RFP INVEST-052



То:	Offerors
Date:	July 16, 2020
From:	Procurement and Partnerships Team, INVEST Project; Implemented by DAI Global LLC
Subject:	Request for Proposals (RFP) INVEST-052 Colombia Energy for Peace Investment Opportunity Assessment Site Selection and Preliminary Design
Due:	1:00PM EDT on August 13, 2020

Dear Offerors:

Enclosed is a Request for Proposals (RFP) to support the implementation of DAI's INVEST project funded by the United States Agency for International Development (USAID). DAI invites firms to submit a proposal for work as part of the USAID Colombia Mission.

- I. **RFP Process and deadlines:** This solicitation will result in the award of one Indefinite Quantity Contract (IQC) with an embedded task order (Task Order 1) and an anticipated follow-on task order (Task Order 2). The **combined ceiling of the awarded IQC** (including both Task Orders) is expected to be up to \$700,000. We anticipate the value of Task Order 1 will be a maximum of \$300,000 but offerors are encouraged to propose competitive pricing based on their technical approach.
 - a. Submission of Questions Questions must be submitted no later than 1:00 pm EDT on July 23, 2020 via email to <u>INVEST_Procurement@dai.com</u>. All questions must be submitted in English.
 - b. Bidders Teleconference DAI anticipates hosting a Bidders Teleconference at 11:00AM EDT / 10:00AM COT on July 29, 2020. The teleconference will be held in English and will address the submitted questions and provide the opportunity for follow-up questions to ensure clarity around the proposal requirements. The dial-in information for the Bidders Teleconference is on the final page of this document and additional details will be provided as part of the responses to questions on/about July 27, 2020.
 - c. Submission of Proposals Proposals must be submitted no later than 1:00 pm EDT on August 13, 2020 via email to <u>INVEST_Procurement@dai.com</u>, copying <u>katherine_tilahun@dai.com</u>, matthew_mitchell@dai.com, and <u>talin_baghdadlian@dai.com</u>. The subject line of the email should be your organization name, followed by "Submission under RFP INVEST-052: Colombia Energy for Peace Investment Opportunity Assessment." All proposals must be submitted in English. Please certify in your submission email a validity period of 60 days for the price(s) provided and include your organization's DUNS number. Please limit file submissions to 10 megabytes or less.
- II. Composition of Proposal: Your organization's proposal should comprise the following submission documents. The Technical Proposal and Cost Proposal should be submitted in English and prepared as separate files for independent evaluation, as follows below. Technical proposals should be submitted as a fifteen (15)-slide presentation with a minimum font size of 12, and graphics with a minimum font size of 10. Submissions in PowerPoint or in PDF are acceptable, although PDF is preferred along with an

accompanying PowerPoint document. Please provide a copy of your cost proposal in Excel format.

Part 1 – Technical Proposal

Please limit your technical proposal to no more than fifteen (15) slides. The technical proposal is composed of the following four (4) sections:

- 1. Technical Approach to Task Order 1 (Site Selection and Prioritization) Offerors will detail their approach to fulfill the accompanying Statement of Objectives (SOO). The approach will clearly indicate how the proposed activities will result in the successful completion of all deliverables and milestones including selection of the PDET sites for sustainable mini-grids and productivity hubs by the end of 2020. Offerors should also detail how the current pandemic might affect their approach to carrying out the work, including existing and anticipated travel restrictions, as well as any adaptation and/or mitigation strategies they envision employing in light of COVID-19.
- 2. Technical Approach to Task Order 2 (Design of Mini-Grids and Productivity Hubs Offerors will detail their approach to fulfill the accompanying SOO. The approach will clearly indicate how the proposed activities will result in the successful completion of all deliverables and milestones including preliminary designs for minigrids and productivity hubs for the selected PDET sites and analysis and outreach with Colombia utility operators to identify potential partners, and cost estimates for any other basic infrastructure deemed essential for the success of any specific site as stated in the SOO. Offerors should also detail how the current pandemic might affect their approach to carrying out the work, including existing and anticipated travel restrictions, as well as any adaptation and/or mitigation strategies they envision employing in light of COVID-19.
- 3. **Institutional Capacity** Offerors should provide details about the experience, expertise, or capacity of their firm (or firms if a partnering arrangement is proposed) to recommend the proposed approach for Task Order 1 and Task Order 2 and complete the work as described. This should also include past performance information for similar contexts. Offerors should demonstrate their experience working in rural Colombia and with Colombian solar energy utility companies. Offerors should demonstrate their ability to operate and carry out the work in Colombia, including ability to carry out regular meetings with local stakeholders and travel to PDET sites. Offerors should also detail their approach to ensuring the safety and security of their personnel traveling to and carrying out assignments in the PDET areas.
- 4. Management Plan/Staffing Structure Offerors should include details of personnel who would be assigned to the activities described in each of the technical approaches, as well as a clear management plan in narrative form for the development, review, and submission of all associated deliverables, including a milestone schedule for each task order. Offerors are permitted to engage in partnering arrangements if it will aid in providing best value to USAID, regardless of whether organizations belong to the USAID INVEST network. If a partnering arrangement is being proposed, please describe the nature of the arrangement, the specific technical value being contributed by each member of the team, and the appropriate management controls to ensure successful delivery. Firms may consider partnering with other firms that bring in complementary skill sets and experience.

In addition to the above, please include the following. These inputs will not be counted as part of the 15-slide limit and the format may be PDF or Word:

- One (1) to two (2) examples of past performance relevant to each of the two task orders for this activity (limited to two (2) pages per example)
- CV(s) of any individuals proposed in the staffing plan to conduct this activity (limited to two (2) pages per individual)

A cover slide will be considered a non-counting slide, should offerors choose to include one. No additional annexes or documentation are requested now.

Part 2 – Price Proposal

The contract type for the presumptive contract(s) will be an Indefinite Quantity Subcontract with Fixed Price Task Orders, awarded by DAI Global, LLC. **Please include your total proposed fixed price for Task Order 1 along with details for specific deliverable pricing.**

For Task Order 2, please provide the illustrative cost of designing ten (10) mini-grids and productivity hubs. Please provide narrative explanation of assumptions related to Task Order 2 pricing in terms of the complexity of the sites and designs. The proposed illustrative pricing for Task Order 2 will serve as an indication of how the Offeror will structure and price its work under subsequent Task Orders; INVEST will compare subsequent Task Order pricing during IQC implementation against the pricing proposed during this competitive phase.

Offerors must also include a cost breakdown of the hourly rates for proposed personnel, any other direct costs, indirect costs, and fees if applicable, with a build-up to their total proposed price or include substantiating price reasonableness documentation/justification. Cost breakdowns included will be utilized to determine price reasonableness. Offerors should use the attached cost/budget template; please limit file submissions to 10 megabytes or less.

- Evaluation of Proposal: DAI will use best value determination for the award of this Request for Proposals. A best value determination means that, in DAI's estimation, the selected offer(s) will provide the greatest overall benefit to USAID in response to the requirements stated in this RFP. DAI may also exclude an offer from consideration if it determines that an Offeror is "not responsible", i.e., that it does not have the management and financial capabilities required to perform the work required. Proposals will be evaluated against a stated number of factors, including the overall proposed approach, past performance, specific qualifications in site selection and design of sustainable energy solutions and productivity hubs, as detailed in the SOO and other evidence substantiating the bidder's ability to deliver, including budget and time frame considerations. Specific preference will be shown for firms with experience working in rural Colombia and with Colombian solar energy utility companies.
 - **1. Technical Proposal:** The Technical Proposal will be scored and evaluated separately from the price proposal. Technical panel reviewers will evaluate offerors on the following factors, consistent with the offerors' technical proposal.

- a. Technical Approach (40 points) Points for this section will be awarded based on the information presented in the technical approach. Points will be awarded to firms describing their thoughtful approach to addressing the statement of objectives. The offeror will be scored based on its presentation of a clear approach for each Task Order that reflects the requirements of this specific activity and incorporates the offeror's competencies, including proposed adaptation and/or mitigation strategies in light of COVID-19.
 - i. Task Order 1: Points will be awarded to firms clearly describing the offeror's technical criteria and process to conduct qualitative and quantitative analysis of the PDET sites and communities identified in the SOO to prioritize and recommend those with the highest potential for attracting private investment to build and operate sustainable energy mini-grids and productivity hubs. It should include an approach for assessment and selection of the sites, as well as conducting the requisite Initial Environmental Examination (IEE).
 - **ii. Task Order 2:** Points will be awarded to firms describing their thoughtful approach to addressing the statement of objectives, especially those that aid in creating economies of scale so that clean, sustainable energy can be delivered at the lowest cost possible per KWh to the communities. The offeror will be scored based on its presentation of a clear approach for Task Order 2 that reflects the requirements of this specific activity and incorporates the offeror's competencies. The technical approach for TO 2 should focus on the design of the mini-grids and productivity hubs for the selected sites taking into consideration community acceptance, durability, cost effectiveness and attractiveness to private utility companies and investors. It also should include the approach to identify and engage potential energy utility companies for building and operating the mini-grids.
- b. Institutional Capacity (30 points) Points for this section will be based on information presented in the corresponding section and any submitted case studies. Preference will be given to firms and/or consortia that have past performance in timely and successful delivery of similar services and/or relevant experience in site selection and design of sustainable solar energy mini-grids and shared productive infrastructure or productivity hubs. Emphasis will be placed on firms with presence in Colombia and experience working in PDETs, rural areas of the country or similar environments as well as existing networks in the energy utility sector in Colombia, particularly solar energy and energy storage. Firms should also demonstrate their ability to carry out the work and produce deliverables in English and Spanish.
- c. Management Plan/Staffing Structure (30 points) Points for this section will be based on the qualifications of proposed staff, taking into consideration the range of skills required for each task order (including but not limited to social sciences, finance and economics, architecture, engineering, solar energy, agricultural value chains, community and rural development, among others), clear delineation of the roles and responsibilities of each proposed staff and each proposed firm (if firms are partnering), and the demonstrated efficacy and clarity of the management and staffing plan to ensure quality deliverables on time and effective coordination and communication with a range of stakeholders including INVEST, USAID, target PDET communities, Government of Colombia, energy utilities and others. Proposals should provide a clear management plan in narrative form for the development, review, and submission of all associated

deliverables, including a proposed milestone schedule, which outlines a basic framework of expected deliverables and a timeline for submission of each, including time for regular meetings, review and feedback on drafts as appropriate should be included. If the offeror is submitting a proposal along with partners, the proposal should describe the nature of the arrangement (i.e. added technical value), the division of labor among the partners, and the appropriate management controls to ensure successful delivery.

2. Price Proposal: Price will be evaluated separately from the technical approach, with due consideration for realism, price reasonableness, and allowability consistent with US government cost principles. Evaluation for this section will be dependent upon all information presented by the Offeror in their deliverable table, budget with cost breakdowns, and any relevant supporting cost information, as well as its alignment with the proposed technical approach. Budgets will be analyzed for cost reasonableness of the deliverable prices as well as the cost build-up. The price proposal should include all costs associated with carrying out the work and producing the proposed deliverables, including any and all related travel and security costs that are necessary to ensure that the offeror can get to and safely carry out assignments in the selected PDET sites.

At the proposal stage, Offerors should include the total fixed price for Task Order 1 along with details for specific deliverable pricing in Task Order 1. The illustrative pricing for Task Order 2 will be evaluated as an indication of how the offeror will structure and price its work under the subsequent Task Order. This budget will be analyzed for cost reasonableness of the deliverable price as well as the cost build-up.

Once the IQC is issued, the budget for any subsequent Task Order, if issued, will be analyzed for price reasonableness at that stage. INVEST will compare subsequent Task Order pricing against the pricing proposed during this competitive phase. Any significant deviation from the pricing submitted at the IQC stage will need to be fully documented and justified at the Task Order level, and will be subject to approval by DAI.

III. Offeror's Agreement with Terms and Conditions: Please visit the <u>INVEST</u> <u>Procurement Forecast</u> website for RFP Terms and Conditions.

The completion of all RFP requirements in accordance with the instructions in this RFP and submission to DAI of the technical and price proposals will constitute an offer and indicate the Offeror's agreement to the terms and conditions in this RFP and any attachments hereto. DAI is not required to accept and/or evaluate proposals that do not conform to the instructions of the RFP, and additionally, DAI may reject all proposals and not award a subcontract for this RFP. DAI reserves the right to award a subcontract without discussion and/or negotiation; however, DAI also reserves the right to conduct discussions and/or negotiations, which among other things may require an Offeror(s) to revise its proposal (technical and/or price). By submitting an offer, Offerors agree to comply with the general terms and conditions for an award, including Representations and Certifications compliance. Offerors must provide full, accurate, and complete information in response to this solicitation. By submitting an offer, Offerors certify that they have not/will not attempt to bribe or make any payment to DAI employees in return for preference. Issuance of this RFP in no way obligates DAI to award a subcontract, nor does it commit DAI to pay any costs incurred by the Offeror in preparing and submitting the proposal. DAI reserves the right to award a subcontract to one organization or to issue multiple awards to different organizations based on the results of our evaluation.

Thank you, DAI INVEST Procurement and Partnerships Team INVEST_Procurement@dai.com

Instructions for Joining the Bidders Teleconference on July 29, 2020

The Bidders Teleconference will be hosted via WebEx dial-in. Due to the number of participants this will be held as an audio call (no video) to preserve bandwidth. Participants will be muted upon entry. INVEST will provide an introduction and overview of the procurement, as well as highlight common themes from the received questions. Then there will be a period for follow-up questions from offerors.

As we anticipate a large number of participants, questions from Offerors should be submitted via the chat function in WebEx. WebEx chat instructions are provided below.

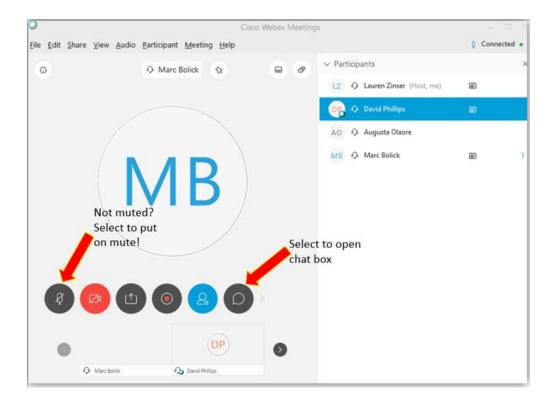
Webex Chat Instructions

- 1) Please join the WebEx through your computer to take full advantage of WebEx features, including the chat function.
- 2) Please submit your questions or comments via the **chat box** in the bottom right corner of the screen.
- 3) Instead of selecting "Everyone" as the recipient of your chat message, select "Katherine Tilahun".
- If you are calling on your phone and not able to submit questions in the chat box, please email your questions to <u>katherine_tilahun@dai.com</u> and copy <u>INVEST_Procurement@dai.com</u>.

Please see the following page for Screenshots of the WebEx platform and where to find the list of participants, the chat function, and how to mute yourself as necessary.

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To join the WebEx please follow the instructions below:

When it's time, join your Webex meeting here.

Meeting number (access code): 129 286 1096 Meeting password: pAA2EP4ueM5

<u>Join</u>

Host key: 570247 Meeting password: pAA2EP4ueM5

 Tap to join from a mobile device (attendees only)

 +1-415-655-0002,,1292861096##

 +44-203-478-5290,,1292861096##

 United Kingdom Toll

Join by phone

+1-415-655-0002 United States Toll +44-203-478-5290 United Kingdom Toll Global call-in numbers

Join from a video system or application

Dial <u>1292861096@dai.webex.com</u> You can also dial 173.243.2.68 and enter your meeting number.

Join using Microsoft Lync or Microsoft Skype for Business

Dial 1292861096.dai@lync.webex.com

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Need help? Go to http://help.webex.com

The INVEST Project: Mobilizing Private Investment for Development

USAID/Colombia Energy for Peace

Statement of Objectives for Investment Opportunity Assessment Site Selection and Preliminary Design

I. Introduction

USAID seeks to unlock the potential of private capital to drive inclusive growth. Increasingly, private investors and businesses are looking to emerging markets for better returns and new market opportunities. Specifically, USAID can leverage its resources – grants, technical assistance, guarantees, and convening power – to help raise awareness of investment opportunities, lower transaction costs, and mitigate the risk of investments that generate positive social, economic, and environmental impact.

In support of its efforts to promote blended finance within the agency, the USAID Office of Private Capital and Microenterprise (USAID/PCM) awarded the INVEST contract to DAI in September of 2017. Through INVEST's flexible buy-in mechanism, USAID Missions and Operating Units are able to access an unprecedented network of firms and individuals that have the range of technical expertise needed to identify opportunities and effectively mobilize private capital toward development priorities. Using a lean approach tailored to high potential opportunities, relevant parts of the network will come together to research, develop, and build specific solutions that align private capital with development needs.

II. Colombia Energy for Peace Activity

USAID Colombia is supporting the post peace accord era in strategic regions and communities (known by the Spanish acronym PDET for Programa de Desarrollo con Enfoque Territorial) by introducing abundant, reliable, low cost, and sustainable renewable energy to increase the population's productivity, incomes and well-being. Supporting implementation of the peace accords and leveraging private sector engagement and investment in this manner supports Colombia's Journey to Self-Reliance.

Support for the PDET communities' access to energy to promote economic growth, improved incomes and well-being will begin with the identification of productivity clusters that can benefit from the introduction of electricity, or the improvement of existing, poor electricity systems. Productivity clusters are groups of significant numbers of producers operating in a vereda or municipality. Examples of economic activities in potential productivity clusters include nature tourism, lodging, food services, processing of coffee, cacao, sugar, honey, dairy and fruits, milk, livestock production, among others. The site selection, partnerships and aggregated financing solution for the five to ten sustainable mini-grids and associated productivity hubs are intended to provide a demonstration effect with potential for replication and scale.

Through INVEST, USAID Colombia seeks to utilize a catalytic financial structure to unlock the potential of private capital to plan, build, operate and potentially transfer (BOT) sustainable energy generation projects for peace in prioritized PDET sites in rural Colombia. These projects will be selected from a universe of 15 PDET candidate sites (see Annex A) which have been pre-selected by USAID together with the Territorial Renovation Agency (known by its Spanish acronym ART¹) and the Ministry of Mines and Energy Institute of Energy Solutions Planning and Promotion for Non-Interconnected Zones (known by its Spanish acronym MME-IPSE²). USAID Colombia is aiming to mobilize capital for the development and

¹ ART: Agencia para la Renovación del Territorio

² MME: Ministerio de Minas y Energía, IPSE: Instituto de Planificación y Promoción de Soluciones Energéticas para las Zonas no Interconectadas

implementation of five to ten cost-efficient and financially sustainable solar energy mini-grids with battery storage, to support growth of productivity, incomes and social stability for the peace process.

INVEST will take a phased approach to support USAID/Colombia's Energy for Peace Activity. For the phase one Investment Opportunity Assessment, INVEST anticipates issuing an Indefinite Quantity Contract with two task orders. The first task order would be for assessment of the 15 PDETs³ and selection of 5-10 sites that are most viable for sustainable mini-grids. The second task order would be for preparing the preliminary designs for the 5-10 mini-grids and productivity hubs on the selected sites and identifying energy utility companies as potential partners.

INVEST anticipates issuing separate RFPs for follow on phases including the design and fundraising for the blended finance solution and project implementation. Those follow-on RFPs will be released for open competition and will not be restricted to the winner of this procurement.

III. Vendor Responsibilities and Tasks

For the phase one Investment Opportunity Assessment, INVEST anticipates issuing an Indefinite Quantity Contract with two task orders. The first task order will be issued along with the IQC, and the second will follow once the initial assessment and prioritization has occurred. In order to select high-potential sites and build the evidence base for mobilizing blended capital to support the peace accords and development in the PDETs, in the first Task Order the selected subcontractor(s) will be expected to assess 15 candidate PDET sites and then prioritize five to ten of them, including an evaluation of each site's productivity clusters⁴. The second task order will be for preparing the preliminary designs for the minigrids and productivity hubs⁵, and identification of potential utility partner(s) that are interested in: investing with USAID, operating and maintaining the generation projects, and leading and mobilizing co-investment to build, operate and maintain the mini-grids.

Task Order One:

Task Order One will be for site selection and prioritization, which should take into account the following:

a. Evaluation of the 15 candidate PDET sites and determination of the five to ten PDET sites with the best probability of success: i.e., where the productivity clusters have the greatest productivity and output growth potential from the introduction of stable low-cost clean electricity. This will require collaboration with USAID Colombia, the INVEST Country Lead and the GOC to conduct the assessment. The assessment will include PDET site data review with ART, IPSE, and MME, site visits, interaction with the community leaders and producers, documenting the growth potential of the productivity clusters, and identification of key social services that the new electricity could provide to the community. It will include:

³ Please see the Annex for the list of the PDETs identified for this assessment. 14 sites have been identified and one is to be determined.

⁴ Productivity cluster is a regional grouping of existing productive activities in a target PDET community that could benefit and grow from the introduction of stable, low cost renewable energy.

⁵ Productivity hub is a simple infrastructure to be built and co-located with the solar grid, with "safe spaces" for internet and cell communications, training rooms, and secure stalls with energy, water and internet connections for producers who wish to set up productive activities in the hub such as tourist offices, refrigeration, storage, value added processing, etc.

- i. the analysis of baseline factors⁶ such as population and settlement density, average income, output and productivity levels of existing productive activities, quality of the goods and services being produced, income levels of producers, access to markets, access to finance, ability to invest, purchasing power, existence of internet and cellular phone access, and determination of key social and economic variables in the baseline condition; determination of whether the school, municipality offices, and clinic have adequate access to electricity; determining whether the community has engaged in electricity generation projects previously and what became of those proposals;
- ii. engagement with community leaders to promote acceptance and support of the mini-grids and productivity hubs;
- iii. estimation of the growth potential (growth of output, productivity and quality) of the principal activities in the productive clusters from the introduction of stable low cost energy;
- iv. analysis and determination of capacity building activities and technical support to producers that would be needed to attain the desired growth potential (improve productive and administrative capacity, access to finance, training programs, etc.) when improved energy arrives;
- v. identification of potential off-takers and anchor clients for part of the energy
- vi. determine the level of accessibility that producers would have to the productivity hubs
- vii. determine the security risks and propose risk mitigation plans with GOC
- viii. develop demand forecasts for the energy as the productivity cluster output grows over the first five-year period. This will be a key input for the design of the generation plant and its production capacity.
- ix. Determine the willingness to pay for energy by the producers if their output and incomes rise as expected;
- x. Determine the availability and tenure of land for constructing the mini-grids and productivity hub;
- xi. Determination of the set of social services (health clinics, internet access, cellular communications, public lighting, schools, municipal offices) that could be significantly improved by providing them access to stable low-cost electricity.
- xii. and other evaluation and selection criteria determined useful by USAID.
- b. Ranking of the 15 candidate PDET sites in terms of potential for success and growth, in order to ensure the most favorable returns to USAID, GOC and private investors.
- c. An Initial Environmental <u>Initial Environmental Examination</u> for the activity, which should include a review of the reasonably foreseeable effects on the environment of the installation of the mini grids and productivity hubs in the PDET sites, and recommend determinations and, as appropriate, conditions, for the completion of these activities.
- d. Regular meetings and presentations with USAID, GOC (primarily ART and IPSE), and INVEST to discuss progress and recommendations.

⁶ Please refer to Annex A for initial criteria used to identify the 15 sites for this assessment.

Task Order Two:

Task Order Two will be for design of the mini-grids and productivity hubs and should consider the following:

- a. Initial conceptual design for the productivity hubs based on the local context and potential for growth of productivity, output and incomes, taking into account a five-year planning horizon.
 - i. This should include an evaluation of the productive and market opportunities, and the challenges related to developing those opportunities, that are faced by the various producers which make up the productivity clusters, when they gain access to stable low-cost energy.
 - ii. Determine the optimal placement for the productivity hub and the solar generation minigrid, taking into account the local production conditions, producer access, availability of land and security. Hubs may be co-located with the minigrids (for example rooftop solar on the Hub roofs).
 - iii. Productivity hubs may include individual stalls /safe spaces with electricity, water and easy access for loading and unloading of goods for each stall. The Hub space should allow producers to set up production systems, processing equipment, storage, refrigeration, and office equipment. The Hub may provide training rooms, cellular and internet communications and bathrooms for common use;
- b. Initial conceptual design for the Solar Mini Grids generation and energy storage systems should include:
 - i. Optimal localization of the Solar Mini Grids, which should take into account both the productivity clusters' criteria and the key social uses such as the electrification of nearby community centers, schools, health facilities, communications equipment and public lighting, among others.
 - ii. Design of the solar generation plant (mini grid) and battery storage plant should include an evaluation of the level of energy demand that may occur in each of the five to ten minigrids over the first five-year period⁷; the level of UPME-estimated solar resources⁸
 - iii. The deliverables should include preliminary architectural and engineering designs for generation and distribution assets required for the long-term sustainable supply of electricity to each site;
 - iv. The definition of common solar generation equipment (solar cells, inverters, control systems) and battery storage technologies that could be used in all of the selected PDET sites. This will allow for modular design, aggregated procurement, aggregation of transportation and construction services, and simple operation and maintenance across the minigrids. The same generation and storage equipment will be used across all selected PDET sites. The minigrids will only vary in terms of energy generation power capacity.
 - v. The assessment, design requirements, feasibility and cost analysis should consider the option of planning a phased approach to modular construction to increase capacity of the generation plants over time, as productivity, output and ability to pay grow. They should be based on standardization of solar generation and storage equipment and designs to control costs and optimize savings through aggregated purchasing, transportation, construction and financing.

⁷ Sufficient capacity to address current and expected production needs as the community productive activities grow over the first five years.

⁸ UPME the Ministry's energy planning unit, and NREL have detailed solar resource maps for the country.

- vi. The objective of evaluating these options is to develop sustainable minigrids that minimize the cost of electricity generation per kWh, operations, and maintenance so that PDET communities can increase productivity, invest, grow and pay for their energy. The minimization of electricity generation costs should also increase the profitability of the investments in the blended finance model.
- c. Initial architectural and engineering designs (including blueprints) for each of the mini-grids and productivity hubs.
- d. Appraisal of the best options for partnership and ownership structure at each PDET site, including legal and regulatory requirements and options, and review and definition of the role of the public and private partners for each site. This analysis should be developed in close consultation with the INVEST Country Lead.
- e. Definition of the BOT process (build, operate and transfer property rights to owner/operators) that will satisfy investors, comply with USAID regulations, and ensure long term sustainability for operations and maintenance. USAID will not be an owner; the owners will be the investors and /or the utility. This analysis should be developed in close consultation with the INVEST Country Lead.
- f. Working in close consultation with the INVEST Country Lead, conduct an assessment of multiple Colombian energy utilities and operators that share USAID's Energy for Peace vision, are willing and able to co-invest with USAID and private sector partners, and have proven capacity to carry out the long-term operations and maintenance of one or multiple mini-grids. USAID has identified the participation of an energy utility operator as a fundamental requirement for the sustained success of the project, given their experience in energy generation and distribution, the regulatory framework, permitting, community consultation, risk management, tariff structures and billing, and availability of technical personnel and the institutional framework to guarantee long term operations and maintenance. Colombian energy companies will be favored, but international actors could be considered.

IV. <u>DELIVERABLES</u>

The Subcontractor will provide the following deliverables as a result of the investment opportunity assessment:

Task Order One:

- 1. Site prioritization among the 15 PDET candidate sites, and supporting assessment findings and conclusions for the five to ten most promising sites, including:
 - a. Baseline conditions of production, quality, productivity and incomes;
 - b. Estimates of potential productivity and production growth with the energy project into the future⁹ for each PDET site; and
 - c. Ranking of the candidate sites in terms of their potential productivity and production growth with the energy project, the willingness and ability to pay (estimated) tariffs by the target PDET productivity clusters, willingness of the community to accept and support the Minigrids, readiness to begin design and building of the mini-grids and productivity hubs, and other criteria as included in the site assessment process.
- 2. Initial Environmental Examination, compliant with USAID's requirements and regulations.

⁹ Potential growth over a five-year time period

- **3.** Periodic (e.g. monthly or as recommended in proposal) presentation and discussion of progress, findings and recommendations to USAID/Colombia, GOC, INVEST and other relevant stakeholders.
- 4. Stakeholder analysis to detail key actors' willingness to support and co-finance the mini-grids and productivity hubs (e.g. at each of the prioritized PDET/Municipal sites as well as other GOC stakeholders).

Task Order Two:

- For each selected PDET site, provide an initial conceptual design of a) the productivity hub and b) the solar minigrid and battery storage plant, with specific indications on connectivity between the two.
- 2. Provide a Final design of the productivity hubs for each of the final selected PDET sites. These should include:
 - a. The preliminary architectural and engineering design plans for the individual mini-grids and for each of the accompanying productivity hubs to support expected growth over the first five-year period.
 - b. All sites will share an aggregated purchasing, transportation and construction approach based on the use of common technology and modularity of solar and storage equipment across sites, to build, expand and maintain each mini-grid over time based on demand projections in the most cost-effective manner;
 - c. Initial estimate of the appropriate generation capacity for each final selected PDET site (recommend an initial capacity and a probable expansion plan over five years), based on an expansion plan as productivity clusters respond and improve output, and demand grows.
 - d. Preliminary estimate of the cost to build the proposed mini-grids and productivity hubs and identify other infrastructure deemed as essential (main railways, roads, canals, harbors and docks, drinking water, drainage, cellular tower, etc.) for the success of any site.
 - e. Preliminary time frame for site development and construction.
- 3. Potential electric utility partners identified and contacted, and a list of proposed partners to invite to an industry day; objectives of the utility partner developed and defined.
- 4. Next steps and requirements for moving forward.

V. Role of INVEST Project

INVEST Colombia Energy for Peace will work closely with the selected subcontractor(s) during all stages of this work. DAI will subcontract the selected subcontractor(s) directly and provide review and oversight throughout the life of the activity in accordance with INVEST's lean management approach. INVEST will hire a Country Lead that will work closely with the Site Assessment contractor in all phases. The Colombia INVEST team will administer periodic check-ins, reporting, deliverable review prior to client presentation and approval, and manage an ongoing monitoring, evaluation and learning framework.

• Subcontractor Onboarding: Colombia INVEST will provide the successful offeror(s) with all necessary context, and work with the successful offeror(s) to develop work plan(s)

- Project Implementation: The selected subcontractor(s) will implement the work as prescribed by the work plan(s). Colombia INVEST will provide management support and ensure periodic check-ins/reporting
- Ongoing Monitoring, Evaluation, and Learning: Colombia INVEST will define indicators in subcontract, collect and review M&E data from subcontractors for requisite reporting to USAID and will conduct data quality assessments as necessary.

Duration and Place of Performance

This engagement is expected to commence in September 2020 and last between 6 - 7 months. Task Order One is expected to conclude by December 2020, and Task Order 2 is anticipated to commence in January and conclude by March 2021. Work will take place in Bogota, Colombia and the PDETs.

Annex A

The following 15 PDETs have been identified for assessment and prioritization.

- 1. Bajomira Tumaco Nariño
- 2. San Vicente del Caguán Pato Guayabal Caquetá
- 3. Puerto Rico Santana Ramos Solano Caquetá
- 4. Buenaventura Consejo Comunitario de la Plata Valle del Cauca
- 5. Cienaga Bethel Magdalena
- 6. Capurgana Corregimiento de Acandi Choco
- 7. Uribe Meta
- 8. Unguia, Choco
- 9. TBD
- 10. Sardinata, Catatumbo, Norte Santander
- 11. El Paujil, Caqueta
- 12. Cartagena del Chaira, Caqueta
- 13. San José del Guaviare, Guaviare
- 14. Caceres, Antioquia
- 15. San Juan del Cesar Guajira

Assessment criteria

- a. USAID/Colombia Vulnerability Index
- b. Municipal Population
- c. Number of IPSE beneficiary families
- d. Solar potential in selected site (KWh/square mile/day)
- e. PDET within Zonas Estratégicas de Intervención Integral (ZEII)
- f. Other USAID projects in the selected municipality
- g. Land use priority vocation (considering Sub-direction of Productive Projects application)
- h. Fisheries priority vocation (considering Sub-direction of Productive Projects application)
- i. Non-agricultural production priority vocation
- j. Nature tourism vocation
- k. Availability of reliable electricity for productive activities
- 1. Productive associations or cooperatives active in the site
- m. Productive activities identified
- n. Police and/or army presence
- o. NGOs/foundation(s) working on productive activities in the site
- p. Private companies operating in the municipality
- q. Financial institutions or bank correspondents present in the site
- r. Schools available and stable in the site
- s. Health services available in the site
- t. Acceptability of the road network for supporting the productive activities in the site
- u. Potential co-investors identified
- v. Which women's organizations are present in the municipality
- w. IPSE selection criteria
- x. Detail of the investments to be made by IPSE in the site including estimated investment
- y. Favorable factors for the site