



UNITED NATIONS



Economic Commission for Latin America and the Caribbean  
Subregional Headquarters for the Caribbean

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Training workshop on energy efficiency and  
renewable energy policy in the Caribbean  
18 May 2016  
Port of Spain, Trinidad and Tobago

LIMITED  
LC/CAR/L.500  
18 July 2016  
ORIGINAL: ENGLISH

## **EVALUATION REPORT OF THE TRAINING WORKSHOP ON ENERGY EFFICIENCY AND RENEWABLE ENERGY POLICY IN THE CARIBBEAN**

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## CONTENTS

|   |    |
|---|----|
| A. INTRODUCTION .....                                   | 2  |
| B. ATTENDANCE.....                                      | 2  |
| 1. Place and date of the meeting .....                  | 2  |
| 2. Attendance .....                                     | 2  |
| C. SUMMARY OF KEY OUTCOMES OF THE MEETING .....         | 3  |
| D. SUMMARY OF EVALUATION .....                          | 3  |
| 1. Substantive content.....                             | 3  |
| 2. Responses and comments to open-ended questions ..... | 5  |
| E. CONCLUSIONS.....                                     | 5  |
| Annex I List of participants .....                      | 7  |
| Annex II Evaluation form .....                          | 9  |
| Annex III Responses to close-ended questions.....       | 12 |

## **A. INTRODUCTION**

1. The Economic Commission for Latin America and the Caribbean (ECLAC) and German Agency for International Cooperation (GIZ) have partnered to support Caribbean countries' initiatives to improve energy sustainability in the subregion. In addition, the Caribbean faces serious climate change related challenges; therefore, this initiative contributes to mitigating the harmful effects of greenhouse gases.
2. The "Training workshop on energy efficiency and renewable energy policy" aimed at presenting one of the key targeted outputs of the GIZ/ECLAC project titled: "Sustainable energy in the Caribbean: Reducing the carbon footprint in the Caribbean through the promotion of energy efficiency and the use of renewable energy technologies."
3. The objective of the training workshop was to emphasize the steps involved in the implementation and evaluation of viable energy projects utilizing effective tools. It was intended to engage the meeting participants in exchanging practical application of strategies and mechanisms used around the region to implement energy efficiency (EE) and renewable energy (RE) initiatives.
4. The training session was designed to promote exchange ideas between representatives from national governments, as well as with representatives from regional and international organizations. In order to strengthen the participants' technical knowledge and tools, this one-day training on methodologies for evaluating energy efficiency and renewable energy projects was developed, with a view towards enhancing financing feasibility.

## **B. ATTENDANCE**

### **1. Place and date of the meeting**

5. The "Training workshop on energy efficiency and renewable energy policy" was held on 18 May 2016 in Port of Spain, Trinidad and Tobago.

### **2. Attendance**

6. The meeting targeted national officials from the energy sector, as well as specialized representatives from regional and international organizations in the Caribbean. Participants represented the following countries: Antigua and Barbuda, Ecuador, Grenada, Guyana, Saint Lucia, Trinidad and Tobago, and the Cayman Islands.
7. The regional and international organizations represented in the training workshop were the Association of Caribbean States, the Caribbean Community, GIZ Caribbean, the Organization of Eastern Caribbean States, Catholic University of Ecuador (Universidad Católica de Ecuador) and VSL Consultants.
8. The training workshop on energy efficiency and renewable energy policy in the Caribbean built upon the previous day's policy dialogue. The respective presenters shared their practical experiences in energy efficient and renewable energy initiatives around the Caribbean.

### C. SUMMARY OF KEY OUTCOMES OF THE MEETING

9. In order to strengthen the expertise and experience in the energy field among those present several substantive presentations were introduced by ECLAC and other supporting stakeholders. Discussions were started by a working session on energy in buildings.

10. Subsequent sessions examined the experiences related to the Regional Building Energy Efficiency Project (BEEP) at CARICOM, a case study of the BEEP initiative at the OECS and the Renewable Energy and Energy Efficiency Technical Assistance (REETA).

### D. SUMMARY OF EVALUATION

11. This section of the report presents a summary of the comments provided by participants at the end of the training session. To elicit participants' feedback on diverse aspects of the training session, an evaluation questionnaire was administered. The summary presents an account of all responses received from the participants.

12. A total of 30 online invitations to the evaluation process were sent and 12 evaluation forms were collected, 9 were received via online facilities and three hard copies of the form. Therefore, indicating that 40 per cent of the participants completed the evaluation of the training workshop. The male to female composition of the respondents were 54.54 per cent female, while the other 45.45 per cent were male.

13. The respondents were asked to further specify the type of organization they represented. Most of them were from national ministries, 66.67 per cent; 8.33 per cent were from a subregional institution, 8.33 per cent represented an academic institution/university, and 8.33 per cent an independent consultancy.

14. The designation of respondents included: Senior Energy Officer, Economist, Research Officer, Project Officer – Energy CARICOM, Programme Officer, Adjunct Professor, Project Development and Implementation Specialist and a Research Associate.

#### 1. Substantive content

15. In response to the overall rating of the workshop it was conceived as excellent by most participants, 50 per cent, another 41.67 per cent rated it as good and 8.33 per cent rated it as regular.

16. In response to the ranking of the substantive content of the workshop, 50 per cent of the respondents felt it was excellent and the other 50 per cent agreed it was good (see table 1).

**TABLE 1**  
**SUBSTANTIVE CONTENT OF THE TRAINING SESSION**

| <i>Response</i>      | <i>Frequency (%)</i> | <i>Count</i> |
|----------------------|----------------------|--------------|
| Excellent            | 50%                  | 6            |
| Good                 | 50%                  | 6            |
| Regular              | 0%                   | 0            |
| Poor                 | 0%                   | 0            |
| Very Poor            | 0%                   | 0            |
| Not sure/no response | 0%                   | 0            |

17. Most of the respondents, 75 per cent stated that the training workshop met their expectations but 16.67 per cent were not satisfied. One person opted not to respond to this question.

18. Most persons shared the idea that the analyses and recommendations formulated at the EE and RE training workshop were useful, 58.33 per cent. Some felt it useful, thirty-three per cent and 8.33 per cent felt these were regular (table 2).

**TABLE 2**  
**USEFULNESS OF ANALYSES AND RECOMMENDATIONS**

| <i>Response</i>      | <i>Frequency (%)</i> | <i>Count</i> |
|----------------------|----------------------|--------------|
| Very useful          | 33.3%                | 4            |
| Useful               | 58.33%               | 7            |
| Regular              | 8.3%                 | 1            |
| Not very useful      | 0%                   | 0            |
| Not useful at all    | 0%                   | 0            |
| Not sure/no response | 0%                   | 0            |

19. Fifty per cent of the respondents agreed that the training workshop was useful for strengthening mechanisms for promoting EE and RE. Other thought it was very useful, 33.33 per cent. One person thought it was regular and one person believed it was not useful at all (see table 3).

**TABLE 3**  
**USEFULNESS FOR STRENGTHENING MECHANISMS FOR PROMOTION OF ENERGY EFFICIENCY AND RENEWABLE ENERGY**

| <i>Response</i>   | <i>Frequency (%)</i> | <i>Count</i> |
|-------------------|----------------------|--------------|
| Very useful       | 33.3%                | 4            |
| Useful            | 50%                  | 6            |
| Regular           | 8.33%                | 1            |
| Not very useful   | 0%                   | 0            |
| Not useful at all | 0%                   | 0            |
| Not sure          | 0%                   | 0            |

20. Most of the respondents believed the experience helped to expand their capacity with respect to the preparation of financial proposals that promote EE and RE, 66.7 per cent. Another 16.67 per cent disagreed. One person was undecided while another opted not to answer this question (see table 4).

**TABLE 1**  
**EXPANSION OF CAPACITY**

| <i>Response</i>      | <i>Frequency (%)</i> | <i>Count</i> |
|----------------------|----------------------|--------------|
| Yes                  | 66.67%               | 8            |
| No                   | 16.67%               | 2            |
| Not sure/no response | 8.33%                | 1            |
| Not answered         |                      | 1            |

21. It was generally stated that the areas discussed during the training session were useful and relevant to their work, 58.33 per cent. Another 33.33 per cent thought it was very useful. One person opted not to respond to this question.

22. Fifty per cent of the respondents were of the opinion that the OECS case study was relevant to the training exercise. Another 33.33 per cent felt it was relevant. However, one person held the view it was regular.

## **2. Responses and comments to open-ended questions**

23. The following were suggestions that the participants proposed to improve this type of training workshop:

- Participants should be provided with relevant background on the proposed workshop and a matrix with required national data and information for practice exercises.
- More training should be made available for developing and assessing the financing model for EE projects.
- The last presentations should have been presented in the morning sessions. It would have been nice to have a dedicated day just for the financial aspects for the promotion or preparing proposals for an EE or RE project.
- Handouts for writing during presentations.
- Field visits to EE projects.
- More time for practical working with the teaching tool on financing modelling.
- Increased focus on creating the right environment for IPPs. I think more focus should be placed on independent power producers in the Caribbean context. Hands on practice with the GIZ financial tool.

24. The participants recounted the most significant outcomes of the meeting in the following comments:

- Dynamic Cash Flow Analysis
- Information sharing
- Exchanges
- Knowing about the EE competition held in Guyana. - Knowing that most Caribbean Countries face the same problems in terms of EE policies
- Learning from the experiences of countries in the region
- The analysis of energy project cash flows which shed light on why major energy projects are denied funding by financial institutions and the potential measures that can be utilized to address the problem. This information should be very helpful in developing RE projects going forward.

## **E. CONCLUSIONS**

28. In conclusion, the respondents of the evaluation session was completed by more women than men (6 vs 5), who were mainly from the 31 – 40 age group. Representation was primarily at the senior level from national ministries. The substantive content of the training workshop was received favourably with respondents rating this as either excellent or good. Most of the respondents expressed their satisfaction that their initial expectations of the training session were fulfilled. The analyses and recommendations formulated at the end of the session were largely accepted as being either very useful or useful and were perceived as avenues that could strengthen the mechanism for the promotion of EE and RE. The majority of the respondents also believed that their capacity to prepare financing proposals that promote EE and

RE was expanded. Finally, the relevancy of both the content of the workshop and the case study rated highly among the group.

29. The recommendations proposed for future improvement of a similar training session could be placed to a few categories: more detailed training material, further sessions, preference for the evaluation tool session to be placed earlier in the training session, the inclusion of field trips, hands-on practice sessions.

30. Some of the most significant outcomes of the meeting were mainly that it was an overall learning session and the introduction to a practical analysis tool.



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Annex II**EVALUATION FORM**

german  
cooperation  
DEUTSCHE ZUSAMMENARBEIT

ECLAC Internal Reference

Subprogramme: SRHC

17-18/May/2016

**REGIONAL DIALOGUE AND TRAINING WORKSHOP ON ENERGY EFFICIENCY  
AND RENEWABLE ENERGY POLICY IN THE CARIBBEAN**

**Sustainable Development and Disaster Unit**

**PORT OF SPAIN**

**17 – 18 May 2016**

**Evaluation form for Training Workshop**

**Please answer the following questions** (to facilitate processing, please print answers to open-ended questions):

**Identification<sup>1</sup>**

Sex

- Female  
 Male

Age (optional)

- 30 or under  
 31 - 40  
 41 - 50  
 51 or over

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<sup>1</sup> NOTE: These details are requested for the sole purpose of assessing the demographic profile of meeting participants, and would not be factored into any other aspect of the overall evaluation.

|  |                          |  |
|--|--------------------------|--|
| Country of origin: _____                                       |                          |  |
| Institution(s) you represent: _____                            |                          |  |
| Type of organization you represent, please circle accordingly: |                          |  |
| National ministry  | <input type="checkbox"/> | Subregional institution <input type="checkbox"/>         |
| Other national institution (please specify):<br>_____          | <input type="checkbox"/> | International organization <input type="checkbox"/>      |
|  | <input type="checkbox"/> | Independent consultant <input type="checkbox"/>          |
|  | <input type="checkbox"/> | NGO <input type="checkbox"/>                             |
| Local / municipal institution                                  | <input type="checkbox"/> | Civil society (please specify): <input type="checkbox"/> |
| Academic institution / university                              | <input type="checkbox"/> | _____ <input type="checkbox"/>                           |
| Private sector   |                          | Other: _____ <input type="checkbox"/>                    |

Title / position: \_\_\_\_\_

**Substantive content and usefulness of the training workshop**

|   |
|---|
| <p>1. How would you rate the training workshop overall?</p> <p>a. Excellent    b. Good <input type="checkbox"/>    c. Regular <input type="checkbox"/>    d. Poor <input type="checkbox"/>    e. Very poor <input type="checkbox"/>    f. Not sure/ no response <input type="checkbox"/></p>  |
| <p>2. How would you rate the substantive content of the training workshop?</p> <p>a. Excellent    b. Good <input type="checkbox"/>    c. Regular <input type="checkbox"/>    d. Poor <input type="checkbox"/>    e. Very poor <input type="checkbox"/>    f. Not sure/no response</p>   |
| <p>3. Did the training workshop live up to your initial expectations?</p> <p>a. Yes    b. No <input type="checkbox"/>    c. Not sure    d. No response</p>  |
| <p>4. How useful did you find the analyses and recommendations formulated at EE and RE training workshop?</p> <p>a. Very useful <input type="checkbox"/> b. Useful <input type="checkbox"/> c. Regular <input type="checkbox"/> d. Not very useful <input type="checkbox"/> e. Not useful at all <input type="checkbox"/> f. Not sure/ no response <input type="checkbox"/></p> |

5. Did you think the training workshop was useful for strengthening the mechanisms for promoting EE and RE?

a. Very useful  b. Useful  c. Regular  d. Not very useful  e. Not useful at all  f. Not sure/ no response

6. Did you think the training workshop expanded your capacity with regard to the preparation of financing proposals for the promotion of EE and RE?

a. Yes      b. No       c. Not sure      d. No response

7. How useful were the subjects presented and discussed for the work of your institution?

a. Very useful   b. Useful    c. Regular    d. Not very useful  e. Not useful at all  f. Not sure/ no response

8. How relevant was the case study to the training exercise?

a. Very relevant   b. Relevant   c. Regular   d. Not very relevant   e. Not relevant at all  f. Not sure/ no response

9. How would you improve this training workshop in terms of the areas addressed?

10. What do you consider the most significant outcomes of the training workshop?

*Thank you for your time.*

Annex III**RESPONSES TO CLOSE-ENDED QUESTIONS****Table 1. Identification**

| <i>Response</i> | <i>Frequency (%)</i> | <i>Count</i> |
|-----------------|----------------------|--------------|
| Female          | 54.54%               | 6            |
| Male            | 45.45%               | 5            |

**Table 2. Age**

| <i>Response</i> | <i>Frequency (%)</i> | <i>Count</i> |
|-----------------|----------------------|--------------|
| 30 or under     | 36.36%               | 4            |
| 31-40           | 54.55%               | 6            |
| 41-50           | 0%                   | 0            |
| 51 and over     | 9%                   | 1            |

**Table 3. Types of organizations**

| <i>Response</i>                 | <i>Frequency (%)</i> | <i>Count</i> |
|---------------------------------|----------------------|--------------|
| National ministry               | 88.67%               | 8            |
| Other national institutions     | 0%                   | 0            |
| Subregional institutions        | 8.33%                | 1            |
| International organization      | 0%                   | 0            |
| Independent consultant          | 8.33%                | 1            |
| NGO                             | 0%                   | 0            |
| Civil Society                   | 0%                   | 0            |
| Local/municipal institution     | 0%                   | 0            |
| Academic institution/university | 8.33%                | 1            |
| Private sector                  | 0%                   | 0            |
| Other                           | 8.33%                | 1            |

**Table 4. Overall rating of the workshop**

| <i>Response</i>      | <i>Frequency (%)</i> | <i>Count</i> |
|----------------------|----------------------|--------------|
| Excellent            | 50%                  | 6            |
| Good                 | 41.67%               | 5            |
| Regular              | 8.33%                | 1            |
| Poor                 | 0%                   | 0            |
| Very poor            | 0%                   | 0            |
| Not sure/no response | 0%                   | 0            |

**Table 5. Substantive content of the training**

| <i>Response</i>       | <i>Frequency (%)</i> | <i>Count</i> |
|-----------------------|----------------------|--------------|
| Excellent             | 50%                  | 6            |
| Good                  | 50%                  | 6            |
| Regular               | 0.0%                 | 0            |
| Poor                  | 0.0%                 | 0            |
| Very poor             | 0.0%                 | 0            |
| Not sure/ no response | 0.0%                 | 0            |

**Table 6. Initial expectations of training**

| <i>Response</i>        | <i>Frequency (%)</i> | <i>Count</i> |
|------------------------|----------------------|--------------|
| Yes                    | 75%                  | 9            |
| No                     | 16.67%               | 2            |
| Not sure / no response | 8.3%                 | 1            |

**Table 7. Usefulness of analyses and recommendations**

| <i>Response</i>        | <i>Frequency (%)</i> | <i>Count</i> |
|------------------------|----------------------|--------------|
| Very useful            | 33.3%                | 4            |
| Useful                 | 58.33%               | 7            |
| Regular                | 8.3%                 | 1            |
| Not very useful        | 0.0%                 | 0            |
| Not useful at all      | 0.0%                 | 0            |
| Not sure / no response | 0.0%                 | 0            |

**Table 8. Usefulness for strengthening mechanisms for promotion of EE and RE**

| <i>Response</i>        | <i>Frequency (%)</i> | <i>Count</i> |
|------------------------|----------------------|--------------|
| Very useful            | 33.3%                | 4            |
| Useful                 | 50%                  | 6            |
| Regular                | 8.33%                | 1            |
| Not very useful        | 8.33%                | 1            |
| Not useful at all      | 0.0%                 | 0            |
| Not sure / no response | 0.0%                 | 0            |

**Table 9. Expansion of capacity**

| <i>Response</i>        | <i>Frequency (%)</i> | <i>Count</i> |
|------------------------|----------------------|--------------|
| Yes                    | 66.67%               | 8            |
| No                     | 16.67%               | 2            |
| Not sure / no response | 8.33%                | 1            |
| Not Answered           |                      | 1            |

**Table 10. Relevance of content to work**

| <i>Response</i>        | <i>Frequency (%)</i> | <i>Count</i> |
|------------------------|----------------------|--------------|
| Very useful            | 33.33%               | 4            |
| Useful                 | 58.33%               | 7            |
| Regular                | 0.0%                 | 0            |
| Not very useful        | 0.0%                 | 0            |
| Not useful at all      | 0.0%                 | 0            |
| Not sure / no response | 0.0%                 | 0            |
| Not Answered           |                      | 1            |

**Table 11. Relevance of case study**

| <i>Response</i>        | <i>Frequency (%)</i> | <i>Count</i> |
|------------------------|----------------------|--------------|
| Very relevant          | 33.33%               | 4            |
| Relevant               | 50.0%                | 6            |
| Regular                | 8.33%                | 1            |
| Not very relevant      | 0.0%                 | 0            |
| Not relevant at all    | 0.0%                 | 0            |
| Not sure / no response | 0.0%                 | 0            |
| Not Answered           |                      | 1            |