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CALL FOR GRANT CONCEPT PAPERS

INNOVATION IN CLEAN ENERGY SOLUTIONS
Support for Renewable energy, Planning Tools, and
Transformative technologies

USAID Urja Nepal Program

September 10, 2024

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I. Grant Background and Scope of Work

Urja Nepal Project, supported by USAID, the International Development Agency, and implemented by International Consulting LLP, builds upon the achievement and lessons learned from the International Development Agency's previous similar project. The Urja Nepal Project is supporting to transformation of the energy sector of Nepal into a stable and climate-resilient one. Urja Nepal aims to create a financially viable electricity sector that provides affordable, reliable, and secure power and enables the entry of private sector investment into the Nepal market through four objectives:

- Objective 1: Utility Performance and Relevant Sector Policies are Improved
- Objective 2: Advanced Energy Systems Deployment
- Objective 3: Increased Private Sector Engagement
- Objective 4: Cross-Border Electricity Trade between Nepal and its Neighbors Advanced

Under its grant component, Urja Nepal has championed the exploration and implementation of innovative energy solutions, including pioneering charging station business models and energy service company (ESCO) interventions aimed at enhancing energy efficiency. The main objectives of the grants program are to Increase technical and institutional capacities, Increase gender equality and social inclusion, and Deployment of advanced energy systems.

The Call for Concept is aligned with the priority areas of the Alternative Energy Promotion Centre (AEPC) related to micro hydropower, battery energy storage systems, biogas, and other related fields. It, therefore, invites the submission of concept papers focused on the design, feasibility study, or piloting of interventions within the energy sector. Proposals should center around clean energy, with particular emphasis on areas such as energy transition, energy efficiency, and the integration of advanced energy technologies. Examples of potential focus areas include, but are not limited to:

Micro Hydropower Grid Interconnection: Micro hydropower systems offer an essential solution for rural and remote areas where access to reliable electricity is often limited. As the national electricity grid is expanding throughout Nepal, interconnecting micro hydropower systems have multifold benefits. The systems will not have to face redundancy and go out of use. There is also an opportunity for the operators to earn revenue through net metering. Moreover, interconnection can also help with grid stability.

Biogas Feasibility Study: Biogas presents a powerful opportunity to transform organic waste into a valuable energy resource, addressing both waste management challenges and energy needs. Conducting a feasibility study is a critical step in understanding how biogas can be effectively utilized in a specific context. Such studies assess the technical, economic, and environmental viability of biogas projects, ensuring that investments in this renewable energy source are sustainable and impactful.

Energy Storage Systems: Battery storage systems are essential for enhancing the resilience and reliability of electricity supply, particularly in remote areas. Several remote regions of Nepal face frequent power outages, and the power quality is also poor. Energy storage systems provide backup and stabilize the supply which is beneficial, especially for critical applications such as health care, and government services.

Digital Tools for Energy Sector Planning: Resource planning in Nepal's energy sector can be significantly enhanced by developing advanced web-based or software tools for comprehensive generation, transmission, and distribution planning. Building on efforts like Urja Nepal's Generation Expansion Plan and Demand Forecasting tools, new solutions could integrate data analytics, machine learning, and Geographic Information Systems (GIS) for effective decision-making and scenario analysis. These tools could provide user-friendly dashboards for real-time

project management, monitoring, and data-driven decision support systems, optimizing energy production, grid stability, and renewable integration. Additionally, incorporating features for energy efficiency analysis and stakeholder collaboration could ensure effective resource utilization, capacity building, and sustainable development of Nepal's energy infrastructure, addressing critical needs in planning, operations, and disaster risk management.

Solar Irrigation Pumps: In Nepal, farmers face challenges with unreliable irrigation, often depending on costly diesel pumps or inaccessible electricity. Those with connection to the grid electricity also face issues of low reliability and quality, especially in the Tarai region. Solar irrigation pumps provide a sustainable, cost-effective solution, ensuring reliable water access, improving crop yields, and reducing carbon emissions. These systems promote healthier farming practices while addressing energy access in remote areas, enhancing agricultural productivity and supporting environmental sustainability.

Electric Mobility: Electric mobility is a transformative approach to reducing the environmental impact of transportation. It can significantly improve air quality, lower carbon emissions, increase consumption of electricity, and reduce petroleum dependency. While the growth of electric vehicles in Nepal has been encouraging, there are still gaps in the necessary infrastructure and opportunities for innovations. Addressing the gaps and introducing innovative concepts can sustain the growth of the sector.

Hydrogen: Hydrogen technologies can offer clean and versatile energy applications that can decarbonize sectors where other renewables may sometimes fall short. Its potential to store and transport energy, as well as power industries, vehicles, and homes without carbon emissions, makes hydrogen crucial in the transition globally and in Nepal as well.

Waste to Energy: Waste-to-energy technologies are pivotal in addressing waste management and providing sustainable energy production. By converting waste materials into usable energy, waste-to-energy technologies reduce the environmental impact of landfills, thus contributing to a circular economy. As waste, especially inorganic wastes, is seen as an increasingly complicated problem for Nepal, innovation in waste management can be beneficial in managing urban and industrial waste sustainably while providing a reliable renewable energy source.

Carbon Markets/Carbon Monetization: Carbon markets and carbon monetization are pivotal in addressing climate change by providing economic incentives for reducing greenhouse gas emissions. These mechanisms allow for the trading of carbon credits, which represent a reduction or removal of one metric ton of carbon dioxide or its equivalent in other greenhouse gases. By putting a price on carbon emissions, carbon markets encourage businesses and governments to invest in cleaner technologies and sustainable practices. This not only helps in meeting emission reduction targets but also fosters innovation and economic growth. Urja Nepal welcomes concepts that apply carbon monetization mechanisms to any of the technology areas listed above.

2. Eligibility

Grantees may be Non-Government Organizations (NGOs), professional organizations, research institutions, or other not for profit entities legally established in the recipient's country; or private firms legally established who demonstrate a compelling need for grant funds through this competitive process. Individuals, political organizations, foreign owned and government institutions and religious groups are not eligible for grants under this Project. Also, ineligible are private firms and Non-Governmental Organizations whose objectives are not consistent with the broad objectives of the Project. Grantees must be registered with sam.gov and have acquired a Unique Entity Identifier (UEI) in order to receive the grant fund.

3. Grant Application Process

The application process is in three stages.

Applicants are first to submit a concept paper. Concept papers will be reviewed for compatibility with Project objectives. From the group of concept papers submitted, the Project Staff will invite applicants that received scores higher than 70 points to present their concepts to the Project Grant Selection Committee. After these oral presentations, a set of Applicants will be asked to submit final grant applications. After a final review, these formal applications will be submitted to USAID for final approval.

Stage 1: Submission of a concept paper

Prior to developing a full grant application, potential grantees are to submit a concept paper for review and feedback. Developing a concept paper provides potential grantees with the opportunity to define and refine their thinking about the proposed project or activity and provides the Program review team with an opportunity to see how well the concept aligns with the Project's key objectives and goals.

A concept paper should be short – not more than 5 pages. Ideas should be clear, concise, to the point and provide an overview of what is planned, who will benefit, the results expected and a notional estimate of the proposed budget linked to the components of the activities planned.

The concept paper shall include:

I. Cover Page/Introduction:

- · Name and address of organization;
- Type of organization (e.g., for-profit, non-profit, university, etc.);
- Contact point (lead contact name; relevant telephone, fax and e-mail information). Regional or multi-country applications should provide the name of at least one local partner for each country targeted in the program;
- Names of other organizations (federal and non-federal as well as any other USAID offices) to whom you are/have submitted the application and/or are funding the proposed activity; and
- Signature of authorized representative of the Applicant.

2. Technical Information:

- Concise title and objective of proposed activity;
- Discussion of the objectives, the method of approach, the amount of effort to be employed, the anticipated results, and how the work will help accomplish USAID's as well as the field Mission's specific strategic results within the field Mission's timeframe; and
- Type of support the Applicant requests from USAID (e.g., funds, facilities, equipment, materials, personnel resources, etc.). Supporting Information:
- Proposed estimated cost.
- Detailed cost breakdown (e.g., salaries, travel, etc.).

- Proposed amount of the Applicant's financial as well as in-kind participation.
- Proposed amount of prospective or existing partner(s) financial as well as in-kind participation.
- Proposed duration of the activity; and
- Brief description of Applicant's, as well as prospective or existing partner(s') previous work and experience.

Annex I suggests an outline for the concept paper and is designed to assure that key points have been covered. This summary will form the basis of the grant application should the Grantee be invited to the next stage.

Stage 2: Oral Presentation

Those organizations whose concept papers receive scores at a higher 70 points will be invited to make a presentation about their request. A standard presentation template is provided as an Attachment I to this RFA.

Stage 3: Grant Application

At the conclusion of the presentation process, successful Applicants will be asked to submit a complete Grant Application and Budget for review and approval by USAID.

4. Technical Selection of Concept Paper

The Project Grant Selection Committee will evaluate each concept paper based upon the review criteria set forth below. A concept paper can be categorized as unacceptable when it is incomplete, does not respond to the scope, does not comply with the format requirements or is submitted after the deadline.

The technical criteria below are presented by major category, in relative order of importance, so that Applicants will know which areas require emphasis in the preparation of their concept papers.

Illustrative Concept	50%
Organization's qualifications	35%
Cost Share percentage, if applicable	15%

Any such concept papers shall be reviewed by the relevant Project Grants Selection Committee for consistency with Project objectives. If a concept paper evidences a program concept that <u>is consistent</u> with the objectives of the Project, the Grants Manager, will invite the organization to submit a full grant Application. If a concept paper evidences a program concept that <u>is not consistent</u> with Project objectives the Grants Manager will communicate with the submitting organization regarding the non-approval of a concept paper. A sample of the letter is presented in Annex 3.

5. Timetable

The following is an illustrative timetable for the grant process:

ACTIVITY	ILLUSTRATIVE TIMETABLE
Request for Concept Papers Issued	September 10, 2024
Concept Papers Due	4 weeks from issue
Concept Papers Review	I week from the application deadline

Grant applicants make oral presentations to Grant	I week
Committee to clarify concept	
Final Selection	
Grants applications received from finalists	I-2 weeks
USAID Approval and Grant Awarded	I-2 weeks

Annex I

Concept Paper Outline

Abstract of proposed Activity:

- · One line description of the proposed grant Activity
- What are the Objectives of the Activity and why is the Activity is needed?
- How will the Activity be carried out?
 - What is the approach to the Activity?
 - Who will carry out Activities (Identify project team and other relevant stakeholders)?
 - What is the location and timeframe of Activity?
- What are the Impacts of the Activity implementation? (for example):
 - Number of direct/indirect beneficiaries
 - Number of jobs created
 - Increase in revenue
- · What kind of Reporting and Monitoring plan will be used during the period of the grant?

Post Grant Sustainability:

- How will the Grantee sustain the impact of the grant Activity after the grant is closed?
- · How will the Grantee report on results after the grant period is over?

Background

- Brief background on grantee
 - o [Entity's] full legal name
 - o Is [Entity] public or private?
 - o Who is [Entity's] auditor?
 - o Where is [Entity] currently headquartered (address)?
 - o Is [Entity] owned by a parent company?
 - o Does [Entity] have any subsidiaries or own 5%, or more, of any other entity?
 - o Is [Entity] or any subsidiary an audit client of Deloitte?
 - o Are there any owners/shareholders of [Entity] that own 5% or more of [Entity]?
 - If yes, please list the owners and their percentage owned.
 - Also, please list any other entities which the shareholder controls (greater than 50 percent ownership or voting rights) and, if the shareholder is an individual, list any other entities in which this shareholder serves as an officer or director.
- Grantee's prior experience related to this Activity

Budget

- One Page Summary
- Budget Detailed Line-Item Budget (including # of Units, Unit Costs, Subtotals)
- Cost Sharing and Third-Party Contributions