

SUSTAINABILTY ENERGY PROJECT DEVELOPMENT: EXPERIENCE, STRATEGIES & IMPLEMENTATION WORKSHOP PROCEEDINGS

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SUMMARY

On August 19th, 2014, The Department for Sustainable Development of the Organization of American States (OAS/DSD) hosted a workshop within the framework of the Sustainable Energy Capacity Building Initiative (SECBI) of the Energy and Climate Change Partnership of the Americas (ECPA). The workshop which was held in Saint Lucia under the theme, *Sustainable Energy Project Development: Experience, Strategies and Implementation* was facilitated by Christina Becker-Birck.

The workshop brought together representatives from 11 countries and representatives from 10 international agencies (see Appendix D for the Workshop Participant List).

The purpose of the workshop was to bring together senior energy government delegates and development partners to discuss past experiences and current support for energy project and policy development and strengthening the effectiveness of donor interventions in the region against the backdrop of increased activity in region towards the transformation of the energy outlook of the Caribbean. The workshop context is described in further detail in Appendix A. A full agenda can be found in Appendix B of this workshop proceedings report.

Prior to the workshop, a questionnaire was circulated to participants from recipient countries and donor agencies for completion complete in advance of the workshop (See Appendix C). The purpose of the survey was to encourage participants to reflect on successes and failures of technical assistance provision in order to support a more robust dialogue at the workshop.

This workshop proceedings report is broken into six sections. Parts 1-5 summarize the discussion highlights of the workshop. Part 6 summarizes the workshop's outcomes and recommendations to OAS/DSD.

PART 1: OPENING REMARKS

The workshop began with introductory remarks from Mr. Cletus Springer, Director, OAS/DSD. Mr. Springer applauded the renaissance that is taking place in the energy sector of the Caribbean. He noted that while the region was making strong strides towards sustainable energy pathways, it was critical that this be done within a coordinated and strategic framework that allowed countries to learn from each other and to not seek to reinvent the wheel. Additionally, Mr. Springer provided introductory remarks for the Hon. James Fletcher, Minister for Public Service, Sustainable Development, Energy, Science and Technology of Saint Lucia.

Minister Fletcher effectively got workshop participants energized for the day's discussion by sharing Saint Lucia's challenges, accomplishments and goals with regards to growing its renewable energy markets as it relates to the regional context. He highlighted the importance of sustaining efforts towards the transformation of the energy sector in the region. He noted that current energy rates in the region are undermining the competitiveness of productive sectors of the countries of the region and simply had to be addressed, if the region is to stand any chance of boosting their sustainable development.

In particular, Minister Fletcher highlighted the importance of initiatives such as the OAS Energy and Climate Partnership of the Americas (ECPA) and SECBI with regards to supporting the development of administrative capacity in the Caribbean region, stating that, "institutional capacity building is important because it allows us to work with people who are more seasoned than us." He stressed the importance of regional collaboration, emphasizing that, "[it is] important to look at institutional capacity not on the country level but on the regional level. We all face similar issues and challenges." By finding ways for donor agencies to coordinate the support they provide, the Caribbean can meet its broader regional goals relating to climate change mitigation, sustainable energy market growth and energy independence.

PART 2: WORKSHOP INTRODUCTION

Following the opening remarks, Ms. Becker-Birck set the context for the workshop by summarizing findings from work conducted on behalf of OAS and CARICOM, in partnership with the Clean Energy Solutions Center, to catalogue donor supported activities in the region. This presentation high lighted how over 80 activities have been conducted in the region, how over USD \$128 million have been provided in technical assistance and grants since 2014, and how several Caribbean countries have multiple donor-supported projects underway (currently or in the past). This overview discussed the progress and accomplishments to date and also the need to reflect upon lessons learned, gaps and needs for additional technical assistance and areas for strengthened donor coordination.

Following Becker-Birck's presentation, Philipp Blechinger gave a short presentation (via Skype) of his doctoral research being conducted at the Reiner Lemoine Institut in Germany. Over the past several months, Mr. Blechinger has reviewed over 60 reports, conducted over 20 interviews and surveyed 30 individuals across the Caribbean region to evaluate the barriers to renewable energy growth. His research identified the follow six most important barriers, as identified by respondents and interviewees:

- Lack of regulatory framework and legislation for private investors
- Gap between policy targets and implementation
- High initial investments
- Lack of legal framework for IPPs and PPAs
- Diseconomy of scale
- Utility monopoly of production, transmission and distribution of electricity

Mr. Blechinger provided several high-level recommendations to reduce barriers such as

- Developing the regulatory framework to secure investments, attract private capital, and further oversight of monopolies
- Applying direct or in-direct subsidies could reduce prices of renewable energy technologies and attract private capital

• Exploring whether a Caribbean wide market could increase economies of scale by increasing competition and enhancing economies of scale

Following Mr. Philipp Blechinger's presentation, Ms. Carolina Peña of OAS/DSD gave a presentation covering the following topics:

- The OAS/DSD's approach to assisting countries
- A summary of OAS interventions in the region
- Current initiatives and main activities
- A briefing on the SECBI project

PART 3: CONVERSATION ABOUT TECHNICAL ASSISTANCE

The next part of the workshop was a group discussion about what types of technical assistance and donor support have most impacted the growth of national sustainable energy markets. As discussed previously, workshop participants had already reflected on this question prior to the workshop through their completion of a questionnaire (see Appendix C for list of questions).

The facilitator, Ms. Becker-Birck, summarized the participants' discussion on a pin board (see picture below), the notes of which are also included below. The discussion focused around needs, success factors, challenges & barriers and examples of support:

Technical Assistance Needs

Conversation about technical assistance needs focused on how country representatives need help with implementation. The group agreed that financial and technical assistance support exists for studies but often not for implementation. Participants believed that implementation would be more impactful if energy office staff had budgets and staff capacity (i.e. time) to support implementation and to coordinate the multiple activities in their countries (internally and with stakeholders). The following gaps and needs were identified:

- Support programs should not rely on long-term subsidies for implementation/continuation
- Provide financial support for each country to have an energy office or advisor
- Involve universities and educators in projects, implementation and building local knowledge
- Provide dedicated funding for renewable energy implementation within the project plans so reports do not sit on the shelf (e.g. similar to how universities charge for overhead)
- Ensure that a percentage of each project goes toward implementation by local partners
- Help government find ways to fundraise for renewable energy implementation
- Provide implementation support to national energy units: each donor-supported project includes a project manager, which often increases their burden
- Involve local knowledge and experts in project design and implementation
- Support governments with stakeholder engagement

Build technical ability of government staff to manage a full tendering process

Success Factors

Participants identified several success factors of previous donor-provided, technical assistance. Success stories included some combination of the elements described below:

- Policy planning that creates specific goals and identifies technical assistance needs
- Tie concrete problems to implementable solutions
- Donors provide experienced, on-call staff for expertise (e.g. governments of Australia and Japan)
- Jointly designed and implemented projects (country + donor)
- Assistance provided is responsive to specific needs outlined by the country
- Provision of external technical expertise and independent recommendations
- Involve not only the government in power since political time horizons can be short
- Donor assistance that delivers specific frameworks that could be taken to cabinet for approval
- Flexibility so the project can change along with market and political realities during the course of the project and allowing countries themselves to modify and adapt
- Peer review fosters knowledge sharing and can strengthen outcomes
- Develop an implementation funding stream through small fees (e.g. electricity bills, tourism tax)
- Comprehensive projects that provide the full spectrum of support preparation, implementation and sustained support until impact is achieved

Challenges & Barriers

Participants agreed that the key challenge to successful energy transitions and technical assistance provision is the lack of continuity: of government commitment, donor agency representatives and financing.

- Frequent rotation of programmatic personnel within donor agencies (i.e. up to 5-10 people might work on a project which is disruptive)
- Easier for donors to assess rather than implement
- Lack of government commitment to transformation
- Access to stable financing
- Lack of commitment for implementation
- Recipient countries lack long term planning —projects and initiatives change with political cycles (i.e. sometimes a project is gone within a year of its creation due to an election)
- Need continuity of technical assistance
- Lack of follow through with public awareness programs

Examples of Support

During the conversation, participants highlighted examples of successful projects. This list is not inclusive of all successful donor-supported initiatives; it highlights those raised by participants.

- OAS support with Antigua & Barbuda's National Energy Plan
- GIZ assistance to Antigua & Barbuda's through CREDP for a wind regime technical study
- World Bank on-demand, geothermal expertise and a peer review process to Dominica

- UNEP preparation support for Trinidad and Tobago's feed-in tariff policy, the tangibles of which were brought to government cabinet
- Caribbean Development Bank loan programs which include a percentage or line-item to support government implementation costs
- Australian and Japanese provision of extra staffing capacity to Belize in the form of senior-level skilled support for energy planning and implementation
- Eastern Caribbean Energy Regulatory Authority (ECERA) assistance with regulatory reform to the Easter Caribbean region
- US Department of State guidance for waste-to-energy procurement in St. Kitts and Nevis



PART 3: DONOR & AGENCY ROUNDTABLE DISCUSSION

After listening to a discussion centered around lessons learned from technical assistance provision, representatives from donor and international organizations gave short presentations of their ongoing and upcoming efforts in the region. Speakers included:

- Organisation of Eastern Caribbean States Mr. Leonard Deane
- Carbon War Room Mrs. Maya Doolub
- European Union Mr. Jannik VAA
- Caribbean Development Bank Mrs. Tessa Williams
- U.S. Department of Energy Mrs. Nadia Rhazi and Mr. Gary Ward
- Clean Energy Solutions Centre Mrs. Christina Becker-Birck

PART 4: CONCURRENT GROUP BREAKOUT SESSIONS ON TECHNICAL ASSISTANCE & COORDINATION

After lunch, workshop participants broke into three groups:

Groups 1 and 2 included the country representatives and were facilitated by Carolina Peña and Christina Becker-Birck, respectively. These groups discussed and identified specific requests for technical assistance.

Group 3 included donor and international organizations and was facilitated by Wilson Rickerson. This group discussed areas for strengthening collaboration in the region.

Group 1: Requests for Technical Assistance

Discussion outcomes from Group 1 were presented by Mr. William Hinds of Barbados in PowerPoint presentation. Group 1 identified seven areas where technical assistance would be beneficial, as listed below:

1. Minimum Energy Performance Standards

- Energy departments develop the standards
- Countries can develop national labs

2. Sustainable Transport

- Vehicle fuel efficiency and emission standards for individual vehicles and fleets
- Encourage non-motorized travel
- Complete network of electric vehicle charging stations (local assembly)

- Electric vehicle incentives and local production and service
- Clean production and biofuels entrepreneur development (i.e. US DOE, Brazil)

3. Renewable Energy Tariffs

- Training in rate setting methodology
- Process development support
- Review of electricity rates
- Resolving utility monopoly legacy issues
- Tariffs for auxiliary services (e.g. storage, blackstart)

4. Empowering Local Capacity

- Targeting areas for growth of local capacity (e.g. audits, street lights, small wind turbines, biodiesel and biogas systems)
- Develop and encourage the creation of a stronger regional consultant pool

5. Smart Grid and Mix of Renewables

- Develop SMART GRID road map
- Develop mix of renewables for maximum renewable energy uptake
- Improve grid efficiency

6. Stakeholder Levers

- Energy Minsters forum through the Council for Trade and Economic Development (COTED) of CARICOM
- Preparatory Meeting to support stronger outcomes at the OAS Ministerial Meetings
- Senior Energy Officer Annual Meeting sanctioned by regional political agency (OAS, CARICOM or CDB)
- Support for membership in international organizations (IRENA, IEA, etc.)
- SIDS-Dock participation

7. Specific Collaboration

- Creation of a geothermal network
- Creation of Caribbean RE Centre(s)
- Peer review sessions to foster knowledge exchange
- Strengthen private sector energy agencies
- Support regional expert networks (i.e. through creation of the Caribbean Energy Expert group, like AEE). This could be supported through funding that is progressively reduced over 5 years as alternative funding is generated including through subscriptions and corporate sponsorship

Group 2: Requests for Technical Assistance

Discussion outcomes from Group 2 were presented by Ms. Judith Ephraim of Saint Lucia on a flip chart. Group 2 identified seven areas where technical assistance would be beneficial, as listed below. Items with a star (\bigstar) next to it reflects an area identified by the entire group and being relevant to all group members.

1. Capacity Building

Group 2 suggested that capacity building target four groups:

For Government Administrators

- How to set up an energy unit?
 Defining government energy management
 (Request specific to Haiti, St Kitts & Nevis) specifically)
- Legislator training on renewable energy
- Creation of performance contracts (Energy Service Companies)
- Policy analysis and review
- Contract review and negotiation

For Universities/Training Centers

- Curriculum development
- Energy audits
- Creation and enforcement of standards

For Project Developers and Financiers

How to assess bankable projects

For National Energy Officers

• On-call sounding board and technical assistance to build knowledge

2. Knowledge of Resources

Where is international finance for projects?
 Where can I find partners for public-private partnerships?

Build local knowledge

3. Legal Training & On-Call Legal Assistance★

Support with legal topics including contract preparation and review

4. Sustainable Workforce Training

- Train the workforce across several sustainability elements such as farming, solar and rainwater harvesting
- Target specific segments of society (e.g. re-integrating prison members into the workforce)

5. Support for Local Innovators & Entrepreneurs *

- Match funders with research institutions and product developers
- Business skills and training
- Funding: direct investment or for start-up low interest loan program

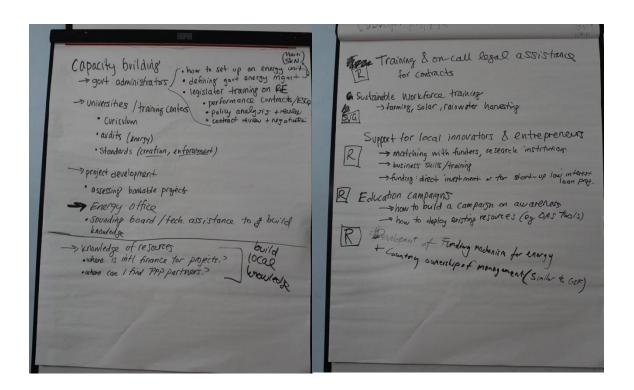
6. Education Campaigns *

How to build awareness campaigns

How to deploy existing resources (e.g. OAS tools)

7. Develop Funding Mechanism for Energy and Country Ownership of Management (similar to GEF) *

 Create avenues for countries to apply funds to implement their own programs with oversight from donor organizations



Group 3: Areas for Collaboration

The discussions in Group 3 centered around four questions relating to provision of donor assistance and coordination, as described below. It was agreed that donor-recipient conversations such as this workshop led by OAS are important in improving coordination.

Where can we improve "will" in order to strengthen the outcomes of donor assistance?

- Donor projects should be structured to respond to and engage other departments and ministries beyond the line ministry that deals with energy (i.e. involve finance, planning, natural resource ministries).
- Utilities should be involved from the onset in order to obtain buy-in and respond to their needs.

What are the symptoms of uncoordinated donor planning?

- Lack of donor coordination
- Donor competition for provision of technical assistance and support
- Dilution of resources and bandwidth

Shopping among donors (i.e. competition and lack of longer-term support)

How do we address and begin to fix the lack of coordination?

- Workshop relief (e.g. set a cap on the number of workshops, such as 4 per year)
- Deeper country-donor dialogue not just inter-donor/inter-country
- The amount of competition is overwhelming for recipient countries and donor organizations
- Develop a regional, self-sustaining peer network
- Develop coordinated platforms (e.g. SEIC)
- Pool resources (e.g. for assessments)
- Coordinate centers of excellence
- Data coordination and sharing
- Integrated regional resource planning

How can donors better deploy resources and what should they focus their resources on?

In response to conversation in the morning, Group 3 participants discussed how donors could more deeply engage local knowledge in project design and implementation. Donors also discussed additional areas to focus their resources.

Project Design and Implementation

- More nationally-designed programs
- Place emphasis on local expertise
- Local capacity in requests for proposals
- Emphasize opportunities to create jobs
- Engage local workforce in implementation (proof & pilot, scale-up)

Project Focus

- A stronger focus on transportation
- Assessment of new technologies with the abundance of emerging technologies it is challenging
 to know which ones provide real solutions. Donors can help countries with the rapidly changing
 landscape.
- Technology winners donors can help countries identify promising and commercially available technologies



PART 5: WORKSHOP OUTCOMES & RECOMMENDATIONS TO OAS/DSD

Mr. Cletus Springer provided closing remarks to the workshop, where he emphasized that it had been a success, particularly because it opened new channels for dialogue. He described the importance of continuing donor-country dialogues and reaffirmed the commitment of the OAS to support improved coordination.

The second SECBI workshop received positive feedback, with the recommendation from the group to continue the conversation about coordination. Specifically, participants recommended:

- Provision of comprehensive, longer-term donor support that supports countries from project design through implementation and evaluation.
- Identification of avenues for countries to receive specified funding for implementation .
- Identification of avenues for countries to receive specified funding for coordination of stakeholders and donors.
- Provision of flexible, on-call technical assistance to national energy units.
- Commitment to develop, train and engage local stakeholders and workforce.
- Development of regional peer knowledge sharing networks.
- Donor support to be more deeply guided by recipient country input through ongoing donor dialogues such as this one hosted by the OAS.
- Recipient countries could explore hosting intra-country dialogues to improve the coordination of
 active donors within a given country thereby reducing duplication and addressing gaps in
 assistance provision.

APPENDIX A: WORKSHOP CONTEXT

Over the past decade, the OAS/DSD have made considerable impacts in the Caribbean region toward improving market conditions for the development and use of sustainable energy alternatives (including renewable energy, energy efficiency and interconnected systems).

At the macro-policy level, the OAS/DSD have worked to establish an energy development pathway to articulate each nation's intentions to incorporate sustainable energy solutions into their overall energy matrix through the formulation of National Energy Policies and/or Sustainable Energy Plans. Most recently the countries of Saint Vincent and the Grenadines (NEP 2009 and SEP 2010), Saint Lucia (NEP 2010), Grenada (NEP 2011), Antigua and Barbuda (NEP 2011), Saint Kitts and Nevis (2012), and Jamaica (2009) have adopted such policies with the involvement of the OAS/DSD and regional partners.

As national strategies are put in place subsequent actions have been implemented to assist with critical issues related to the promotion, selection, and management of sustainable energy programs and projects. This has included the establishment and strengthening of Energy Desk Offices within the Ministries responsible for energy and climate change and the provision of technical training (via study tours, workshops, seminars and forums) to energy sector stakeholders (e.g. utility managers and government personnel related to renewable energy and energy efficiency applications).

Despite these advances, challenges to renewable energy project development remain. In particular, regional actors face challenges relating to:

- Developing a working knowledge of innovative technology solutions through first-hand experience;
- Identifying commercial and bankable project opportunities;
- Negotiating power purchase agreements and contracts;
- Reviewing and evaluating project plans, engineering and designs; and
- Identifying and securing project financing.

As a result of the implementation of the ECPA Caribbean Initiative (completed in 2012) and the Caribbean Sustainable Energy Program (CSEP) (completed in 2013); the OAS/DSD has been working closely with senior energy officials, utilities and project developers throughout the Caribbean. During the course of these efforts, many of the representatives have requested support from the OAS/DSD to provide technical assistance and to offer awareness/educational programs to enable the successful development of sustainable energy projects in the region.

Based on these expressions and in alignment with its goals to strengthen regional collaboration to overcome the current hurdles that limit investments in renewable energy and energy efficiency projects in the Caribbean, the OAS/DSD was awarded a two-year grant from the U.S. State Department to execute the project entitled *Sustainable Energy Capacity Building Initiative (SECBI)*.

SECBI is linked to the ongoing projects, the Energy and Climate Partnership of the Americas Clearinghouse and the ECPA Energy Efficiency Working Group, and serves as a follow-up to the ECPA Caribbean Initiative, and the Caribbean Sustainable Energy Program (CSEP).

In this pursuit, the *Sustainable Energy Capacity Building Initiative*, implemented under the auspices of the Energy and Climate Partnership of the Americas (ECPA), addresses critical commercialization challenges related to expanding the development and use of sustainable energy alternatives as a means of injecting lower cost and less environmentally harmful energy technologies into the energy portfolio in the Caribbean region. SECBI's beneficiary countries include: Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Trinidad and Tobago.

One of the first SECBI's interventions has been to train stakeholders in energy project development services to escalating the implementation of renewable energy and energy efficiency projects into the energy portfolio in the region. The first regional workshop was co-hosted with the Carbon War Room and the Rocky Mountain Institute during the Creating Climate Wealth Global Summit held on February 4-6, 2014 in Miskito and Necker Islands. This summit was relevant, as it served not only as a forum to introduce the SECBI project among high-level government delegates, but also to harmonize with other agencies and initiatives.

The second regional workshop was led by Christina Becker-Birck and was held in Saint Lucia on August 19th, 2014. This workshop targeted senior energy government delegates with the goal of discussing the experiences of past and current support for energy projects and policy development and to identify specific requests for assistance to address one or more of the aforementioned challenges among official delegates and development partners.

APPENDIX B: WORKSHOP AGENDA

	Welcome Remarks					
9:00 am Mr. Cletus Springer, Director, Department of Sustainable Development, American States						
	Opening Remarks: The Importance of Sustainable Energy to the Caribbean Region					
9:10 am	Hon. James Fletcher, Minister for Public Service, Sustainable Development, Energy, Science and Technology (TBC)					
	Consultation Overview					
9:30 am	 Regional snapshot Presentation of consultation goals and desired outcomes of workshop 					
	Christina Becker-Birck, OAS Consultant and Philipp Blechinger, Researcher (via Skype)					
	Introduction					
10:00 am	 An overview of OAS activities in the Caribbean Background on SECBI 					
	Carolina Peña, Department of Sustainable Development, Organization of American States					
10:30 am	Coffee Break					
	Technical Assistance: What has worked? What hasn't?					
10:45 am	Discussion of what types of technical assistance and donor support have most impacted the growth of national sustainable energy markets					
	Facilitated by Christina Becker-Birck, OAS Consultant					
11:45 pm	Roundtable Discussion					
	This session will bring together development partners to present on-going and up-coming efforts in the Region. (12 minutes each)					
	1. Organisation of Eastern Caribbean States – Mr. Leonard Deane					
	2. Carbon War Room – Mrs. Maya Doolub					
	3. European Union – Mr. Jannik VAA 4. Caribbean Development Bank – Mrs. Tessa Williams					
	5. U.S. Department of Energy – Mrs. Nadia Rhazi and Mr. Gary Ward					
	6. Clean Energy Solutions Centre – Mrs. Christina Becker-Birck					
	Facilitated by Cletus Springer OAS/DSD					
1:00 pm	Lunch					
	Concurrent Groups Breakout: Technical Assistance: Where are the gaps?					
2:00 pm	 Discussion to identify technical assistance needs and priorities Identify potential levers to advance the discussions for stakeholders 					
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	Develop more specific collaboration opportunities Facilitated by Christina Becker-Birck, OAS Consultant					
3:00 pm	Coffee Break					
3:15 pm	Plenary Session – Breakout Group Reports The groups will present an overview (10 minutes max.) of their findings and recommendations for technical assistance. A brief open discussion period (30 minutes max.) will follow to provide an opportunity for Q&A. Facilitated by Cletus Springer and Carolina Peña, OAS/DSD					
5:00 pm	Adjournment and closing remarks Cletus Springer, Director, OAS/DSD					

APPENDIX C: RECIPIENT COUNTRY & DONOR QUESTIONNAIRE

Recipient Country Questionnaire

- 1. Reflect on the different types of donor-supported technical assistance, capacity building or financial support your government has received in support of growing your sustainable energy market:
 - * What has been most impactful? Why? (e.g. Success factors, nature of support, quality of deliverables, team, etc.)
 - * What has been least impactful? Why? (e.g. Weaknesses, nature of support, quality of deliverables, team, etc.)
- 2. What are the top three challenges your country faces to growing its sustainable energy market?
- 3. Where is donor-supported technical assistance, capacity building or financial support most needed to grow your energy market?
 - * Describe that desired outcome(s), need addressed and nature of the support (i.e. Length of support, estimated cost, whether in-house or national expertise exists to support this need, etc.)
 - * Provide examples of long-term support needed
- 4. In what ways has regional collaboration been helpful in growing your sustainable energy market?
- 5. In what ways could regional collaboration better support your sustainable energy market growth objectives?

Donor Representative Questionnaire

- 1. Reflect on the different types of donor-supported technical assistance, capacity building or financial support you have been involved in providing:
 - * What has been most impactful? Why? (e.g. Success factors, nature of support, quality of deliverables, team, etc.)
 - * What has been least impactful? Why? (e.g. Weaknesses, nature of support, quality of deliverables, team, etc.)
- **2.** What new programs or initiatives will your organization be providing to countries in the Caribbean region? (Please describe in a few lines the goals, target audience, outcomes)
- 3. What are the top three challenges Caribbean countries face to growing their sustainable energy market?

- 4. Where is donor-supported technical assistance, capacity building or financial support most needed to grow energy markets in the Caribbean?
- 5. In what ways has regional collaboration been helpful in growing your sustainable energy market?
- 6. In what ways could donor organizations work together to improve regional coordination and delivery of support to recipient countries?

APPENDIX D: WORKSHOP PARTICIPANT LIST

Co	Country Delegates						
No	Country	Name	Title	Institution	Email	Phone	
1	Antigua and Barbuda	Brian Challenger	ECPA Clearing House Focal Point	Minister of Tourism, Economic Development, Investment & Energy	challengerbrian@hotmail.co m	1(268) 764- 7087	
2	The Bahamas	Gilles Deal	Energy Officer	Ministry of the Environment and Housing	gildeal@hotmail.com	1 (242) 302- 5828 1 (242) 376- 7573	
3	Barbados	William Hinds	Senior Technical Officer, Head Renewable Energy and Energy Conservation Unit	Energy Division, Ministry of Energy, Immigration, Telecommunications and Invest Barbados	caribbeanret@yahoo.com whinds@energy.gov.bb	(246) 434- 2505	
4	Belize	Ambrose Tilett	Director of Energy	Ministry of Energy, Science and Technology and Public Utilities	energy.director@estpu.gov. bz	(501) 802- 2178; (501) 610-2357	
5	Dominica	Michael Fadelle	Senior Energy Program Coordinator	Ministry of Public Works, Energy and Ports	michaelfadelle@hotmail.co m; fadellem@dominica.gov.dm	1 (767) 616- 2159	
_	Dominican Republic	Julian Despradel	Coordinator, Division of Projects	Department of Alternative Resources and Rational Use of Energy, National Energy Commission	idespradel@cne.gov.do	(809) 540- 9002 Ext. 363 / (809) 756- 0399	

7	Haiti	Nicolas Allien	Senior Engineer	Office of the Minister Delegate to Primer Minister in Charge of Energy Security	nickallien@gmail.com	(509) 2811- 0882			
8	Saint Lucia	Judith Ephrain	Energy Officer	Ministry of Physical Development & the Environment	jephraim@sde.gov.lc	(758) 451- 8746			
9	Saint Lucia	Sylvester Chauzel	Permanent Secretary	Ministry of Physical Development & the Environment	sylvester.clauzel@govt.lc	(758) 722- 3119			
10	Saint Lucia	James Fletcher	Minister	Ministry of Physical Development & the Environment					
11	Saint Kitts and Nevis	Michelle Walters	Assistant Permanent Secretary	Ministry of Communications, Public Works, Public Utilities, Post, Physical Planning and Environment	renewalters@gmail.com	(869)469- 5521 ext 2273			
12	Saint Vincent and the Grenadines	Ellsworth Dacon	Director, Energy Unit	Ministry of National Security	edacon@gov.vc	(784) 4512338 / Cell 7844986622			
13	Trinidad and Tobago	Harnanan	Advisor to the Minister for Renewable Energy	Ministry of Energy and Energy Affairs	rsingh@energy.gov.tt	623-6708 ext 2620, 2608			
Δσ	Agencies								
14	Barbados		Foreign Service Officer	US Department of State	rasmussendr@state.gov	(246) 227- 4000			
15	Barbados		Head of Infrastructure Section	Delegation of the European Union to Barbados, the Eastern Caribbean and OECS	Jannik.VAA@eeas.europa.eu	1 (246) 434- 8506			

16	Barbados	Tessa Williams	Head of Section REEEU / Energy Consultant	Caribbean Development Bank	williat@caribank.org	1 (246) 431- 1721
17	England	Maya Doolub	Operations Manager, Smart Island Economies	Carbon War Room	mdoolub@carbonwarroom.coom	447-817- 638-324
18	Germany	Philipp Blechinger	Researcher	Reiner Lemoine Institut gGmbH	Philipp.Blechinger@rl- institut.de	+49 30 53042012
19	Saint Lucia	Leonard Deane	Program Manager - SETA	Organisation of Eastern Caribbean States	Ideane@oecs.org	1 (758) 460- 4901
20	United States	Christina Becker-Birck	Consultant	OAS Consultant/ Meister Consulting Group	christina.becker-birck@mc- group.com	1 (617) 209- 1980
21	United States	Gary Ward	Director, Office of American Affairs	U.S. Department of Energy	gary.ward@Hq.Doe.Gov	1 (202) 586- 6123
22	United States		International Advisor, Office of American Affairs	U.S. Department of Energy	Nadia.Rhazi@Hq.Doe.Gov	(202) 586- 0827
23	United States	Wilson Rickerson	CEO of Meister Consultants Group	Meister Consulting Group	Wilson.rickerson@mc- group.com	1 (617) 209- 1980
24	United States	Cletus Springer	Director	Organization of American States	cspringer@oas.org	1 (202) 370- 9084
25	United States	Carolina Peña	SECBI Program Manager	Organization of American States	cpena@oas.org	(202) 370- 4560