# **Theme Synopsis**

Within the last decade, significant changes have occurred across power sectors worldwide, whereby various steps have been undertaken to modernise energy systems in developed and developing countries. There is a pressing need to develop sustainable and robust solutions which can mitigate and address the impacts of climate change, severe weather events and soaring fuel prices, all of which continue to challenge the performance and resilience of the Caribbean's energy sector. As digitisation continues to advance and expand, the need for novel designs and technologies that are fit-for-purpose, environmentally friendly, energy efficient and possessing greater levels of cybersecurity has been increasing. This has prompted an even greater focus on competitive, cost-efficient, and time-sensitive procurement practices, that can lead to achieving favourable and timely outcomes in support of energy transitioning in the Caribbean power sector.

Distributed energy resources have the potential to contribute considerably to enhanced demand response, reduce peak demand, support flexible generation and net zero pathways. Advanced Metering Infrastructure (AMI) and demand-response systems can promote and support the aggregation and remote access of such resources. Likewise, strategic efforts towards the maintenance of transmission and distribution systems will collaboratively contribute to the effective functioning of the power grid. Furthermore, with the current shifts towards electric vehicle usage and decarbonization, the introduction of new energy services is required to operationalise and commercialise energy efficiency concepts and solutions that incentivise and target emobility, decentralized RE, as well as demand-response management. As such, there should be increasing focus on effective and dynamic technologies, whilst the procurement and contracting of services and procedures should be honed to spearhead efforts towards successful energy diversification and increased resilience. Emphasis should be placed on acquiring a deeper understanding of grid planning, complex power generation and storage technologies, supply chain interactions, and modelling and monitoring tools and software to complement relevant processes and ensure the holistic functioning and modernisation of the power sector.

It is envisaged that technical planning, along with the design of new and resilient energy infrastructure, and the related procurement of works, services and equipment will become increasingly complex, thus requiring more innovative approaches and inclusive perspectives. Design, procurement, and operation of energy infrastructure should not only aim for cost-efficiency, but should also include environmental, social and governance (ESG) frameworks. Strengthening of strategic alliances, cooperation among sector and non-sector stakeholders, acceleration of the digitisation of processes and the active participation of citizens are key factors that will significantly contribute to successful energy transitioning in the Caribbean region.

During the CARILEC Engineering and Procurement Conference 2023, we will examine and discuss best-practices and experiences, as well as new solutions and innovative approaches for Smart Designs, Efficient Procurement and Effective Execution, that have and will continue to power energy transition in the Caribbean.

All interested persons are invited to submit abstracts of approximately 100 words with titles, for preliminary consideration, as presentations for CARILEC 2023 Engineering & Procurement Conference & Exhibition and Articles for the CARILEC CE Industry Journal.

### **Presentation Topics**

Topics of interest to the CARILEC Conference audience should incorporate the theme of the conference and focus on sub-topics listed below:

## **Panel Discussion**

Powering Transition in the Caribbean Energy Sector through Smart Designs, Efficient Procurement & Effective Execution

# **Key Topics** (with a focus on best practices, lessons learnt and successful models for replication in the region)

- **Energy Modelling Approaches** Technologies and solutions for planning and simulating future power generation and grid capacities in the Caribbean.
- **Cybersecurity** Operational safety for Energy Security: tailored protection for the daily utility business.
- > Flexible generation Technologies and Solutions for more complex grid operation requirements.
- > Advanced Metering Infrastructure (AMI) how to prepare the Customers for Energy Transition.
- ➤ **The Prosumer model** Technologies, Technical Standards, Contract Templates and Financial Programmes to safely increase Customer Ownership for Energy Transition.
- Electric vehicle (EV) charging: Standards and Technologies and how they differ.

#### **Procurement Track**

### **General**

RFP and Procurement procedures: Ways to boost procurement efficiency and effectiveness - strong specifications, distinct evaluation criteria and extensive outreach to ensure best-available technology at competitive market prices. EPC-Contracts (for grid infrastructure, generation or storage capacities) - Considerations and Success Factors for a long-term and mutually beneficial partnership.

### **Key Topics**

- > ESG in Procurement and Engineering:
  - o Integrating Environmental, Social, and Governance factors in procurement decision-making
  - Measuring and tracking ESG performance in supply chains
  - The role of ESG in supplier selection and evaluation
  - Building sustainable and responsible procurement strategies
- > Supplier Relationship Management and Collaboration:
  - Building strategic partnerships with suppliers for ESG performance improvement
  - Leveraging supplier diversity and promoting social equity in supply chains
- **▶** Regulatory and Compliance Frameworks in Procurement:
  - o International standards, regulations, and guidelines for ESG and procurement
  - o ESG reporting, disclosure, and transparency in procurement
- Skills and Competencies for Future Procurement Professionals:
  - Training and development needs for procurement professionals in ESG and sustainability
  - The evolving role of procurement professionals in driving sustainable and innovative practices.

**Utility Case Studies:** Presentations on experiences and practices which are relevant to the Region and the Conference theme.

#### **Presenters Guidelines**

- 1. All completed Abstract Submissions Forms must be submitted by May 30th, 2023.
- 2. Selected presenters will be informed by June 6th, 2023.
  - **3.** Subsequent to notification, a full presentation must be submitted by July 14<sup>th</sup>, 2023, based on the selection committee's allotted time for your presentation:
    - Option 1 Power Point slides, for an approximate 35–60-minute presentation/ working session (inclusive of 15 minutes Q & A)
    - Option 2 Power Point slides, for an approximate 20 35 minutes presentation (inclusive of 5 10 minutes Q & A)
    - **Option 3** Power Point slides, for an approximate 15–20-minute presentation (inclusive of 5 <u>minutes</u> Q & A)
- \* A Written Article (Optional) to be considered for publication in the CARILEC's CE Industry Journal. For more information on the Journal email caribbeanelectric@carilec.org

Please send all Submissions to: Marketing and Member Services Department, at <a href="mailto:events@carilec.org">events@carilec.org</a> (Early Submissions are highly encouraged). Receipt of your submission will be acknowledged within two days.

**General:** CARILEC has appointed a selection committee to determine the presentations to be delivered at its conferences. The number of presentations accepted for a conference depends on program size (the number of sessions), technical coverage (the topics to be covered), focused on the subtopics and the number and quality of presentations. The selection committee identifies the best contributions for the agenda.

#### **Awards**

#### **Presenters will:**

- 1. Have an opportunity to be published in **CARILEC CE Industry Journal**.
- 2. Have their bio, photo and company name published on the CARILEC website.
- 3. Present to Caribbean Regional Utility Managers and an audience of over 60 delegates.

**Criteria for Selection**: Your abstract should demonstrate clearly that your presentation:

- 1. Will focus on the specified theme and general topics;
- 2. Will be of interest particularly to the target audience of the conference;
- 3. Will present information that is theoretically sound and accurate;
- 4. Will present new knowledge or experience, the substance of which has not been previously presented at a CARILEC conference (unless otherwise advised);
- 5. Will not be commercial in nature and will not promote specific companies, products, or services.

#### **Full Disclosure: Third Party Compensation**

All instructors and presenters are required to disclose proprietary interest in any product, instrument, device, service, or material discussed in the experience, event, or program, as well as the source of any compensation related to the presentation.

\*ONLY SIGNED FORMS WILL BE ACCEPTED.