benefit from it, including through outreach efforts, collaborations or partnerships (e.g.: federal agencies; other levels of government; academia; NGOs; the private sector; civil society; and youth):

Lead agencies or organizations	Country
Natural Resources Canada	Canada
Secretariat of Energy (Secretaría de Energía)	Mexico
US Environmental Protection Agency, US EPA	United States
International Renewable Energy Agency IRENA	Intergovernmental

Other organizations/individuals (if applicable)	Country
Environment Canada	Canada
Crown-Indigenous and Northern Affairs Canada	Canada
Indigenous Clean Energy (ICE)	Canada
Federal Electricity Commission (Comisión Federal de Electricidad)	Mexico
National Institute of Ecology and Climate Change (Instituto	Mexico
Nacional de Ecología y Cambio Climático —INECC)	
Department of Energy	United States
Indigenous, isolated, and remote communities across North	Canada, Mexico and the United States
America	

11. In the following table, describe: the project objective(s) and the activities and subtasks planned to achieve the objective(s); the corresponding outputs, expected results and how they will be measured (performance measures); baselines (if known), and targets by end of the project; and the timeline and budget.

OBJECTIVE 1	Document, consolidate, and share best practices from across North America on transitioning community-driven experiences to cleaner, more affordable, and reliable sources of energy		
Activity 1 Budget C\$50,000	Identify at least one case per country as a model of community-driven own renewable energy projects.	nership and maintenance of	
Output(s)	 Cases for each North American country are selected. Agreement on content and elements to highlight in case studies. 		
Expected results, performance measures	Selected cases reflect the diverse nature of the region regarding implementation strategies, challenges, and socio-environmental conditions in North America.		
Baseline (current status), if known	N/A		
Target (by project end)	At least three study cases—one per country—are selected as examples community-driven renewable energy projects in North America.		
Subtask 1.1	Establish information and documentation needs to determine common metrics and criteria to select and showcase at least one community's experience per country, in alignment with IRENA's multi-stakeholder platform initiative and <i>Guidebook for Decentralized Renewable Energy</i> <i>Solutions for Isolated and Remote Communities.</i>	When: 2023	
Subtask 1.2	Select and engage three North American communities (at least one per country) interested in sharing renewable energy transition experiences and lessons learned.	When: 2023	
Activity 2 Budget C\$300,000	Document North American community-driven renewable energy projects and integrate them into a regional case study.		
Output(s)	Documented North American case studies for inclusion in IRENA's multi-stakeholder platform.		
Expected results, performance measures	Case studies will present the diverse experiences and acknowledge the differences and similarities of past and current challenges for the transition to renewable energies. Case studies will be shared through IRENA's multi-stakeholder platform.		

Baseline (current status), if known	N/A	
Target (by project end)	Gathered information and community contacts feed IRENA "Multi-stakeholder Platform for Transitioning Remote Communities to Renewable Energy" to foster global capacity building in the development of decentralized renewable energy projects.	
Subtask 2.1	Compile information and document each case, based on the contents agreed upon in subtask 1.2. Information gathering and documentation may include shared experiences from interviews and participatory workshops to feed into the final project document.	
Subtask 2.2	Develop documents and information for integration into a multi- stakeholder platform. When: 2023–2024	
Subtask 2.3	Integrate the regional case study.	When: 2024
Activity 3 Budget C\$150,000	Dissemination of results	
Subtask 3.1	Conduct a campaign to disseminate and promote the findings of the CEC IRENA initiative and case studies.	When: 2024

12. Describe <u>post-project</u> expected impacts:

Expected impact (by when: month, year)	SMART performance measure(s)	
By 2025, the project will have developed a common understanding of the key elements that have enabled remote community access and ownership of clean energy projects in North America.	Criteria for applicability and replicability of remote clean energy projects. Lessons learned and overcome barriers in each community.	
By 2025, the case studies will highlight the impacts of clean	Metrics for understanding environmental and social benefits of	
energy access and/or transition on each community.	access and energy transition for each community.	
By 2025, the North American shared experiences will		
contribute to and collaborate with IRENA's Multi-	Participation in collaborative events or workshops.	
stakeholder Platform for Transitioning Remote	Dissemination campaign of published case studies.	
Communities to Renewable Energy.		