Terms of Reference and Scope of Services

Cloud Based, Community Data Platform Specialist

**Background:** Caribbean countries experience some of the highest electricity prices in the world and their economies are highly vulnerable to global oil price fluctuations. This coupled with a heavy reliance on fossil fuel imports, presents a significant barrier to sound socio-economic development pathways for countries in the region. Therefore, by reducing their dependency on imported fossil fuels through the generation of renewable energy, Caribbean countries will be more resilient, less vulnerable to price shocks, and will keep a greater proportion of gross domestic product (GDP) spent within the economy.

It is well known that Caribbean islands have excellent natural resources available for the generation of energy. The technologies exist, the natural resources are abundant and the economics are attractive, but a myriad of issues impede the swift transition to renewable energy. These include technical, financial, regulatory, political and legal issues. For many islands, gaps also remain in the expertise to select appropriate and economically feasible solutions, and in the ability to attract investment and enable the Caribbean energy transition.

While most islands are not large enough to create a significant impact on global carbon emission reductions, they are the ideal combination of geographical scale and renewable potential to demonstrate system-wide, sustainable solutions across an entire economy, and collectively show that this transition is both replicable and scalable.

In early 2015, the Carbon War Room-Rocky Mountain Institute (RMI-CWR) and Clinton Climate Initiative (CCI) agreed to bring their complementary skill sets together and form a partnership aimed at addressing some of the gaps, which have prevented transition to date. The purpose of the partnership is to successfully execute a joint program to accelerate the transition of Caribbean island economies from heavy dependence on fossil fuels to a diverse platform of renewables and energy efficiency and establish a blueprint for other isolated economies.

In late 2015, RMI-CWR and CCI joined forces with the Caribbean Electric Utility Services Corporation (CARILEC) to target utility practitioners to provide the information, support and tools required to facilitate utilities in making the transition from fossil fuel to renewable electricity generation. By leveraging the core competencies of CARILEC, RMI-CWR, and CCI, and collaborating on an agreed scope of work, this unique Partnership will:

- Identify the optimum solutions for Caribbean countries
- Catalyse the flow of capital to renewable energy and energy-efficient systems
- Create an open playing field for technology providers able to deliver those systems

**Overview:** With the goal to foster knowledge exchange on renewable energy project implementation and sharing of experiences among island nations, a concept for a renewable energy community of practice (CoP) was conceived to support energy professionals in the Caribbean to transition from fossil fuels to indigenous, renewable energy sources. The CoP will enable CARILEC, RMI-CWR, CCI, and development partners to ramp up the sharing of best practices and capitalize on existing knowledge foundation among electrical utilities to stimulate energy transition in the Caribbean.
The overall objectives of the CoP are as follows:

- Foster continuous knowledge exchange between Caribbean utility engineers, government practitioners, and development partners active in the sustainable energy space;
- Provide a virtual and accessible knowledge platform and document repository that is focused specifically on renewable deployment approaches, tools and templates;
- Provide a virtual and accessible knowledge platform and document repository that would encompass various facets of utility operations and management. This may include disciplines of Management, HR, Safety, Transmission/Distribution, Planning, Generation, GIS etc. This can begin initially as a few general spaces, and refined in future site revisions;
- Strengthen partnerships between governments, utility companies and external specialists to draw upon and access state-of-the-art practices;
- Create a new, online portal to deliver training developed and delivered by CARILEC and other development partners; and
- Develop a secure platform for disaster management (including disaster notification and response coordination). The designer should employ modern technologies and innovative methods to ensure rapid dissemination of information and ease of real-time communication across multiple platforms in the community (computer, mobile, text, web, mms etc).

Since September 2015, CARILEC, RMI-CWR, and CCI began to assess the specific needs, services, and resources for prospective CoP members through an online survey, which demonstrated a clear desire from Caribbean energy professionals to learn, exchange, and gain access to new, innovative decision-making support tools in order to advance RE projects in the region. With the establishment of the Caribbean Center for Renewable Energy and Energy Efficiency (CCREEE) and the Aruba Center of Excellence, many of these needs will be met. However, there is still a need to provide the core audience of utility engineers and professionals with dedicated and tailored services. The complete results and analysis will be provided to the Cloud-based, Community Platform Specialist (hereon referred to as the Consultant).

Additional feedback was received during the Aruba Learning Event (ALE), CoP session that took place in Aruba, October 27th, 2015 and attended by utility executives, engineers and government officials from the Caribbean and the Pacific region. During the session participants provided inputs to develop a CoP mission statement for RE on islands, and also suggested a list of activities, and specific features, and resources to consider in the design of an online, community platform. (A synthesized list of requested features and priority resources will be provided to the Consultant - currently in development). In general, the community platform aims to provide:

- Face-to-face and virtual activities to share knowledge and best practices to accelerate learning on renewable energy;
- Online knowledge-sharing platform to facilitate collaboration, discussions, and networking among island energy practitioners;
- Dedicated list serve to communicate, ask questions, and exchange with other island energy professionals;
- Training opportunities to build capacity and foster skills to meet increasing demands in renewable energy generation and distribution, and project implementation;
• Repository of manuals, tools, webinars, and training materials that can be easily accessed and stored;
• Disaster management activities for utility managers and operators;
• Peer network of local policymakers, utility executives & staff, project developers, and engineering, procurement & construction consultants; and
• “First-stop shop” to search energy information resources, models, project documents, upcoming events, and links to ask questions and request technical assistance.

The Consultant will focus on the key deliverable for CARILEC, RMI-CWR and CCI partnership to design and implement a virtual renewable energy CoP platform that is able to maintain a robust, document repository, and ultimately will provide a venue for energy professionals to collaborate.

The CoP will primarily target utility practitioners – with the option of including policy makers working in the sustainable energy sector at a later date. The CoP will enable CARILEC, RMI-CWR, and CCI, and development partners to ramp up knowledge exchange of best practices to stimulate energy transition in the Caribbean.

Responsibilities: The purpose of this Consultancy is to support the CARILEC, RMI-CWR and CCI Partnership in the selection of appropriate technology, and implementation of the technical design and launch of a user-friendly, cloud-based, virtual community platform that is tailored to the CARILEC membership. The CoP platform will be owned and hosted by CARILEC, and co-managed by the Partnership’s community development team. For the first 3 years, funding for operation and maintenance of the platform will be provided by the RMI-CWR and CCI partnership.

The CoP platform design and implementation will take a phased approach: (i) design and consultation, (ii), Beta launch and training; and (iii) community-wide launch and implementation. More specifically, the consultant will be responsible for completing the following tasks and deliverables:

Task 1. Develop an integrated work plan in consultation with the Community Development Team, to be reviewed and approved by CARILEC and RMI-CWR and CCI.¹

Deliverable 1. Integrated work plan. Upon submission and review of the work plan, the tasks and expected days to complete each task will be adjusted accordingly. Deliverable 1 is expected to take 2 days.

Task 2. Explore functionality requirements of platform users and operators, based on the inputs from a recent community development session and community survey that were conducted in October 2015. In collaboration with the Team, conduct consultations with: prospective community members and platform users, CARILEC IT staff, subject matter experts (SMEs), and regional development partners², in order to validate the platform needs; ensure that the site can be easily managed and self-sustained by the Community Development Team to enable them to update the site with new content and easily redesign based on evolving, user needs and demands, including GIS capabilities for RE projects in the Caribbean.

¹ The tasks outlined are envisaged following the successful submission of the integrated work plan, but will be revised/refined based on the agreed path forward.
² Namely the UNDP, CARICOM, IRENA, TNO, and the Government of Aruba.
The Consultant will also assess hardware and software requirements, security and bandwidth restrictions for the site, and provide a full list of back-end user criteria. The PPT and final presentation to the Team will be used to determine if the selected cloud-based technology solution is either an:

a) Off the shelf, with customizable features; or
b) A custom-designed platform.

**Deliverable 2.** A PPT and presentation outlining:

1) A list of priority functionalities, and other recommendations to include in the future;
2) At least two mock-ups for CoP design and architecture to demonstrate user experience and interface;
3) Recommendations (pros/cons) for technology, software solutions, as noted in a/b above), including but not limited to: development and maintenance costs, ease of use for members and back-end community administrators;
4) Recommendations to integrate and/or leverage parallel sustainable energy initiatives, such as the Aruba Center of Excellence to be based in Aruba; and the CCREE based in Barbados;
5) A list of related professional networks targeting energy professionals, and recommendations on how link/leverage existing knowledge and relevant resources to the CoP.

Deliverable 2 is expected to take 7 days.

**Task 3.** Based on the Team’s final selection of technology solution, the Consultant will design, install and configure virtual CoP platform to implement the Beta launch with select CoP and CARILEC members.

**Deliverable 3.** Virtual platform for Community of Practice beta launch. Launch of the beta version of the platform is expected by late January.

Deliverable 3 is expected to take 10-15 days.

**Task 4.** As part of this deliverable, the Consultant will be required to deploy and test a virtual webinar on the platform to users in order to ensure bandwidth and quality are not compromised. The Consultant will also be responsible to train the Community Development Team, namely the Community Administrator/Manager(s) to build the capacity of the Community Development Team to ensure sustainable community management and operations.

**Deliverable 4.** Deliver a virtual webinar to CoP members, and test the webinar software integration on the platform in order to ensure bandwidth and quality are not compromised across the region.

Deliverable 4 is expected to take 5 days.

**Task 5.** Test all functionalities and assess the beta version of platform and webinar to make necessary changes for formal, Community-wide launch of platform, expected in February 2016.

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3 Depending on result of the findings and agreed decision of Task 2, the Consultant may design or customize an off-the-shelf solution.
Deliverable 5. Formal launch of the virtual platform to all CARILEC members and energy professionals in the Caribbean. As part of the deliverable, the Consultant will be expected to:

- Optimize design and back-end requirements tested under the beta version to ensure the platform is fully operational
- Put in place monitoring systems – including platform operation and maintenance requirements
  - Outline system for updating virtual platform with new contents (discussions, documents, files, calendar and etc.)
  - Develop protocols for keeping data layers up to date
  - Develop protocols to manage the software service account (if necessary)
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  - Outline feasible and cost effective future platform enhancements

Deliverable 5 is expected to take 10-15 days.

**Timeline of Activities**

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<thead>
<tr>
<th>Deliverable</th>
<th>No of Days</th>
<th>Suggested Timeframe</th>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>Expected by end of December</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>Expected mid-January</td>
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<tr>
<td>3</td>
<td>5</td>
<td>Expected January 21st, 2016</td>
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<tr>
<td>4</td>
<td>10-15</td>
<td>Expected by January, 31st, 2015</td>
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<tr>
<td>5</td>
<td>8-10</td>
<td>End of February, 2016</td>
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**Payments.** An agreed daily rate will be negotiated and outlined in the executed contract agreement. The consultant will submit an invoice after each deliverable or at the conclusion of the consultancy – based on preference. The proposed number of days to be allocated to each deliverable and timing is recommended as above:

Travel for this consultancy is not anticipated, but if deeded appropriate, associated expenses shall be reimbursed in accordance with RMI-CWR travel policies.

**Prospective candidates should have a minimum of the following qualifications:**

- Bachelors degree or vocational training on web design, information systems and collaboration platforms, or related experience;
- Minimum of 5-7 years of direct relevant experience;
- Proven experience in designing, developing and launching virtual platforms that support communities of practice;
- Knowledge and experience in developing cloud based, knowledge networks and document repositories; and
- Experience in working with inter-disciplinary teams in community development planning.
Preferred qualifications include:

- Experience in working with governments, regional organizations, multilateral and bilateral development agencies;
- Excellent computer and information technology skills, including GIS, html, and API development;
- Demonstrated ability to assess client groups' information needs and be innovative in the design and delivery of appropriate targeted solutions; and
- Demonstrated experience to train and engage individuals and groups in use of knowledge management systems, including web sites, virtual community platforms, social media, etc.

Instructions to submit your application:

To be considered, please provide your CV, cover letter, proposed daily rate, and a sample portfolio of related design work, collaboration platforms, information systems, or online web tools. Kindly submit your application materials by email to Katie Lau (klau@carbonwarroom.com), with copy to Justin Locke (jlocke@carbonwarroom.com), Bradley Lyon (blyon@carbonwarroom.com), and Martyn Forde (mforde.consultant@clintonfoundation.org), with the subject line: “Last name, First name; Candidate for the Community Data Platform Specialist”. Qualified candidates must submit their application materials by December 16th, 2015 at 12 pm, EST.