

**External Evaluation of the Energy and Climate Partnership
of the Americas (2017-2020) SID1702**

Final report

Prepared for the
Organization of American States

Geneva, November 2020

Table of contents

List of acronyms and abbreviations.....	iii
Executive summary	2
Section I: Introduction.....	2
1.1 Project background.....	7
1.2 Evaluation background and objective.....	9
1.3 Evaluation methodology and approach.....	11
1.4 Limitations and mitigation measures.....	13
1.5 Reconstructed Theory of Change of ECPA V.....	14
Section II: Findings.....	15
2. Relevance: is ECPA doing the right thing in the OAS Member States?	15
2.1 Relevance for the OAS: alignment to mandates.....	17
2.2 Relevance for the donor	17
2.3 Relevance for selected Member States	18
2.4 Validity of the Theory of Change	19
3. Efficiency: were resources used appropriately to achieve ECPA results?.....	26
3.1 Quality and appropriateness of logframe indicators.....	27
3.2 Use of results-based management principles.....	27
3.3 Project monitoring	27
3.4 Application of best practices in project design.....	27
3.5 Application of best practices in project implementation	28
3.6 Follow-up of training activities to assess changes in participants and institutions..	28
3.7 Cost-efficiency.....	29
3.8 Cost-benefit of ECPA.....	30
3.9 Social and economic cost and benefits: a case study on e-mobility.....	33
4. Effectiveness: were project results achieved, and how?	40
4.1 Achievement of program objectives.....	41
4.2 Effects on ECPA stakeholders.....	49
4.3 Behavior and institutional change	49
4.4 Factors influencing program results	51
4.5 Unintended program results.....	52
4.6 Results for women	53
5. Sustainability: are results lasting?	55
5.1 Partners' ownership of ECPA and its objectives	56
5.2 Institutional and financial sustainability of ECPA achievements	56
5.3 Willingness to financial support the ECPA Technical Secretariat	56
Section III: Conclusions, recommendations and lessons learned	57
6. Conclusions.....	57
7. Recommendations.....	59
8. Lessons learned	61
Annex 1: Terms of Reference	65
Annex 2: Documentation reviewed.....	76
Annex 3: List of people interviewed.....	79
Annex 4: Evaluation matrix	80
Annex 5: Evaluation questionnaire for telephone interviews.....	82
Annex 6: Online survey.....	85
Annex 6: Suggestions on how to strengthen the results focus of ECPA logframe indicators.	86
Annex 7: Endnotes.....	88

Table of figures

Figure 1: Legend for color-coding used for results assessment	v
Figure 2: Evaluation results dashboard	1
Figure 3: Dashboard of key findings by evaluation criteria and main evaluation questions	3
Figure 4: Map of OAS Member States participating in the evaluation of ECPA V	10
Figure 5: Concept of a theory-based evaluation	11
Figure 6: Evaluation tools and processes for ECPA V	12
Figure 7: Reconstruction of the Theory of Change for ECPA V	14
Figure 8: Relevance of ECPA V for the OAS Member States	18
Figure 9: Relevance of ECPA's seven pillars throughout the project cycle	22
Figure 10: Assessment of the output-level assumptions of ECPA V	23
Figure 11: Leverage of funds for the 2019 ECPA Ministerial Meeting in Jamaica	28
Figure 12: Budget of ECPA V	29
Figure 13: Cost-benefit comparisons between ECAP IV and ECPA V	31
Figure 14: Air pollution-related welfare losses and forgone labor output in selected OAS Member States (2013)	32
Figure 15: Total annual welfare losses and GDP equivalent in selected OAS Member States (2013)	33
Figure 16: Air pollution and related deaths in the OAS Member States (2016)	35
Figure 17: Effects of gradual electrification of transport sector in 5 Latin American cities (2019 to 2050)	36
Figure 18: Goals on electric mobility in selected countries of the Western Hemisphere	37
Figure 19: Instruments for the promotion of e-mobility	38
Figure 20: Achievement of ECPA V output level indicator targets	45
Figure 21: ECPA V results from a stakeholder perspective	49
Figure 22: Effects of ECPA V on stakeholders (levels three and four of the Kirkpatrick model)	50
Figure 23: Internal and external factors influencing the results of ECPA V	51
Figure 24: Sustainability of ECPA V	55
Figure 25: Key findings, conclusions, and recommendations	62

List of acronyms and abbreviations

AG	Asamblea General
CAREL	Centro Alternativo Rural el Limón
CARICOM	Caribbean Community
CIDI	Inter-American Council for Integral Development (CIDI)
CO ₂	Carbon Dioxide
COVID-19	Corona Virus Disease
C-SERMS	Caribbean Sustainable Energy Roadmap and Strategy
D.C.	District of Colombia
DPE	Department of Planning and Evaluation (OAS)
DSD	Department for Sustainable Development (OAS)
e	Electric
ECPA	Energy and Climate Partnership of the Americas
FY	Financial Year
g	Gram
GDP	Gross Domestic Product
GS	General Secretariat
IDB	Inter-American Development Bank
ibid.	“Ibidem” (Latin for: “the same”)
ICAI	Independent Commission for Aid Impact (of the United Kingdom)
IMF	International Monetary Fund
IPHE	International Partnership for Hydrogen and Fuel Cells in the Economy
IRENA	International Renewable Energy Agency
km	Kilometer
LAC	Latin America and the Caribbean
M&E	Monitoring and Evaluation
M&EED	Monitoring and Evaluation in Energy for Development
MIT	Massachusetts Institute of Technology
MoU	Memorandum of Understanding
MoV	Means of Verification
MSME	Micro, Small and Medium Enterprise
MWh	Megawatt hour
NAMA	Nationally Appropriate Mitigation Actions

NFP	National Focal Point
OAS	Organization of American States
OLADE	Latin American Energy Organization
PM	Particulate matter
PRODUSE	Productive Use of Energy
RES	Resolution
RPPI	Report on Progress of Project Implementation (OAS)
SICA	Sistema de Integración Centroamericana
SDG	Sustainable Development Goals
SMART	Specific, measurable, achievable, relevant and time-bound
SME	Small and Medium Enterprise
St.	Saint
STEM	Science, technology, engineering, and mathematics
t	Ton
TCU	Technical Coordination Unit
ToR	Terms of Reference
UK	United Kingdom
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNEP	United Nations Environment Program
U.S.	United States
USAID	United States Agency for International Development
US\$	United States Dollar
WHO	World Health Organization
µg/m ³	microgram per cubic meter

Figure 1: Legend for color-coding used for results assessment





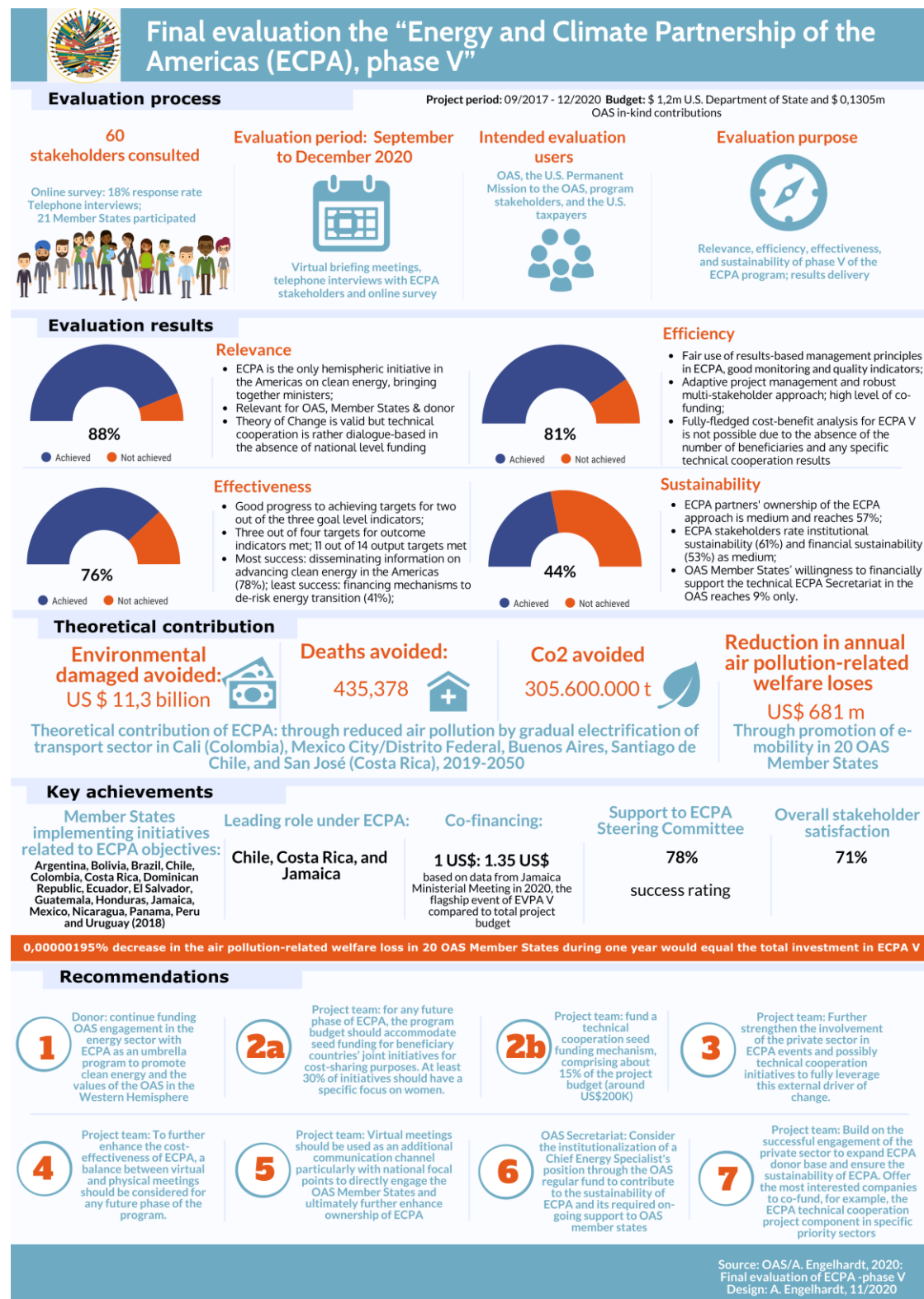
	Green: Strong achievement across the board. Stands out as an area of good practice where OAS is making a significant positive contribution. Score 76 to 100 out of 100
	Green/amber: Satisfactory achievement in most areas, but partial achievement in others. An area where OAS is making a positive contribution but could do more. Score 51 to 75 out of 100
	Amber/red: Unsatisfactory achievement in most areas, with some positive elements. An area where improvements are required for OAS to make a positive contribution. Score 26-50 out of 100
	Red: Poor achievement across most areas, with urgent remedial action required in some. An area where OAS is failing to make a positive contribution. Score: 0-25 out of 100

Figure 2: Evaluation results dashboard



Executive summary

This section summarizes the final evaluation of the Energy and Climate Partnership of the Americas (ECPA), phase V (SID 1702). The Organization of American States (OAS) implemented the program between September 2017 and December 2020.

The United States Department of State funded the program with US\$ 1,200,000.00 (90.19% of total funding), complemented with US\$ 130,500.00 OAS in-kind funding.

ECPA V's purpose was to contribute to shared leadership and cooperation in energy infrastructure, energy efficiency, and energy integration at the regional level.

The OAS implemented ECPA V in a context where the region's economic growth drives an increase in the demand for energy, which is expected to rise by 20% by 2020. Although the region's energy matrix boasts the largest share of renewable sources globally, fossil fuels' share is steadily increasing. If this trend remains unchanged, declining conventional oil reserves could become a cause for concern from 2030 onward. Simultaneously, donors not sharing the values of democracy and human rights undermine the energy sector in the Americas.

At the end of the program cycle, the OAS' Department of Planning and Evaluation (DPE) commissioned a final evaluation of ECPA V with a clear objective: "Evaluate the relevance, efficiency, effectiveness, and sustainability of Phase V of the ECPA program. The evaluation specifically focuses on delivering the main Outputs and the Immediate and Intermediate Outcomes for ECPA".

The evaluation, using a theory-based evaluation approach, took place between August and December 2020. The evaluation approach specified ECPA's intervention logic, building on assumptions, and outlining how the program designers think the change would happen. The evaluation used a mixed-methods approach, including a document review, telephone interviews, an online survey, and a cost-benefit analysis. Due to the COVID-19 pandemic, OAS travel restrictions applied, and not field visits were possible.

The external evaluator¹ invited ECPA stakeholders in all OAS Member States to participate in the evaluation, with representatives of 21 countries responding, which constituted a high coverage and included: Argentina, Bahamas, Belize, Brazil, Canada, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Guyana, Honduras, Jamaica, Mexico, Panama, Paraguay, Saint Lucia, Trinidad and Tobago, Uruguay, and the United States.



Twenty-two stakeholders participated in telephone interviews² Moreover, 38 out of 211 stakeholders completed an online survey (18% response rate). In total, the evaluator managed to consult 60 stakeholders.


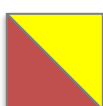
Figure 3 presents the main evaluation findings by evaluation criteria.

¹ DPE selected Dr. Achim Engelhardt for the evaluation following a competitive tendering process. Dr. Engelhardt, who was neither involved in the design nor implementing ECPA V, not any previous program phases. He has repeatedly supported DPE in external evaluations of projects and programs funded by the U.S. Department of State since 2015.

², including the project manager. The quantitative ratings provided by the project manager were not included in the data analysis to avoid any bias.

Figure 3: Dashboard of key findings by evaluation criteria and main evaluation questions

Criteria	Assessment	Rationale
Relevance		<p>ECPA V was doing the right thing by engaging in strengthening cooperation in energy infrastructure, energy efficiency, and energy integration at the regional level</p> <ul style="list-style-type: none"> ECPA V is aligned to OAS General Assembly resolutions AG/RES. 2253 (XXXVI-O/06), AG/RES. 52 and 2312 (XXXVII-O/07), AG/RES. 2816 (XLIV-O/14), and CIDI/RIMDS-II/DEC.1/10; For the donor, ECPA contributes to Objective 2.3 and Performance Goal 2.3.1 of the Joint Strategic Plan FY 2018 – 2022 of the U.S. Department of State and USAID, referring to energy security and access to diversified, affordable, and reliable energy sources; ECPA also contributes to U.S. government's "Growth in the Americas/América crece" initiative; Member States: the relevance for 22 Member States is high, reflecting the needs of governments, institutions, and companies at a rate of 68%, ECPA being the only hemispheric initiative on clean energy, also bringing together ministers; relevance of ECPA for women reached 28% only; The design of ECPA V was sound and based on a valid Theory of Change reconstructed by the evaluator; Results chain: The primary constraint to the implementation of the reconstructed Theory of Change is that technical cooperation is rather dialogue-based; in the absence of specific pilot projects or initiatives, the contribution of technical cooperation to the purpose and goal of ECPA is somehow limited; The project design's central oversight is due to the inaccurate assumption that project actions would be coupled with funding at the national level to support the priorities.
Efficiency		<p>Efficiency: The project team's time and labor-intensive multi-stakeholder approach shows a high level of value for money for the U.S. taxpayer</p> <ul style="list-style-type: none"> Overall, indicators are SMART, and their quality is given. However, the appropriateness of some indicators could be further strengthened; The evaluation finds fair use of results-based management principles; The project team produced five monitoring reports of high quality, including detailed annexes using OAS/GS' standardized Report on Progress of Project Implementation (RPPI) template; The ECPA design shows good quality. The implicit design assumption at the purpose level of governments' willingness to fund actions under the ECPA action plan was, however, erroneous; The project team applies adaptive project management and drives a robust multi-stakeholder approach. It allows the project team to efficiently implement a partnership-based project, showing for example in the 89.9% co-funding of the US\$ 466,307 for the 2020 Ministerial Meeting in Jamaica through ECPA partners; A fully-fledged cost-benefit analysis for ECPA V is not possible due to the absence of the number of beneficiaries and any specific technical cooperation results. However, if there had been a 0,00000195% decrease in the air pollution-related welfare loss in at least 20 OAS member States during one year, it would equal the total investment in ECPA V, promoting e-mobility. No data was available to suggest that this decrease took place. Hence this is a theoretical attribution; To further enhance cost-efficiency and address stakeholder needs, it might have been interesting to create a budget line for ECPA technical cooperation seed funding by significantly reducing funds for the outputs on dialogue for technical cooperation and communication/ dissemination; The project team used post-event questionnaires/surveys for many of its events, though with a relatively low participation rate.

Effectiveness		<p>Effectiveness: ECPA V achieved most of the planned results and showed good effectiveness based on the logframe indicators and related targets</p> <ul style="list-style-type: none"> • The program shows good progress to achieving targets for two out of the three goal level indicators by 2020 and 2025, respectively; • ECPA V meets three out of four targets for outcome indicators and 11 out of 14 targets for the output indicators; • Stakeholders rated ECPA V most successfully in disseminating information on advancing clean energy in the Americas (78%) and the technical and administrative support to the ECPA Steering Committee (78%); • The least successful areas comprise shared leadership and cooperation on: i) financing mechanisms to de-risk energy transition (41%); ii) resilient energy infrastructure planning (49%), and iii) implementation of technical cooperation (53%); • Stakeholders rate the attribution of ECPA's effects as high (74%), particularly by giving smaller OAS Member States a voice and a learning platform; • Most robust performance in enhancing the preparedness of dealing with energy-related issues due to enhanced knowledge of relevant tools, processes, products, and practices (79%) and improvements on policy capacity of governments in the energy sector (78%); • Internal factors affecting program performance are i) Small but very highly skilled, efficient, and responsive project team on the positive side and the lack of funding and the absence of specific technical cooperation projects under ECPA on the negative side; • External factors affecting program performance are i) Strategic importance of the energy sector for the U.S and the private sector pushing clean energy agenda. Negative factors are the economic effects of COVID-19 on the implementation of clean energy agendas; • In response to a recommendation in the final evaluation of ECPA IV, the project team tried to position gender more dominantly on the ECPA V agenda. However, ECPA V falls short of a fully-fledged gender component.
Sustainability		<p>Sustainability: The evaluation finds challenges in the sustaining ECPA V results</p> <ul style="list-style-type: none"> • Overall sustainability ratings reach 44%; • ECPA partners' ownership of the ECPA approach is medium and reaches 57%, with National Focal Points appreciating less ECPA's engagement of the Permanent missions in Washington D.C.; • ECPA stakeholders rate institutional sustainability (61%) and financial sustainability (53%) as medium. Institutional capacities are uneven across the OAS Member States to sustain ECPA achievements. However, Ministers' active participation in ECPA shows essential leadership at the highest political level; • Financial sustainability: many representatives from ministries of Energy or related energies would be no longer able to attend regional events if ECPA would not provide funding for logistics arrangements; • OAS Member States' willingness to financially support the technical ECPA Secretariat in the OAS reached 9% only, with governments prioritizing the mitigation of the COVID-19 pandemic.

The evaluation reaches the following **main conclusions**:

- **Relevance:** if ECPA did not exist, it would need to be invented, being the only hemispheric initiative on clean energy
- **Efficiency:** OAS shows good program management practices with ECPA V.
- **Effectiveness:** ECPA V is highly effective.
- **Sustainability:** The lasting effects of ECPA are mixed.

Based on the key findings and conclusions presented above, the evaluation makes the following targeted and time-bound **recommendations**:

Relevance:

R1: Donor: continue funding OAS engagement in the energy sector with ECPA as an umbrella program to promote clean energy and the OAS values in the Western Hemisphere.

Prioritization: very high. Next 3 months

R2a: Project team: for any future phase of ECPA, the program budget should accommodate seed funding for beneficiary countries' joint initiatives for cost-sharing purposes. At least 30% of initiatives should have a specific focus on women.

Prioritization: very high. Next 3 months

Relevance and efficiency:

R2b: Project team: To fund a technical cooperation seed funding mechanism, comprising about 15% of the project budget (around US\$200K). Several options emerge: i) additional donor funding; ii) significantly reducing funds for the outputs on dialogue for technical cooperation and communication/ dissemination; iii) costs savings through replacing several physical meetings with virtual events; iv) a combination of i, ii, and iii.

Prioritization: very high. Next 3 months

Effectiveness:

R 3: Project team: Further strengthen the private sector's involvement in ECPA events and possibly technical cooperation initiatives to leverage this external driver of change fully.

Prioritization: very high. Next 3 months

R 4: Project team: To further enhance the cost-effectiveness of ECPA, a balance between virtual and physical meetings should be considered for any future phases of the program. Cost savings could be allocated for a "technical cooperation seed funding" program component.

Prioritization: very high. Next 3 months

Sustainability:

R 5: Project team: In line with R4, virtual meetings should be used as an additional communication channel, particularly with national focal points, to engage the OAS Member States directly and ultimately further enhance ownership of ECPA and its values.

Prioritization: very high. Next 3 months

R 6: OAS Secretariat: Consider the institutionalization of a Chief Energy Specialist's position through the OAS regular fund to contribute to the sustainability of ECPA and its required on-going support to OAS member states.

Prioritization: very high. Next 3 months

R 7: Project team: Build on the private sector's successful engagement to expand the ECPA donor base and ensure the sustainability of ECPA. Offer the most interested companies to co-fund, for example, the ECPA technical cooperation project component in specific priority sectors, which are both relevant to ECPA members and the private sector.

This approach could provide private sector actors with exposure in economically attractive markets, receive risk-sharing in less stable markets (through the OAS co-funding) and advance the clean energy agenda both at a political and technical level under the umbrella of the OAS. The private sector might also be interested in co-funding ECPA meetings in Washington DC if this would allow them access to those events.

Prioritization: very high. Next 3 months

Section I: Introduction

This document comprises the final report of the Energy and Climate Partnership's final external evaluation for the Americas (ECPA). The Organization of American States (OAS) implements the ECPA ("the project"), funded by the United States Department of State. The project implementation period started on September 22, 2017, and was scheduled to end on December 31, 2020.

The United States Department of State funded the project with US\$ 1,200,000.00 (90.19% of total funding), complemented with US\$ 130,500.00 OAS in-kind funding.

1.1 Project background

The project document outlines the project background as follows³:

"PURPOSE:

Shared leadership and cooperation in energy infrastructure, energy efficiency, and energy integration strengthened at the regional level.

DESCRIPTION OF THE PROJECT:

The region's economic growth is driving an increase in the demand for energy, which is expected to rise by 20% by 2020. Although the region's energy matrix boasts the largest share of renewable sources in the world, the share of fossil fuels is steadily increasing. If this trend remains unchanged, declining conventional oil reserves could become cause for concern from 2030 onward. On the other hand, the need to ensure reliable energy access, modernize energy infrastructure, improve energy efficiency, foster regional integration, and create jobs in the energy generation, transmission, and distribution sectors must be addressed with due consideration of environmental challenges. In this energy scenario, renewable energy takes center stage. Hence, implementing successful clean energy strategies that benefit current and future generations becomes a priority.

At the V Summit of the Americas in Trinidad and Tobago in April 2009, the leaders of the Americas reaffirmed their commitment to work together toward a clean energy future. The project supports this commitment by furthering shared leadership and cooperation among governments and the private sector to advance clean energy use.

Since 2009 OAS/ Department for Sustainable Development (DSD) has facilitated clean energy dialogue and cooperation across the Americas through two Ministerial meetings (Washington, DC, in 2010 and Merida, Yucatan, in 2015), half a dozen projects, and more than 50 workshops, fora, and instances of technical assistance. Additionally, it is supporting Chile in the preparation of the Third Ministerial to convene in September 2017. These actions allowed OAS/DSD to (1) strengthen coordination in clean energy efforts among partners by creating a network of National Focal Points; (2) foster shared leadership in clean energy by establishing a Steering Committee comprised of seven governments; (3) consolidate ECPA's structure by developing a set of Guiding Principles; (4) develop a clean energy Action Plan, which the countries review biannually; (5) identify clean energy priorities at the national and regional level; and (6) support high-level energy dialogue by supporting the ministerial process.

³ OAS Secretary-General, 2016: Coordination of CARICOM's Caribbean Sustainable Energy Roadmap and Strategy (C-SERMS) SID1603. Project document. Page 15.

The project will build on these outputs to strengthen shared leadership and cooperation in energy infrastructure, energy efficiency, and energy integration at the regional level through ministerial meetings, workshops, technical exchange missions, senior expert visits, and public discussion fora. Additionally, OAS will partner with the Inter-American Development Bank (IDB) to facilitate dialogue between governments and the private sector as a means to advance public-private partnerships for the delivery of clean energy goods and services. These efforts will contribute to the adoption and widespread use of clean energy in the Americas”⁴.

“In addition to supporting a type of development that is both integral and sustainable, ECPA seeks to provide avenues to strengthen peace, democracy, and human rights across the region through greater dialogue, collaboration, and awareness on energy. To this end, the Organization of American States (OAS), with the financial support of the United States Permanent Mission to the OAS, established the ECPA Technical Coordination Unit (TCU) as the entity tasked with supporting the OAS member states in advancing clean energy goals. Finally, OAS/DSD strives to promote gender mainstreaming in its energy portfolio by addressing issues that affect women's rights in the Americas. To this end, it has included the issue of gender mainstreaming in the technical workshops on energy policy that it has held in previous project iterations.

The OAS, through its Department of Sustainable Development, operates the ECPA Technical Coordination Unit since 2009. The project described herein is the continuation of four ECPA projects implemented by the OAS (SID1006, SID1202, SID1307, and SID1408) in support of the Partnership’s operationalization”⁵. In 2018, phase IV of ECPA underwent an external evaluation⁶.

The document review and the briefing call with the project team showed that the following topics were at the core of ECPA V:

- Energy efficiency
- Resilient energy infrastructure planning
- Electric mobility
- Renewable energy
- Financing mechanisms to de-risk energy transition
- Use of natural gas and LNG
- Strategies for enhanced private sector engagement

The outputs of SID 1702 are as follows:

1. Multi-sector forum on clean energy facilitated
2. Technical cooperation on energy infrastructure, energy efficiency, and energy integration implemented
3. Technical and administrative support to the ECPA Steering Committee and Ministerial Meetings provided
4. Information on the actions of ECPA geared toward advancing clean energy in the Americas disseminated

⁴ OAS General Secretariat, 2017: Implementation of the Energy and Climate Partnership of the Americas (2017-2020) SID1702. Project document, page 19.

⁵ OAS General Secretariat, 2017: Implementation of the Energy and Climate Partnership of the Americas (2017-2020) SID1702. Project document, page 21-22.

⁶http://www.oas.org/en/saf/accountability/docs/EPCA_Final-evaluation-report-20180423.pdf

5. Project planning, monitoring, and evaluation

Since 2016 the OAS/DSD is implementing the three projects whose goals and objectives were incubated by ECPA. These projects are:

- "Advancing Metrology for Sustainable Energy Technologies in the Western Hemisphere" (SID1606).
- "Advancing Metrology for Energy Efficiency Measurement and Compliance in Central America and Dominican Republic" (SID1605).
- "Coordination of CARICOM's Caribbean Sustainable Energy Roadmap and Strategy (C-SERMS)" (SID1603).

SID 1606 underwent an external evaluation in 2019 while an evaluation of SID 1603 and SID 1605 is underway in parallel to the evaluation of ECPA V.

1.2 Evaluation background and objective

The evaluation Terms of Reference (ToR)⁷ outline the purpose of this external evaluation as follows:

- “to evaluate the relevance, efficiency, effectiveness, and sustainability of Phase V of the ECPA program. The evaluation will specifically focus on the delivery of the main Outputs, and the Immediate and Intermediate Outcomes for the project”.

The evaluation scope can be summarized as follows⁸:

- i) Conduct a summative evaluation in order to identify the main achievements and results of the project.
- ii) Determine the efficiency and effectiveness of the project, as best reflected in the available results.
- iii) Critically analyze the formulation, design, implementation, and management of the project and make recommendations as needed.
- iv) Assess the institutional and financial sustainability of the interventions financed by the project.
- v) Document lessons learned related to the formulation, design, implementation, management, and sustainability.
- vi) Make recommendations, as appropriate, to improve the formulation, design, and implementation for future similar interventions.
- vii) Assess if and how the project addressed the crosscutting issue of a gender perspective and to what results.

⁷ Ibid, page 4.

⁸ Ibid. pages 4 -5.

- viii) Identify the social costs and economic and social benefits of the project to properly assess whether the benefits outweigh the costs of the operation. Specifically, conduct a cost-benefit analysis by determining the internal rate of return and the net present value of the investment at a 12% discount rate.

The evaluation questions are listed in the evaluation matrix in Annex 1, based on the international evaluation criteria of relevance, efficiency, effectiveness, and sustainability. Given the focus of the ToR, the criterion of impact is not foreseen in this external evaluation.

Expected users of this evaluation are the OAS, the United States Mission to the OAS, ECPA stakeholders in participating OAS Member States, and the U.S. taxpayers.

The evaluation took place between August and December 2020. The evaluator invited ECPA stakeholders in all OAS Member States to participate in the evaluation, with representatives of 21 countries responding, which constitutes a high coverage. Twenty-two stakeholders participated in telephone interviews⁹ and 38 out of 211 stakeholders completed an online survey (18% response rate). In total, the evaluator managed to consult 60 stakeholders.

Figure 4 shows those Member States in dark blue, including the Bahamas, Saint Lucia, and Trinidad and Tobago, less visible on the map.

The OAS contracted an external evaluation specialist to undertake this evaluation. DPE selected Dr. Achim Engelhardt in a competitive tendering process for this evaluation. The consultant was neither involved in the design nor implementation of ECPA and has supported the OAS in the evaluations of U.S. Permanent Mission-funded projects on several occasions since 2015.



Design: A. Engelhardt, 09/2020

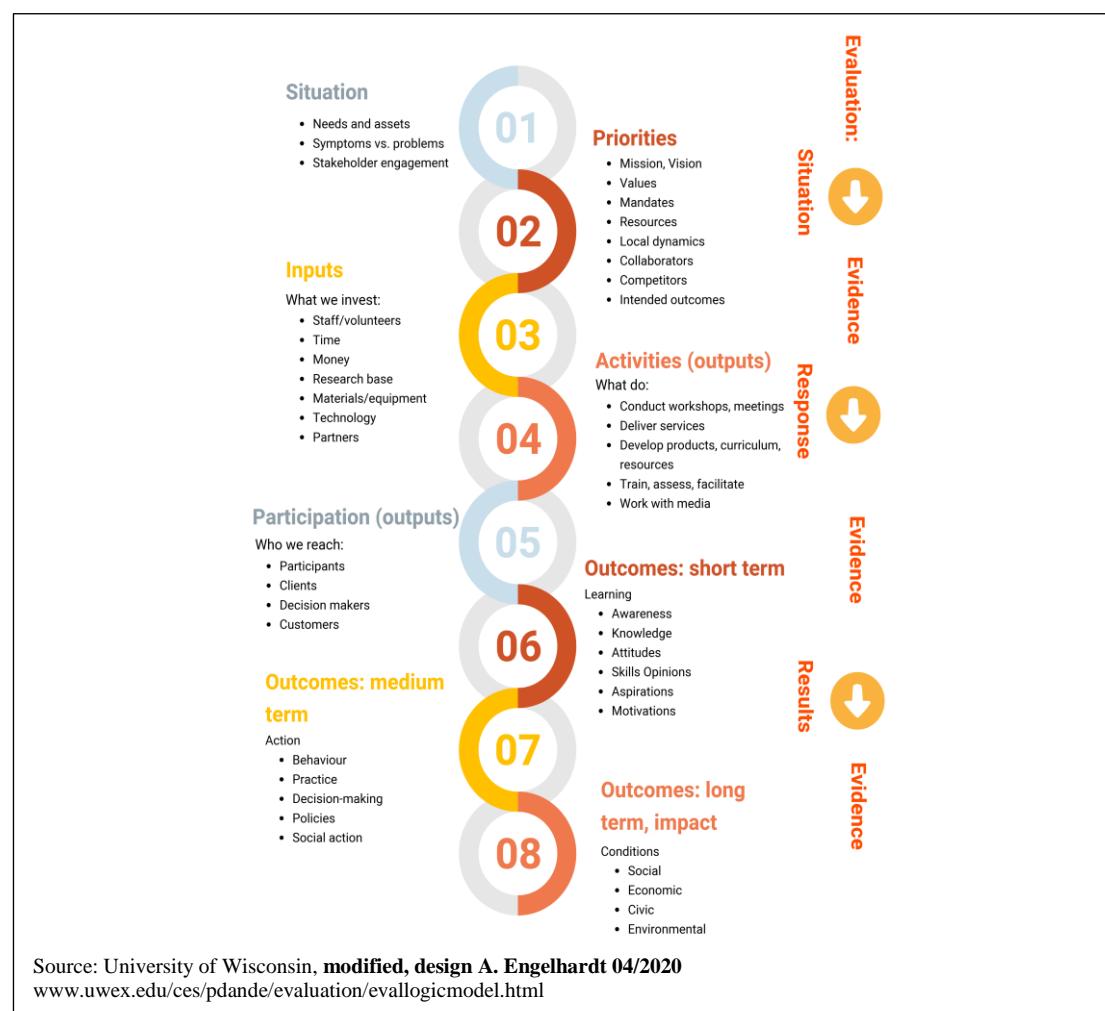
Figure 4: Map of OAS Member States participating in the evaluation of ECPA V

⁹, including the project manager. The quantitative ratings provided by the project manager were not included in the data analysis to avoid any bias.

1.3 Evaluation methodology and approach

As outlined in the evaluation matrix and workplan for this evaluation, the evaluator took a theory-based evaluation approach. This approach specifies ECPA's intervention logic building on a set of assumptions and outlining how the program designers think the change would happen, as shown in Figure 5. This intervention logic was validated through personally engaging the project team in the OAS Secretariat and via an online survey with key program stakeholders.

Figure 5: Concept of a theory-based evaluation



Logically the Theory of Change is linked to the logframe of the ECPA.

The initial document review showed that ECPA benefits from a logframe with specific, measurable, and time-bound indicators. For the output and outcome (purpose) indicators, baselines, targets, and results are available for April 2020.

The assessment of progress against those log frame indicators will be the basis for evaluating the effectiveness of ECPA.

Following consultations with DPE, the evaluator used the following evaluation tools and processes summarized in Figure 6.

Figure 6: Evaluation tools and processes for ECPA V



Source: A. Engelhardt, 08/2020

1. Document review of program documentation and other documentation on energy infrastructure, energy efficiency, and energy integration in the Americas;
2. Virtual scoping meetings with the Department of Planning and Evaluation, the Department of Sustainable Development implementing the program in the OAS in Washington DC and with the representative of the US Permanent Mission to the OAS;
3. Theory of Change virtual validation meeting in the OAS in Washington DC with the Department of Sustainable Development implementing the program;
4. Online evaluation survey to stakeholders and program beneficiaries in all participating OAS Member States with a focus on participants of program-funded capacity building and networking events in 2019 and 2020;
5. Telephone interviews with Steering Committee members and key stakeholders in selected program countries for in-depth assessment of ECPA footprint in the OAS Member States;
6. Limited cost-benefit analysis using existing program data with a focus on selected cases across the program's seven pillars, depending on data availability;
7. Presentation of the midterm report to OAS via Skype conference call, following data analysis;
8. Draft evaluation report for feedback to OAS;
9. Finalization of evaluation report and presentation via Skype conference to OAS in Washington DC.

1.4 Limitations and mitigation measures

Due to the **COVID-19 pandemic**, no travel was envisaged for this evaluation. This public-health related measure limited to some extent the primary data collection, particularly the validation of data in the field and observations of project results in the field.

As a mitigation measure, the evaluator chose a broad **sampling framework**. Using available project documentation, the evaluator reached out to beneficiaries of capacity building and technical assistance that ECPA provided in 2019 and 2020 through an online survey covering all relevant OAS Member States. The focus on 2019 and 2020 only is due to the limited validity of memory recall techniques through surveys. As such, the sampling includes those beneficiaries reached in 2017 and 2018 to the extent that project data such as post-event evaluation questionnaires are available for those events.

For telephone interviews, the evaluator covered the project team and the OAS Member States constituting the ECPA Steering Committee (government officials and permanent missions from Chile, Costa Rica, Dominican Republic, United States, Jamaica, Mexico, and Trinidad and Tobago), the Permanent Representations to the OAS of all other participating OAS Member States and all ECPA focal points in Energy Ministries, again covering all OAS Member States.

In the evaluation matrix and framework for ECPA, the evaluator stated that “the availability of data will influence the selection of cases for **the cost-benefit analysis**. At this early stage in the evaluation process, all seven pillars of the ECPA program are potentially suitable for cases for a cost-benefit analysis. Lessons from the evaluation of the OAS Sustainable Cities and Communities project (phases 1 and 2), implemented under ECPA and evaluated in 2017 showed that technical cooperation projects are particularly well suited for the cost-benefit analysis.”¹⁰¹¹

However, the evaluation showed that while ECPA engaged in technical cooperation, this output did not comprise any specific technical cooperation projects. As a result, the evaluation was unable to quantify any monetary economic or social benefits of ECPA V. To mitigate this challenge, the evaluator used the theoretical attribution of ECPA V to aspects like energy efficacy or energy integration and its environmental benefits for a "theoretical" cost-benefit analysis.

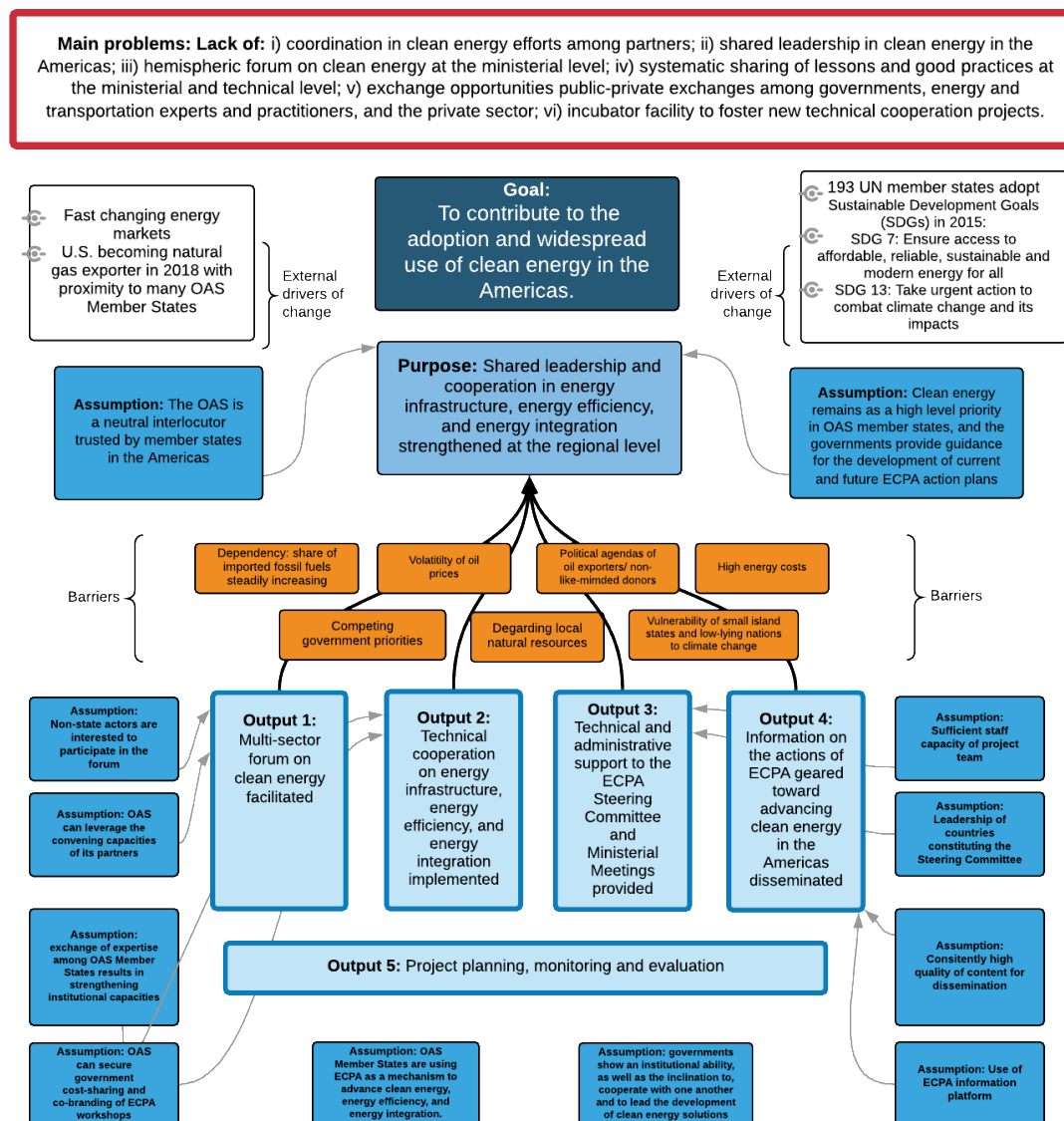
¹⁰ OAS/Engelhardt, A., 2017: Evaluation of the Program Sustainable Communities in Central America and the Caribbean.

¹¹ OAS/Engelhardt 2020: Evaluation of the Energy and Climate Partnership of the Americas V. Evaluation matrix and workplan.

1.5 Reconstructed Theory of Change of ECPA V

Figure 7 presents the reconstructed theory of change of ECPA V undertaken by the consultancy, based on the project documents and its logframe as the primary data sources.

Figure 7: Reconstruction of the Theory of Change for ECPA V



Source: A. Engelhardt 08/2020

The reconstructed Theory of Change of the project contains the following elements:

- Formulation of the main problems
- Outputs (short-term results) and related assumptions
- Barriers to moving from outputs to outcomes (medium-term results)
- Outcomes
- Impact statement (long-term results)
- Linkages to external drivers of change catalyzing the achievement of the impact
- Main assumptions

Section 2.4 provides a fully-fledged assessment of the validity of the Theory of Change.

Section II: Findings

2. Relevance: is ECPA doing the right thing in the OAS Member States?

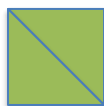
This section addresses the evaluation criteria of relevance by enquiring to what extent ECPA V did the right thing by engaging in strengthening cooperation in energy infrastructure, energy efficiency, and energy integration in the Americas.

The sub-criteria used include the following: i) the alignment to the mandates of the OAS, ii) the relevance for the donor, the U.S. Department of State, iii) the relevance for the OAS Member States; and iv) the validity of the project's reconstructed Theory of Change with four sub-criteria.

The principal sources of evidence for this section are the document review, telephone interviews, the online survey, and the validation of the Theory of Change with the project team.

Key findings: ECPA V was doing the right thing, based on a valid theory of change

- ECPA V is aligned to OAS General Assembly resolutions AG/RES. 2253 (XXXVI-O/06), AG/RES. 52 and 2312 (XXXVII-O/07), AG/RES. 2816 (XLIV-O/14), and CIDI/RIMDS-II/DEC.1/10;
- For the donor, ECPA contributes to Objective 2.3 and Performance Goal 2.3.1 of the Joint Strategic Plan FY 2018 – 2022 of the U.S. Department of State and USAID, referring to energy security and access to diversified, affordable, and reliable energy sources ; ECPA also contributes to U.S. government's "Growth in the Americas/América crece" initiative;
- Member States: the relevance for 21 Member States is high, reflecting the needs of governments, institutions, and companies at a rate of 68%, ECPA being the only hemispheric initiative, also bringing together ministers; relevance of ECPA for women reached 28% only;
- The design of ECPA V was sound and based on a valid (reconstructed) Theory of Change;
- Results chain: The only limitation to the reconstructed Theory of Change is that technical cooperation is rather dialogue-based. In the absence of specific pilot projects or initiatives, the contribution of technical cooperation to the purpose and goal of ECPA is somehow limited;
- This design limitation is based on the inaccurate assumption that project actions would be coupled with funding at the national level to support the priorities.



This final evaluation finds that the relevance of ECPA V is very high. Based on the evaluations' scoring methodology¹², the relevance score is "green" (88 out of 100¹³). In six out of seven

¹² applied by the UK's Independent Commission for Aid Impact, see for example <http://icai.independent.gov.uk/wp-content/uploads/ICAI-Review-UK-aids-contribution-to-tackling-tax-avoidance-and-evasion.pdf>

¹³ Scores by sub-criteria: green: 3, green/amber: 2, amber/red: 1, red: 0 ; 2.1 = 3, 2.2 = 3; 2.3 = 2; 2.4 = 3, 2, 3, 2, 3. Total = 15 out of a maximum of 24. Overall performance = SUM (15/24*100) (87,5%).

sub-criteria, the project shows a solid performance, while for one sub-criteria, the performance is strong. The score for the validity of the theory of change reaches 87%.



2.1 Relevance for the OAS: alignment to mandates

The relevance of the project for the OAS shows through its alignment to OAS General Assembly resolutions. Four references seem pertinent: AG/RES. 2253 (XXXVI-O/06), AG/RES. 52 and 2312 (XXXVII-O/07), AG/RES. 2816 (XLIV-O/14), and CIDI/RIMDS-II/DEC.1/10. The endnotes further specify those references.ⁱ



2.2 Relevance for the donor

The document review showed the relevance of ECPA for the donor, the U.S. Department of State. The Joint Strategic Plan FY 2018 – 2022¹⁴ specifies that “to further advance American leadership in international energy governance, the Department and the United States Agency for International Development (USAID) must leverage developments in the U.S. energy sector to pursue universal access to affordable and reliable energy and promote sustainable global energy markets.”¹⁵

ECAP contributes to the Joint Strategic Plan’s Strategic Objective 2.3: “Advance U.S. economic security by ensuring energy security, combating corruption, and promoting market-oriented economic and governance reforms.” A contribution also shows for the Performance Goal 2.3.1 “By 2022, promote an increase in U.S. energy exports and achieve for the United States, its allies, and partners increased energy security and access to diversified, affordable, and reliable energy sources”.

In the context of the United States being an increasingly dominant energy producer, with U.S. gross energy exports exceeded U.S. gross energy imports in 2019 for the first time in 67 years, the Department of State and USAID have “the opportunity to forge a market-based international energy policy that strengthens the energy security of the U.S. and our allies¹⁶ The Joint Strategic Plan refers to the Department of State and USAID working through bilateral and multilateral engagement, and regional initiatives such as Connecting the Americas 2022 to expand electrical interconnections. ECAP V contributes to those efforts.

ECPA V also contributes to U.S. government’s “Growth in the Americas/América crece” initiative in the area of energy security. The “whole-of-government” initiative “taps into the programs, resources and expertise of numerous U.S. government agencies to help engage with governments, secure financing, assess and mitigate risk, and strengthen regulatory environments for investors”¹⁷. Some of the core agencies include the Departments of State, Treasury, Commerce, and Energy as well as the United States Agency for International Development (USAID).

Specifically for the Caribbean, the relevance of the U.S administration’s investment in ECPA is given through the U.S-Caribbean Strategic Engagement Act (H.R. 4939),¹⁸ passed by the U.S. Congress in December 2016. The Act states that “Congress declares that it is the policy of the United States to increase engagement with the governments of the Caribbean region and with civil society, including the private sector, in both the United States and the Caribbean, in a

¹⁴ U.S. Department of State and USAID, 2018: Joint Strategic Plan FY 2018 – 2022

<https://www.state.gov/wp-content/uploads/2018/12/Joint-Strategic-Plan-FY-2018-2022.pdf>

¹⁵ U.S. Department of State and USAID, 2018: Joint Strategic Plan FY 2018 – 2022, page 35

¹⁶ “ibid, page 40.

¹⁷ <https://www.state.gov/wp-content/uploads/2019/11/America-Crece-One-Pager-003-508.pdf>

¹⁸ <https://www.congress.gov/bill/114th-congress/house-bill/4939/text>

concerted effort to (...) 6. improve energy security by increasing access to diverse, reliable, and affordable power."

As in the case of C-SERMS in 2019 under ECPA, this evaluation finds that ECPA contributes to the engagement of the U.S. administration, also specifically in the Caribbean.

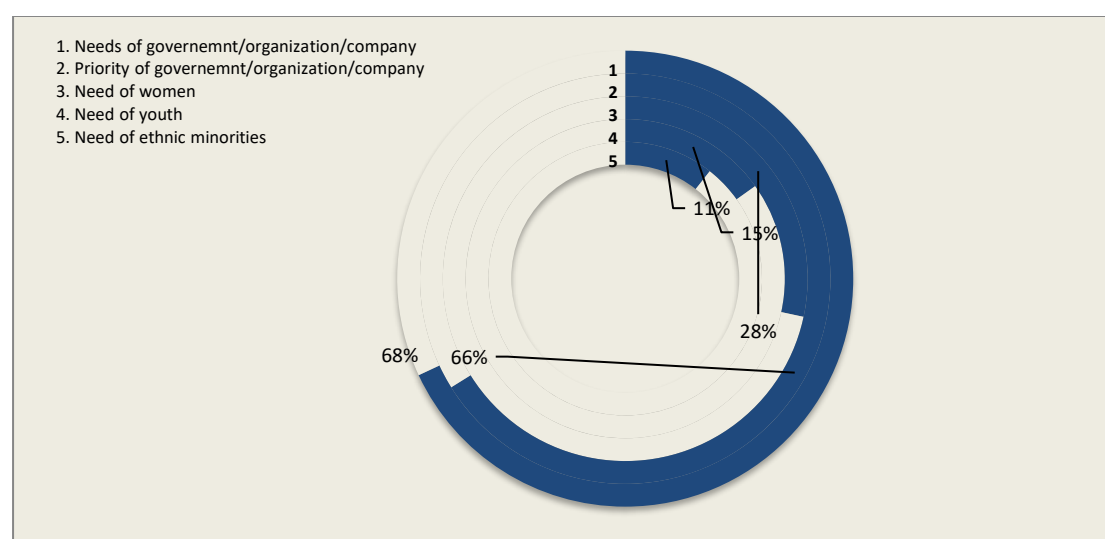
The evaluation of C-SERMS stated in 2019 that "U.S. engagement in the Caribbean energy sector seems at the core of political stability and democracy in the region. The evaluation finds that with the de-factor collapse of PetroCaribe, other non-traditional donors start to fill the void left by Venezuela, with significant geopolitical risks for the region and ultimately the U.S.¹⁹"



2.3 Relevance for selected Member States

The evaluator assessed ECPA V's relevance for the participating Member States mainly through telephone interviews and the online survey. Overall, the relevance for those 22 Member States is high, reflecting the needs of governments, institutions, and companies at a rate of 68% and their priorities (66%).

Figure 8: Relevance of ECPA V for the OAS Member States



Source: evaluation interviews; n=32

The reason for this level of ratings is the existence of multiple other energy-related multilateral and bilateral initiatives across the Americas. Also, the technical cooperation component of ECPA V did not fulfill the expectations of many stakeholders, as shown in the box below.

"ECPA fills some gaps, others not. It is relevant for knowledge exchange, discussion forum, or cooperation between countries. Nevertheless, something is missing: technical cooperation projects between countries. Following the Ministerial meeting in Chile, we identified matching technical cooperation priorities, but countries did not act, and ECPA did not follow-up".

Source: ECPA stakeholder

¹⁹ Engelhardt, A./OAS, 2019: evaluation of the Coordination of CARICOM's Caribbean Sustainable Energy Roadmap and Strategy (C-SERMS)"

However, stakeholders stressed that ECPA is the only hemispheric initiative, also bringing together ministers. Besides, ECPA's active engagement of the private sector differentiates it from other initiatives. While some stakeholders, mainly from South America, stressed the multiple layers of regional and sub-regional energy-related fora, stakeholders from Central America and the Caribbean emphasized ECPA's relevance for accessing learning and knowledge exchange from North America or advanced countries in South America.

Stakeholders were less sure about the extent to which ECPA addressed the needs of women or youth which was also reflected by the high number of stakeholders not responding to that question. The relevance for women reached 28% only and the relevance for youth 15%. The latter findings are slightly surprising, given the gender figured as the main topic in one out of four events of the ECPA Ministerial Dialogue series in 2019. In the event, youth issues were also addressed concerning girls' involvement in science, technology, engineering, and mathematics (STEM).

"ECPA is the only platform to get energy ministers together in the hemisphere. It is a unique forum and allows us even to cooperate across our own government".

"We have another forum for the Caribbean but not at the ministerial level."

Sources: ECPA stakeholders

The project team responded to the recommendation of the final evaluation of ECPA IV to elevate the issue of gender in ECPA V. However, some male stakeholders were more interested in technical issues than gender, given those stakeholders' technical background and interests.

Concerning ethnic minorities, this topic emerged in Honduras, where the respective ministry benefitted from Chile's experience in the country's southern Mapuche region. The topic's relevance was given due to the need for strategies to sensitize ethnic minorities for renewable energies, such as community involvement in renewable energy production in protected areas. In Panama, the additional need for access to rural electrification emerged.

The evaluator's search of Ministries of Energy's websites and other publicly available sources for references to ECPA was less successful, as the search depended heavily on the quality of the public websites of Ministries of Energy or related ministries. Chile constitutes one of the exceptions, with the following references on the Ministry of Energy's website:

- Reference of the President of Chile to ECPA at the inauguration of the first geothermal plant in Chile (09/12/2017)
- Reference of the Minister of Energy to ECPA in the 2014-2018 public account concerning regional energy integration (03/07/2018)
- Two references show for events jointly implemented with ECPA, one inaugurated by the President of Chile (III Ministerial meeting of ECPA, 07/07/2017), the other one by the Minister of Energy (e-mobility, 05/09/2019)

2.4 Validity of the Theory of Change

The evaluation finds that the design of ECPA V was sound, as shown in the assessment of the validity of all main components of the project's theory of change. The evaluator's assessment

uses the reconstructed Theory of Change of ECPA V, as at the time of the design of ECPA V, the use of a theory of change in the project document was not mandatory in the OAS.



Main problems

The project document correctly identified the main problem that justified the design of the ECPA V project. Problems within the remit of ECPA V included:

The lack of:

- i) Coordination in clean energy efforts among partners;
- ii) Shared leadership in clean energy in the Americas;
- iii) Hemispheric forum on clean energy at the ministerial level;
- iv) Systematic sharing of lessons and good practices at the ministerial and technical level;
- v) Exchange opportunities public-private exchanges among governments, energy, and transportation experts and practitioners, and the private sector;
- vi) Incubator facility to foster new technical cooperation projects.

While the evaluation finds that many initiatives exist in the Western Hemisphere on dialogue and knowledge exchange in the energy sector, ECPA remains the only hemispheric platform for dialogue and cooperation covering all OAS Member States. Other initiatives include “Sistema de Integración Centroamericana” (SICA)²⁰, Latin American Energy Organization (OLADE)²¹, International Renewable Energy Agency (IRENA)²², International Partnership for Hydrogen and Fuel Cells in the Economy (IPHE)²³, or “Proyecto Mesoamérica”²⁴. As such, ECPA fills a void at the hemispheric level.

Main assumptions

The project logframe lists three main explicit assumptions of ECPA V. However, the evaluation identified eight implicit assumptions for the four main technical outputs of the project.²⁵ The evaluator tested the explicit assumptions in telephone interviews with countries representing the ECPA Steering Committee, both at the level of Permanent Representations in Washington DC and National Focal Points.



Purpose level assumption

“Clean energy remains as a high-level priority in OAS member states, and the governments provide guidance for the development of current and future ECPA Action Plans.”

²⁰ https://www.sica.int/blank.html?aspxerrorpath=/sica/sica_breve_en.aspx

²¹ <http://www.olade.org/en/>

²² <https://www.irena.org/>

²³ <https://www.iphe.net/>

²⁴ Promotes complementarity and cooperation between Belize, Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, and the Dominican Republic for growth and development in Mesoamerica.

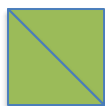
<http://www.proyectomesoamerica.org/index.php/acerca-delpm/proyecto-mesoamerica/quienes-somos>

²⁵ Excluding the output 5 on project planning, monitoring, and evaluation, as this is related to internal project management rather than project results

While this assumption remains valid at high or very high levels in most OAS Member States participating in this evaluation, the evaluation finds that another implicit assumption shows at the purpose level.

The project team identified in the lessons learned for the fifth RPPI that “the sustainability of the project's purpose and goals cannot be achieved if project actions are not coupled with funding at the national level to support the priorities.” As such, it seems insufficient to expect governments' prioritization of clean energy and its guiding role in the absence of any external funding, even co-funding or seed funding, to stimulate any concrete actions. The evaluation finds that, in hindsight, the project design's inaccurate assumption at the purpose level affects the achievement of the project goal.

The evaluator also identified the assumption that “the OAS is a neutral interlocutor trusted by the OAS Member States in the Americas.” The telephone interviews showed that this assumption holds. While some Permanent Representations to the OAS found that the organization played a political role at times, the OAS being a political organization, stakeholders appreciated the purely technical nature of ECPA.



Output level assumptions

1. *“By the end of the project, OAS Member States are using ECPA as a mechanism to advance clean energy, energy efficiency, and energy integration.”*

As stated above in the section on the main problems, ECPA is one mechanism to advance the Americas' energy agenda, but the only Hemispheric one. All stakeholders interviewed confirmed the use of ECPA jointly with other regional or sub-regional platforms to advance with their national decarbonization agendas.

2. *“Toward the end of the project, governments show an institutional ability, as well as the inclination to, cooperate with one another and to lead the development of clean energy solutions.”*

The evaluation interviews showed a high level of ownership of the ECPA concept by countries constituting the ECPA Steering Committee. The institutional ability is more robust in larger economies than in many countries in the Caribbean. The fifth RPPI states in its lessons learned section that “small island developing states have smaller governments, fewer staff and, oftentimes, need more technical support to implement certain types of actions”²⁶. The sustainability section of this report addresses the critical issue of the financial capacities for cooperation.

3. *“Throughout the project, the seven pillars of ECPA are aligned with the priorities of the OAS Member States.”*

The evaluation finds that overall, the seven pillars and subsequent thematic focus of ECPA V meets OAS Member States' priorities. Though not all seven pillars and thematic areas always

²⁶ OAS, 2020: Report on the Progress of Project Implementation. Implementation of the Energy and Climate Partnership of the Americas (2017-2020). SID1702, page 22.

reach the same level of prioritization of the Member States, this fact reflects the different government agendas and stages of the energy transition.

Figure 9 shows the seven pillars of ECPA and any changes observed in the focus of ECPA throughout its project cycle. All pillars are actively addressed through ECPA's work but energy poverty, which was still on the agenda in 2017. As the ECPA Steering Committee constituted by the OAS Member States set the agenda for ECPA, the alignment of ECPA with the priorities of the OAS Member States seems given.

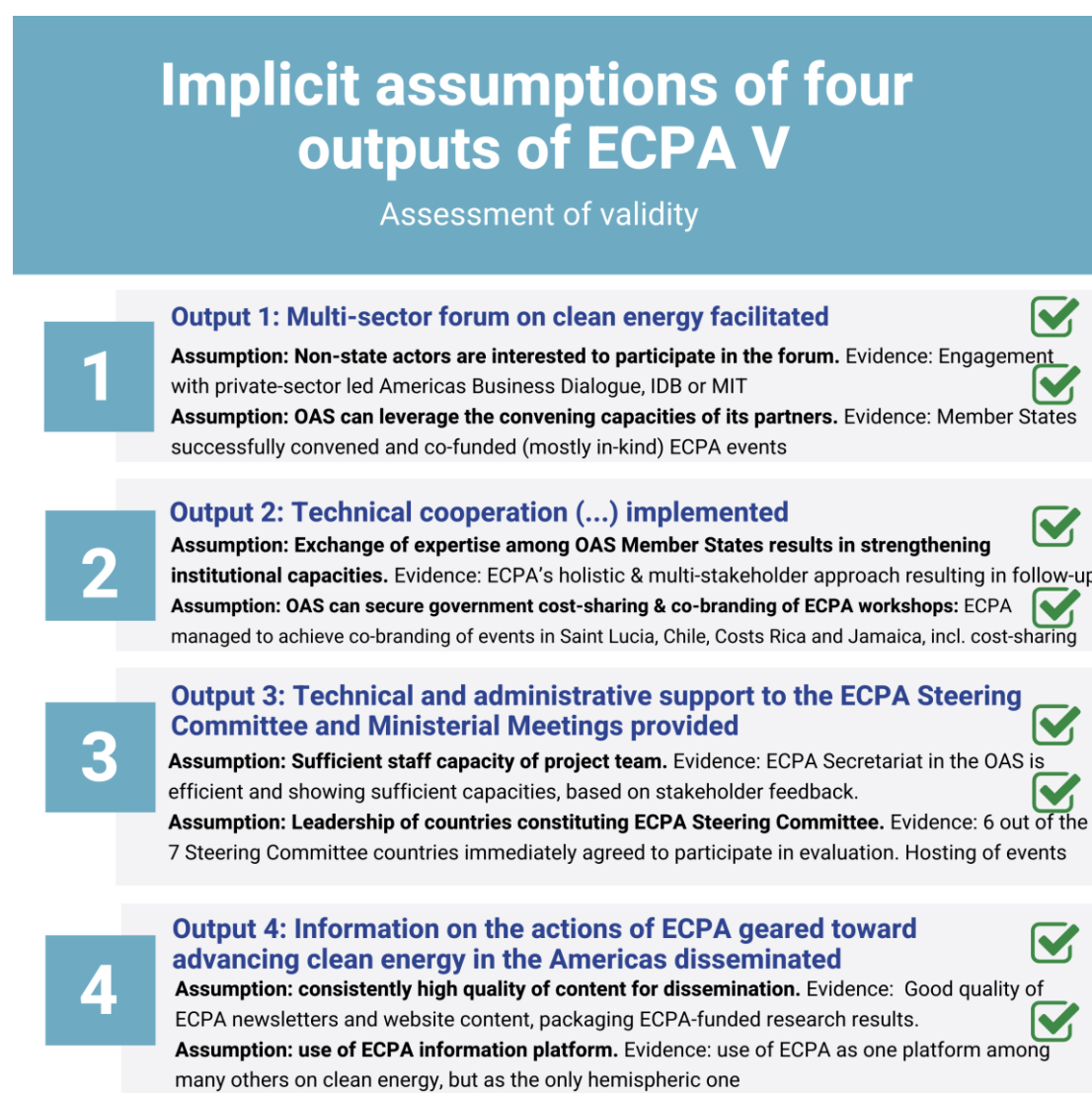
Figure 9: Relevance of ECPA's seven pillars throughout the project cycle

Seven pillars of ECPA	Focus in 2019 and 2020	Comment
1. Energy efficiency	Energy efficiency	Focus kept
2. Renewable energy	Renewable energy Electric mobility Financing mechanisms to de-risk energy transition	Focus specified and deepened
3. Cleaner and more efficient use of fossil fuels	Use of natural gas and LNG	Focus specified
4. Energy infrastructure	Resilient energy infrastructure planning	Focus specified
5. Energy poverty	Access to energy promoted in 2017 through a proposal to the Nationally Appropriate Mitigation Actions (NAMAs) Facility: electrify marginalized off-grid communities using solar PV kits. The proposal was not funded.	No more actions reported in other RPPs after 2017
6. Regional energy integration	Financing mechanisms to de-risk energy transition	Focus specified
7. Energy research and innovation	Electric mobility	Focus specified
	Strategies for enhanced private sector engagement	Applied cross-cutting

Source: Evaluation of ECPA V, 2020

Figure 10 lists a summary of results. The evaluation found evidence that all eight implicit assumptions at the output level of ECPA V hold. The document review, evaluation survey, and telephone interviews prove their validity.

Figure 10: Assessment of the output-level assumptions of ECPA V



Intervention logic from outputs to goal

The evaluation finds that the ECPA outputs such as the multi-sector forum, technical cooperation, or the dissemination of information contribute to the purpose of ECPA, the shared leadership, and strengthened cooperation in energy-related matters at the regional level. However, the technical cooperation is more dialogue-based, and in the absence of specific pilot projects or initiatives, the contribution of technical cooperation to the purpose and goal of ECPA is somehow limited. The latter is also reflected in several interviews with National Focal Points. ECPA's contribution to the adoption and widespread use of clean energy in the Americas depends on the robustness of its multi-stakeholder dialogue and government funding of specific initiatives.

In Panama's case, the U.S. Embassy's facilitation role following an ECPA event to bring together private sector partners and national regulators to inform about options to engage in the clean energy sector in the country show a positive ECPA contribution.



Barriers and external drivers of change

The evaluation finds that barriers and external drivers of change are valid.

The World Bank (2020)²⁷ points towards the importance of consistency in government priorities and challenges with high energy costs as only a minority of countries benefit from wholesale power markets. The International Monetary Fund (IMF, 2016)²⁸ further explains the challenge of high and volatile fossil fuel prices. Evidence is accompanied by more specific analysis for Latin America (World Bank, 2012)²⁹ and the Caribbean (World Bank, 2015)³⁰. UNDP reports on the degradation of natural resources, and the vulnerability of small island states low-lying coastal nations to climate change³¹. The political challenges and interferences in the Americas' energy sector are also well researched (Brookings, 2016³², South China Morning Post, 2019³³ and Center for Strategic and International Studies, 2018³⁴).

Concerning the **barriers**, the project document correctly identified challenges that are outside the remit of the project but which still need to be closely monitored:

- Increasing dependence on imported fossil fuels
- Volatility of oil prices
- Political agendas of oil exporters/non-like minded donors
- High energy costs
- Competing government priorities
- Degrading local natural resources
- The vulnerability of small islands and low-lying coastal nations to climate change.

The evaluation interviews, particularly with stakeholders in the Caribbean, showed the increasing importance of small island states' vulnerability to climate change, a barrier ECPA is facing. The urgency of this topic was repeatedly stressed in the evaluation interviews from stakeholders in the Eastern Caribbean and the northern Antilles.

The evidence of financial impacts is preoccupying. The evaluation of C-SERMS (2019) reported, for example, that the United Nations predicts that in the next 80 years, "the coastal protection of 19 major cities in CARICOM would require the construction of 300 km of new levees or sea walls, at an estimated construction cost of US \$1.2 to US \$4.4 billion respectively, and require annual maintenance costs of US \$111 to US \$128 million"³⁵

²⁷ World Bank, 2020: Rethinking power sector reform in the developing world.

<https://www.esmap.org/rethinking-power-sector-reform-in-the-developing-world>

²⁸ IMF, 2016: CARIBBEAN ENERGY: MACRO-RELATED CHALLENGES

<https://www.imf.org/external/pubs/ft/wp/2016/wp1653.pdf>

²⁹ World Bank, 2012: Latin America: are we forever at the mercy of high oil prices?

<https://blogs.worldbank.org/latinamerica/latin-america-are-we-forever-at-the-mercy-of-high-oil-prices>

³⁰ World Bank, 2015: "There's tremendous interest in adopting renewables across the Caribbean."

³¹ United Nations Development Programme, 2010: Modeling the transformational impacts and cost of sea-level rise in the Caribbean

³² Foreign Policy at Brookings (2016): The geopolitics of China's ride in Latin America. Geo-economics and global issues paper 2. November 2016

³³ South China Morning Post, 2019: China in Latin America: partner or predator. BY RAQUEL CARVALHO MAY 25, 2019

<https://multimedia.scmp.com/week-asia/article/3011618/beijing-conquest-latin-america/index.html>

³⁴ Center for Strategic and International Studies, 2019: Virtual influence in Latin America

<https://www.csis.org/analysis/virtual-russian-influence-latin-america>

³⁵ United Nations Development Programme, 2010: Modeling the transformational impacts and cost of sea-level rise in the Caribbean, page 12

Otherwise, the loss of 31 airports in CARICOM is predicted at a 2m sea-level rise, amounting to 42% of all airports in the region and the flooding of land surrounding 35 out of the 44 ports in the region (80%). Nine power plants would be damaged or lost, all within a time horizon of the next 80 years³⁶.

Besides, the Windward Islands Research and Education Foundation (2018) refers to a calculation of about 260.000 displaced people in the Caribbean due to raising sea levels by 2050³⁷.

The barrier of the "political agendas of oil exporters" remains, but the context has changed due to the de-facto collapse of PetroCaribe, the initiative funded by Venezuela starting in 2005. Other players are now filling the void PetroCaribe left in the region"³⁸. The latter underscores the high political priority for the OAS Member States to engage in the energy sector.

"For the U.S., we see a strategic importance of the energy sector in the Americas. At the same time, we are worried about donors working in the sector which are not sharing the values of democracy and human rights."

Source: ECPA stakeholder

External drivers of change: The fast-changing energy markets are an external driver of change include the fact that the United States became a natural gas exporter in 2018, with many OAS Member States within its easy reach.

The adoption of the agenda 2030 with its Sustainable Development Goals at the United Nations General Assembly in 2015 also serves as an external driver of change in supporting the emphasis of access to affordable, reliable, sustainable, and modern energy for all and action to combat climate change.

³⁶ Ibid., page 11

³⁷ <https://www.paho.org/en/file/51463/download?token=i1hfFehe>

³⁸ Engelhardt, A./OAS, 2019: evaluation of the Coordination of CARICOM's Caribbean Sustainable Energy Roadmap and Strategy (C-SERMS)", pages 31 – 32.

3. Efficiency: were resources used appropriately to achieve ECPA results?

This section analyses the efficiency of ECPA V based on the following set of sub-criteria suggested in the ToR: i) the quality and appropriateness of logframe indicators; ii) the use of results-based management principles; iii) project monitoring; iv) the application of best practices in project design, v) the application of best practices in project implementation; vi) follow-up of raining activities to assess changes in participants and institutions; vii) cost-efficiency, and; viii) cost-benefit of ECPA.

The evaluation uses the document review and interviews as the primary sources of evidence for this section.

Key findings: The project team's time and labor-intensive multi-stakeholder approach shows a high level of value for money for the U.S. taxpayer

- Overall, indicators are SMART, and their quality is given. However, the appropriateness of some indicators could be further strengthened;
- The evaluation finds fair use of results-based management principles in ECPA;
- The project team produced five monitoring reports of high quality, including detailed annexes using DPE's standardized RPPI template;
- The ECPA design evolved over time since its inception in 2009, showing good quality. The implicit design assumption at the purpose level of governments' willingness to fund actions under the ECPA action plan was erroneous;
- The project team applies adaptive project management and drives a robust multi-stakeholder approach. It allows the project team to efficiently implement a partnership-based project, showing for example in the 89.9% co-funding of the 2020 Ministerial Meeting in Jamaica through ECPA partners;
- The project team used post-event questionnaires/surveys for many of its events, though with a relatively low participation rate;
- To further enhance cost-efficiency and address stakeholder needs, it might have been interesting to create a budget line for **ECPA technical cooperation seed funding** by significantly reducing funds for the outputs 2 (dialogue for technical cooperation) and 4 (communication/dissemination);
- A fully-fledged cost-benefit analysis for ECPA V is not possible due to the absence of the number of beneficiaries and any specific technical cooperation results. As a proxy, the evaluation finds that a **0,00000195% decrease in the air pollution-related welfare loss in 20 OAS member States during one year would equal the total investment in ECPA V**, which promotes e-mobility;
- Social/health and economic costs and benefits through ECPA's promotion of e-mobility in the transport sector:
 - ECPA V shows a theoretical contribution to reducing the number of **127,017 deaths annually** as a consequence of **air pollution in the OAS Member States**
 - Assuming gradual electrification of transport 2019 and 2050 in five Latin American cities (Cali, Mexico City, Buenos Aires, Santiago, and San José), **US\$ 11,3 billion of environmental costs could be saved by 2050 through avoided CO2 emissions.**
 - In CARICOM, the fuel cost savings produced by electric mobility could total \$2.2 billion over 20 years.



The evaluation finds that the efficiency of the ECPA V was very high, with an “green” score (81 out of 100). In all nine sub-criteria, the project shows a strong to very strong performance³⁹.



3.1 Quality and appropriateness of logframe indicators

The logframe indicators of ECPA V are SMART (specific, measurable, achievable, relevant, and time-bound). While the indicators' quality is given, the appropriateness of a few output level indicators could be further strengthened.

Annex 6 outlines the current logframe indicators and minor suggestions on strengthening the results-focus of those indicators for any future phase of ECPA.



3.2 Use of results-based management principles

Overall, the evaluation finds fair use of results-based management principles. The project team used the OAS reporting templates such as the Report on Progress of Project Implementation (RPPI) and followed the processes duly.

The project used a logframe included in the project document. The RPPI contained baselines, targets, and a column on the status of actual achievements. Over the project implementation period between 2017 and 2020, the project team prepared five RPPIs.

Issues flagged in RPPIs were followed-up, and the results of corrective action were reported on in the "Issues and action" section of the RPPI. One example includes the pro-activeness of the host of the 2020 ECPA Ministerial Meeting to reach out to prospective partners for the event, which lead to the Government of Jamaica assigning additional staff to the preparations of the Ministerial.



3.3 Project monitoring

The project team's use of DPE's standardized RPPI template resulted in five monitoring reports of high quality. The monitoring followed ECPA's the logframe indicators and enabled systematic tracking of progress using baselines and time-bound targets.

The project team also tracked the assumptions and any changes over time.



3.4 Application of best practices in project design

As the final evaluation of ECPA IV has shown, the ECPA design evolved over time since its inception in 2009. The design of ECPA V includes results-based management principles following good practices and templates of DPE.

However, the validation of ECPA V's Theory of Change showed that an implicit assumption at the purpose level of governments' willingness to fund actions under the ECPA action plan was erroneous. Instead, external donor funding was required to fund the three projects under ECPA implemented after 2017, with the U.S. Department of State funding SID1603, SID1605, and SID1606.

In hindsight, this design shortcoming affected the implementation of ECPA V.

³⁹ Ratings by sub/criteria are as follows on the 0 to 3 scale: 3.1 = 2; 3.2 = 3; 3.3 = 3; 3.4 = 2; 3.5 = 3; 3.6 = 2; 3.7 = 2; 3.8 = 2 and 3.9 = 3. The numbering of the sub-criteria corresponds to the sub-sections of section 3 on efficiency. Total score: 22 out of a maximum score of 27 (3*9). Overall performance =SUM(22/27)*100 (81,48%).



3.5 Application of best practices in project implementation

The project team applies adaptive project management. With the outbreak of the COVID-19 pandemic, the OAS' Department of Sustainable Development introduced a telework plan and reconfiguration of in-person activities for ECPA.

Besides, the project team drives a robust multi-stakeholder approach. While this approach is very time and labor-intensive, it allows the project team to implement a partnership-based project efficiently. Evidence is the co-hosting and co-financing of ECPA events, significant cost-sharing as in the ECPA Ministerial Meeting in Jamaica in 2020, and evolving partnerships to tap into technical expertise. Examples are the Water-Energy nexus and member states' actions seeking to develop sustainable energy systems and meet targets for future energy development. Both ECPA initiatives were based on a cooperation with the Massachusetts Institute of Technology (MIT) in 2018, contracted by the program.

The evaluation also finds some evidence of ECPA being value for money for the U.S. taxpayer, i.e. the maximization of the reach and effects of each US \$ invested in ECPA V. Though the evaluation only found one documented example, the 2020 ECPA Ministerial Meeting in Jamaica showed a co-funding of 89.9% through ECPA partners, as shown in Figure 11. This high percentage of co-funding shows the ECPA project team's significant capacity to leverage funding from partners.

The telephone interviews showed that beyond the co-funding of ECPA events, other OAS Member States seem not in a position to contribute funding ECPA jointly with the U.S. Department of State. The COVID-19 pandemic has further aggravated this situation, as further explained in this report's sustainability section.

Figure 11 provides a breakdown of estimated partner contributions based on data reported in the forth RPPI.

Figure 11: Leverage of funds for the 2019 ECPA Ministerial Meeting in Jamaica

Partner	Contribution in US\$	Percentage
OAS	47.066	10,1%
Government of Jamaica	324.241	69,6%
IDB	50.000	10,7%
World Bank	25.000	5,4%
CARICOM	10.000	2,1%
SICA	10.000	2,1%
Total	466,307	100%

Source: OAS project team, 4th RPPI



3.6 Follow-up of training activities to assess changes in participants and institutions

The document review showed that the project team used post-event questionnaires/surveys for many of its events. The evaluation interviews underpinned that finding. However, participants were uncertain to what extent the use was systematic. Besides, the participation rate in the post-event evaluations was somewhat limited.

Only three participants completed the survey on electric mobility (e-mobility) (6,3% participation rate), ten participants on gender and energy (13,7% participation rate), and eight on urban resilience dialogue (11,8% participation rate).

Section 4.3 of this evaluation report explores the effects of ECPA on capacity building and knowledge exchange on the capacities of ECPA stakeholders addressing levels 3 and 4 of the Kirkpatrick model, behavior change and institutional results.



3.7 Cost-efficiency

The ECPA V budget presented in Figure 12 shows three main areas of spending: output 1 (multi-sector forum), 2 (technical cooperation), and 4 (Communication/dissemination).

Given that the technical cooperation remained more at the level of dialogue and knowledge exchange, the large size of project funding for output 2 could be questioned in hindsight. This finding seems particularly true in the context of Member States lacking the initiative in funding the priorities identified following the Ministerial Meeting in Chile (2018).

Also, the large budget for communication and dissemination, with over US \$ 210.000 for publications and promotional materials, seems rather at the high end for a project like ECPA. While this strong communication focus might be justified for projects with a significant research component or projects advocating change on topics where a consensus in society and politics is still required, this situation seems less the case in most OAS Member States. The energy transition policies and decarbonization strategies are one piece of evidence for Member States' commitment.

Figure 12: Budget of ECPA V

ECPA V outputs	US\$	Percentage
1. Multi-sector forum on clean energy facilitated	323.920	25,5%
2. Technical cooperation on energy infrastructure, energy efficiency, and energy integration implemented	338.810	26,6%
3. Technical and administrative support to the ECPA Steering Committee and Ministerial Meetings provided	98.190	7,7%
4. Information on the actions of ECPA geared toward advancing clean energy in the Americas disseminated	311.827,57	25,5%
5. Project planning, monitoring and evaluation	199.500	15,7%
SUB-TOTAL Direct Cost:	1.272.247,57	100%
Cost Contingency:	34.252,43	
TOTAL Direct Cost:	1.306.500	
Indirect Cost Recovery (ICR):	24,000	
TOTAL Project Costs:	1.330.500	

Data sources: ECPA project team

The evaluation of the OAS Sustainable Communities in Central America and the Caribbean Programme (SID-1203 and SID-1305), implemented under ECPA between 2012 and 2017, provides interesting insights into alternative budget structures to enhance cost-efficiency⁴⁰.

⁴⁰ OAS/Engelhardt, A., 2017: Evaluation of the Program Sustainable Communities in Central America and the Caribbean.

Alternative budget structure

It might have been interesting to create a budget line for **ECPA technical cooperation seed funding** of about US\$ 200.000 by significantly reducing funds for outputs 2 and 4, considering stakeholder needs and the realities of governments' reluctance to spending on energy projects.

Based on the OAS Sustainable Communities experience in Central America and the Caribbean Programme, project seed funding of US\$ 40.000 per technical cooperation project would have allowed ECPA V to provide seed funding for ten projects. Using the co-financing ratio of 1:1.49 achieved in the OAS Sustainable Communities in Central America and the Caribbean Programme, each project could have reached an average financial volume of about US \$ 59,600.

In the case of the OAS Sustainable Communities in Central America and the Caribbean Programme's "Grenada Project" addressing energy and recycling, the OAS managed to leverage even US \$ 550.000 from other sources such as Compete Caribbean, the German Cooperation and private funds (55%). The latter shows the potential to include the private sector in such investments through risk-sharing mechanisms like seed funding.



3.8 Cost-benefit of ECPA

As ECPA serves as an umbrella program, the cost benefit analysis focused on the results of projects implemented under ECPA. In this context, the evaluator took the following approach:

- Use of evaluation results from the "Coordination of CARICOM's Caribbean Sustainable Energy Roadmap and Strategy (C-SERMS)" (SID1603), implemented under ECPA V.
- Use of evaluation results of the Sustainable Communities in Central America and the Caribbean program, implemented under ECPA IV
- Comparison of the cost-benefit of ECPA V with ECPA IV

The evaluation finds that a full-fledged cost-benefit analysis for ECPA V is not possible due to the absence of the number of beneficiaries and any specific technical cooperation results. However, the evaluation managed to mitigate this shortcoming with some proxy data. As a result, the evaluator rated the cost-benefit of ECPA V as "amber-green."

Figure 13, presenting the comparative analysis between the two most recent phases of ECPA, shows that a direct comparison between the cost-benefit of ECPA IV and ECPA V is only partly possible due to different parameters and scope of the projects evaluated under ECPA. The only parameter allowing direct comparison is the co-financing rate, which is similar for both phases, 1 US\$: 1.49 US \$ for ECPA IV and 1 US\$: 1.35 US\$ for ECPA V⁴¹.

⁴¹ Co-financing of the Jamaica Ministerial Meeting amounted to US \$ 419,241.

Figure 13: Cost-benefit comparisons between ECAP IV and ECPA V

	Number of beneficiaries	Cost per beneficiary	Co-financing	Theoretical benefit for women	Environmental damages avoided
ECPA IV based on Sustainable Communities in Central America and the Caribbean Program (2012-2017)	146.258	US\$ 7.19	1 US\$: 1.49 US \$	6000 women (hydro-powered rural electrification in the Dominican Republic)	Direct contribution: US \$ 484.700 to US \$ 2.874.000 per year (through waste recycling in Grenada)
ECPA V based on C-SERMS but for the criterion of "co-financing"	Potentially entire population of CARICOM	N/A	1 US\$: 1.35 US\$ (based on data from Jamaica Ministerial Meeting in 2020, the flagship event of EVPA V compared to total project budget)	Over 3m women in CARICOM (Haiti and Guyana, rural electrification)	Theoretical contribution: US \$ 11,3 billion to US \$ 24,88 billion, (for Cali, Mexico City/Distrito Federal, Buenos Aires, Santiago, and San José, 2019-2050)

The theoretical contribution of ECPA V shows for over 3 million women in Haiti and Guyana through rural electrification and US \$ 11,3 billion to US \$ 24,88 billion savings of environmental damages through a gradual electrification of the public transport sector in Cali Mexico City/Distrito Federal, Buenos Aires, Santiago, and San José between 2019 and 2050. The latter is described in detail in the following section (3.9).

Given the thematic focus of ECPA V, the transport sector, electric-mobility⁴², and air pollution effects are best researched. As such, the evaluator used this thematic area for the proxy cost-benefit analysis of ECPA V, given ECPA's goal to "contribute to the adoption and widespread use of **clean energy** in the Americas", as presented in the Theory of Change. The evaluation's document review showed that ambient air pollution causes significant economic loss globally (IDB, 2020, European University Institute, 2020 and World Bank and the University of Washington/Seattle (2016)⁴³.

In the case of air pollution-related welfare losses, those losses increased in Latin America and the Caribbean by 85% between 1990 and 2013, accounting for 1.5% Gross Domestic Product (GDP) in the region (2013), according to the World Bank and the University of Washington/Seattle (2016)⁴⁴. Figure 14 provides details for the OAS Member States with available data. In total, air pollution-related welfare loss amounted to US \$ 681,048,000 in 2013 in selected OAS Member States, and the total forgone labor output reached US \$ 29,383,000.

⁴² Section 1.1. on the project background list e-mobility as one of ECPA V's core areas

⁴³ European University Institute. Robert Schuman Center for advanced studies. Florence School of Regulation, 2020: Electromobility in Latin America and the Caribbean. Can electromobility help solve health, traffic, environment, and energy problems in Latin America and the Caribbean (LAC)?

Inter-American Development Bank, 2020: ELECTROMOBILITY IN LATIN AMERICA AND THE CARIBBEAN, p. 10

World Bank and Institute for Health Metrics and Evaluation University of Washington, Seattle, 2016 : The cost of air pollution. Strengthening the economic case for action.

⁴³ Inter-American Development Bank, 2020: ELECTROMOBILITY IN LATIN AMERICA AND THE CARIBBEAN, p. 10

⁴⁴ 2.52

Figure 14: Air pollution-related welfare losses and forgone labor output in selected OAS Member States (2013)

OAS Member State (with available data)	Total welfare loss (million US \$)	Total forgone labor output (million US \$)	Total welfare loss GDP equivalent (%)
Costa Rica	748	43	1,14
Uruguay	818	17	1,24
Panama	912	32	1,26
Ecuador	2,721	113	1,64
Nicaragua	490	32	1,82
Bolivia	1,179	N/A	1,86
Mexico	37,709	1,815	1,89
Venezuela	12229	555	2,28
Peru	8,723	329	2,52
Colombia	15,046	916	2,58
Guatemala	2,879	323	2,64
Brazil	82,612	4,927	2,66
Canada	40,460	1,016	2,73
El Salvador	1,306	85	2,74
United States	454,675	18,127	2,80
Chile	10,855	369	2,83
Dominican Republic	3,792	232	3,09
Honduras	1269	171	3,51
Paraguay	1,909	168	3,59
Haiti	716	113	4,21
Total	681,048	29,383	

Source: World Bank and the University of Washington/Seattle (2016)⁴⁵

The countries most affected in 2013 were the Dominican Republic (3,09% of GDP), Honduras (3,51% of GDP), Paraguay (3,59% of GDP), and Haiti (4,21 of GDP), as shown in Figure 15. The high impact on two Caribbean neighboring countries on the island of Hispaniola seems significant. While the evaluation acknowledges that the data is not the most recent but most comprehensive one, even recent publications on the topic use data sets from 2010 to 2014⁴⁶.

The evaluation finds that if there have been a decrease of 0,00000195% decrease in the air pollution-related welfare loss in the 20 OAS Member States listed in Figure 14 during one year, this result would equal the total investment in ECPA V of US\$ 1,330,500⁴⁷.

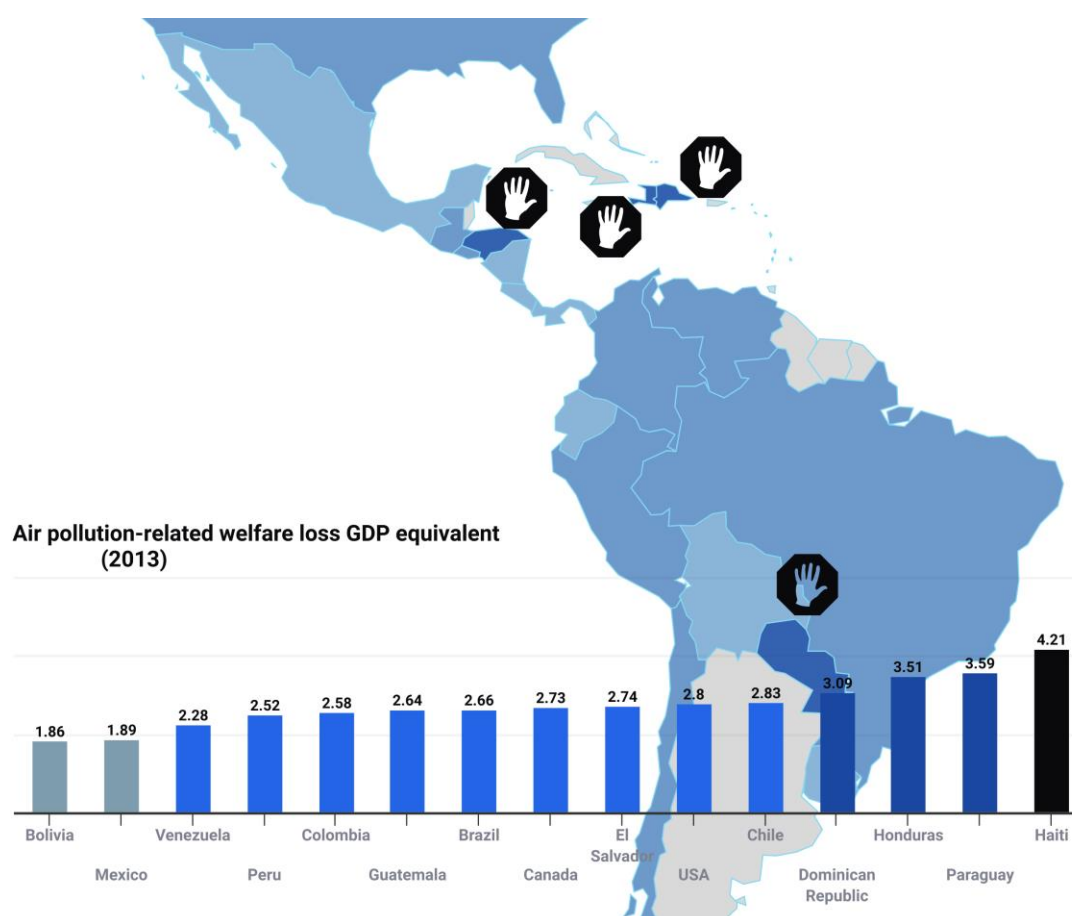
This information serves as a proxy for EVPA V's cost-benefit, given that it is impossible to calculate the quantitative cost-benefit of ECPA V's contribution to reduced air pollution through the promotion of e-mobility in the transport sector across the Western Hemisphere.

⁴⁵ World Bank and Institute for Health Metrics and Evaluation University of Washington, Seattle, 2016 : The cost of air pollution. Strengthening the economic case for action.
<http://documents1.worldbank.org/curated/en/781521473177013155/pdf/108141-REVISED-Cost-of-PollutionWebCORRECTEDfile.pdf>

⁴⁶ Islam, Z. (2019): Air quality situations in Latin America and the Caribbean. Munich. Girn Verlag.

⁴⁷ Based on the World Bank and the University of Washington/Seattle 2013 data.

Figure 15: Total annual welfare losses and GDP equivalent in selected OAS Member States (2013)



Design: A. Engelhardt 09/2020

3.9 Social and economic cost and benefits: a case study on e-mobility

The evaluation finds a theoretical contribution of the investment in ECPA V to benefits using the example of electric mobility (e-mobility). Due to the rich data available on e-mobility, the evaluation managed to present benefits of the investment in ECPA V to mainly health and environmental benefits and indirectly significant economic benefits. Those benefits are assessed on a theoretical attribution.

The IDB (2020) reported that **air pollution** is one of the world's most urgent **environmental hazards**, causing more than **3m premature deaths annually**, according to the World Health Organization (WHO).

Air pollution in the Americas

The pollution levels in capital cities of selected OAS Member States are often well beyond the maximum threshold of 10 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) set by the World Health Organization. According to the European Research Institute (2019), Brasilia ($54 \mu\text{g}/\text{m}^3$), La Paz ($44 \mu\text{g}/\text{m}^3$), Lima ($39 \mu\text{g}/\text{m}^3$), Santiago ($29 \mu\text{g}/\text{m}^3$), and Ciudad de Mexico ($22 \mu\text{g}/\text{m}^3$) are a group that requires urgent action. Quito ($18 \mu\text{g}/\text{m}^3$), Bogota ($15 \mu\text{g}/\text{m}^3$), and Buenos Aires ($12 \mu\text{g}/\text{m}^3$) are in the middle part of the chart. Finally, Montevideo ($8 \mu\text{g}/\text{m}^3$) is an

exception among this group⁴⁸.

Citing WHO, IDB (2020) states that as a consequence of the emission of particulate matter (PM10), internal combustion vehicles are responsible for diseases related to the respiratory and cardiovascular systems, cancer, and adverse reproductive outcomes⁴⁹.

Adverse health effects

The evaluator calculated that **127,017 people die prematurely each year** due to **atmospheric contamination** in the OAS Member States, using WHO data (2016).⁵⁰ The consequences are also economical, with developing economies with increasing rates of motorization, such as Mexico spending millions of dollars in health costs caused by pollution⁵¹. Figure 16 provides insights into country-level data.

The evaluator calculated that the number of air pollution related deaths per 100.000 persons are highest in CARICOM countries, with seven out of the ten countries with the highest death toll being located in the Caribbean. On the top of the table are Guyana (29.2 deaths per 100.000 persons), Haiti (26.5) and Trinidad and Tobago (25.1). Guyana presents nearly three times the levels of deaths registered in Panama (9.9) or Ecuador (10.1), as shown in Figure 16.

Parts of Central America (El Salvador with 23.1 deaths per 100.000 persons and Nicaragua with 18.8 deaths per 100.000 persons) form another cluster, followed by Argentina and Bolivia (both 21.6).

The United Nations (2019) estimate that over 400.000 deaths could be avoided in the cities of Cali, Mexico City/Distrito Federal, Buenos Aires, Santiago, and San José between 2019 and 2050, assuming gradual electrification of 50% of transport in these cities by 2030 and reaching 100% by 2050⁵².

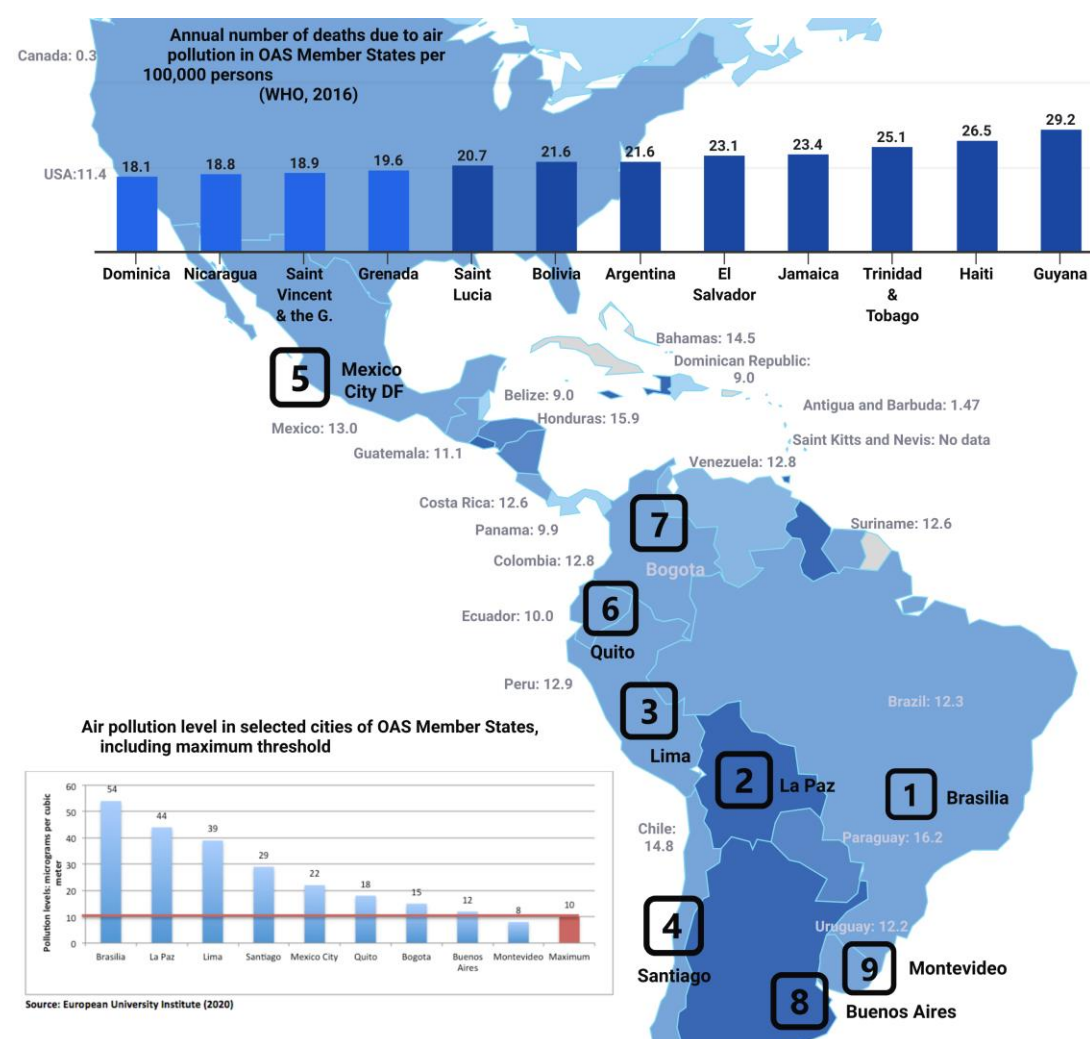
⁴⁸ European University Institute. Robert Schuman Center for advanced studies. Florence School of Regulation, 2020: Electromobility in Latin America and the Caribbean. Can electromobility help solve health, traffic, environment, and energy problems in Latin America and the Caribbean (LAC)?

⁴⁹ Inter-American Development Bank, 2020: ELECTROMOBILITY IN LATIN AMERICA AND THE CARIBBEAN, p. 10

⁵⁰ WHO, 2016: Ambient Air pollution: a global assessment of exposure and burden of disease. Annex 2: Deaths, YLLs and DALYs attributable to ambient air pollution, by country
<https://apps.who.int/iris/bitstream/handle/10665/250141/9789241511353-eng.pdf?sequence=1>

⁵¹ Inter-American Development Bank, 2020: ELECTROMOBILITY IN LATIN AMERICA AND THE CARIBBEAN, p. 10

⁵² UNEP, 2019: Electric mobility: status in Latin America and the Caribbean and opportunities for regional collaboration 2019, page 17.

Figure 16: Air pollution and related deaths in the OAS Member States (2016)

Design and calculations: A. Engelhardt 10/2020

Role of the transport sector

In this context, transport is a crucial emissions mitigation sector, and in the Caribbean, for example, accounted for around 20% of emissions in 2015. Per unit of GDP, transport emissions are much higher than in other countries⁵³.

The important role of public transport for urban air pollution emerged in the evaluation of the OAS' Program Sustainable Communities in Central America and the Caribbean in the case of Guatemala City, implemented under ECPA between 2012 and 2017.⁵⁴

Recent research from the European University Institute (2020) confirms that finding for other parts of the Americas. "Lima, with over 10 million inhabitants, concentrates one third of the national population and 81% of their daily trips are based on public transportation. Trips done in means of transportation granted in concession (Bus Rapid Transit, corridor buses and one subway line) only account for 10% of these trips. A non-negligible 30% of these trips use (formal and informal) taxis, but the majority (almost 60%) is done with buses belonging to the "regular system". This is a non-integrated and non-planned system with no formal bus stops

⁵³ Vergara, W, J V. Fenhann, and M C. Schletz. "Zero Carbon Latin America - A pathway for net decarbonization of the regional economy by mid-century: Vision paper." 2015. UNEP DTU Partnership. https://backend.orbit.dtu.dk/ws/les/123115955/Zero_Carbon_Latin_America_rev.pdf.

⁵⁴ OAS/Engelhardt, A., 2017: Evaluation of the Program Sustainable Communities in Central America and the Caribbean.

and no regulated prices or quality. Furthermore, the fleet is outdated (and thus, very polluting): 42% of the fleet of these buses are more than 15 years old. This situation, that may be shared to some extent by many cities in LAC, is also an opportunity to reform and electrify our public transport systems".⁵⁵

Electrification of transportation

The potential for change emerges in Peru's neighboring country, Chile. The European University Institute (2020) reports that during 2016 and 2017, Santiago started with a pilot project of two buses. In 2018 the city incorporated 100 more units, and finally, in 2019, 183 buses were added. These buses have 250 kilometer (km) of range, have air conditioning systems, and take between 3 and 4 hours to fully charge. With currently 285 electric buses in Santiago's public transport system, the city expects to have 2000 electric buses in 2022, this would account for 30% of the total fleet of buses⁵⁶

What would be the effects of an electrification of transportation in selected cities in the OAS Member States?

Cost saved and economic benefits

The economic cost of emissions saved is considerable between 2019 and 2050, assuming gradual electrification of 50% of transport in these cities by 2030 and reaching 100% by 2050. The evaluator calculated that the environmental costs saved through avoided CO2 emissions (based on a cautious cost estimate of the US government of US\$37/ton⁵⁷) could amount under the above-described circumstances to US\$ 11,3 billion for the selected cities. Figure 17 provides detailed data for each of the five cities.

Figure 17: Effects of gradual electrification of transport sector in 5 Latin American cities (2019 to 2050)

	CO2 avoided (million tons)	Avoided deaths by decreasing air pollution	US\$ in environmental costs saved through avoided CO2 emissions (US government estimate of US\$37/ton)
Cali (Colombia)	29,0	24,664	1,073,000,000
Mexico City/ Distrito Federal	142,6	180,117	5,276,200,000
Buenos Aires	82,8	207,672	3,063,600,000
Santiago de Chile	27,7	13,003	1,024,900,000
San Jose de Costa Rica	23,5	9,923	869,500,000
Total	305,6	435,378	11,307,200,000

Source: United Nations Environment Program (UNEP), 2019

⁵⁵ European University Institute. Robert Schuman Center for advanced studies. Florence School of Regulation, 2020: Electromobility in Latin America and the Caribbean. Can electromobility help solve health, traffic, environment and energy problems in Latin America and the Caribbean (LAC)?, un-numbered.

⁵⁶ European University Institute. Robert Schuman Center for advanced studies. Florence School of Regulation, 2020: Electromobility in Latin America and the Caribbean. Can electromobility help solve health, traffic, environment and energy problems in Latin America and the Caribbean (LAC)?, un-numbered.

⁵⁷ <https://news.stanford.edu/2015/01/12/emissions-social-costs-011215/>

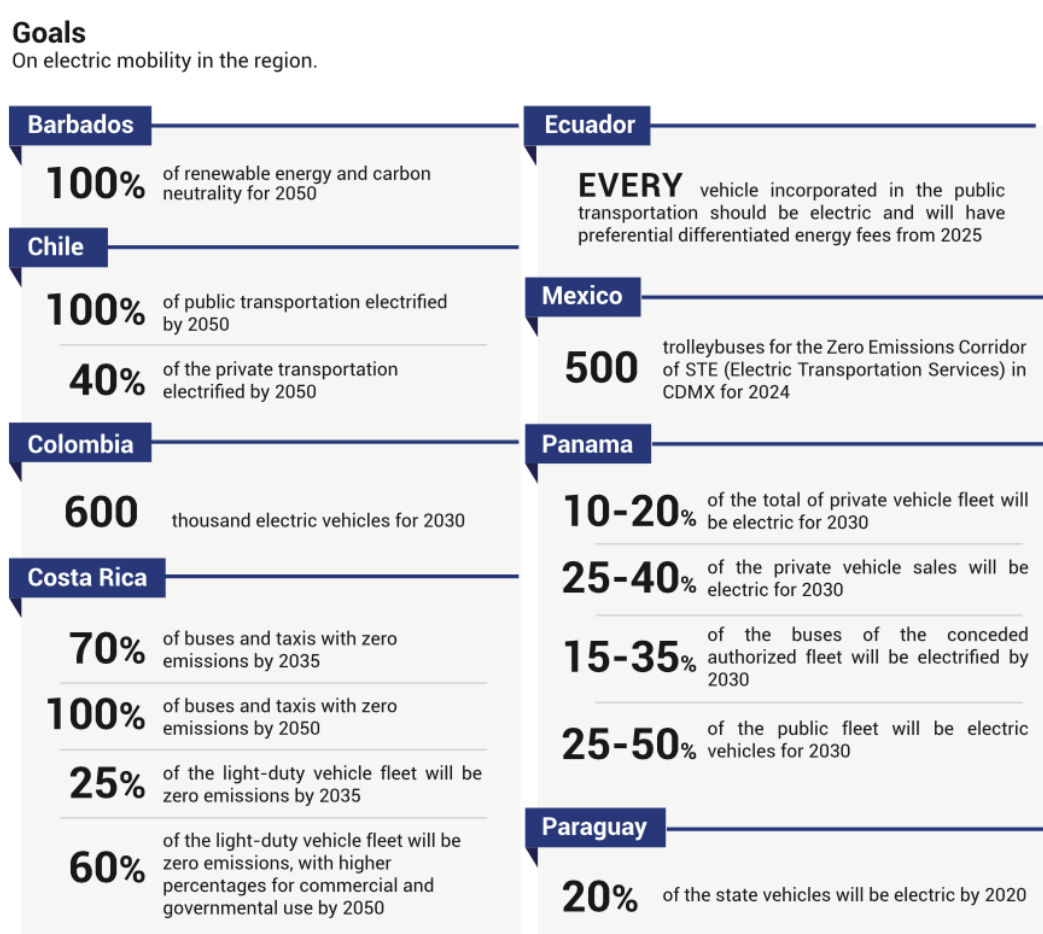
The environmental costs saved through avoided CO₂ emissions could amount up to US\$ 24,88 billion for those cities between 2019 and 2050 based on Stanford University's estimated price tag of US\$ 220/ton CO₂⁵⁸.

In CARICOM, the fuel cost savings produced by electric mobility (not counting the increased electricity cost) could total \$2.2 billion over 20 years⁵⁹. In Barbados, according to its 2019-2030 National Energy Policy, by 2023, the Barbadian government intends to achieve a 49% nationwide reduction in fossil fuel consumption, which will produce energy savings of US \$200-400 million⁶⁰.

From theory to specific target setting

While the above calculations are theoretical, OAS Member States have set targets for electric mobility, as shown below for selected countries⁶¹.

Figure 18: Goals on electric mobility in selected countries of the Western Hemisphere



Source: UNEP, 2019: Electric mobility: status in Latin America and the Caribbean and opportunities for regional collaboration 2019, page 22.

⁵⁸ Ibid.

⁵⁹ Castalia Strategic Advisors, 2019: "CARICOM Sustainable Energy Path Final Report: Report to the Inter-American Development Bank," 76.

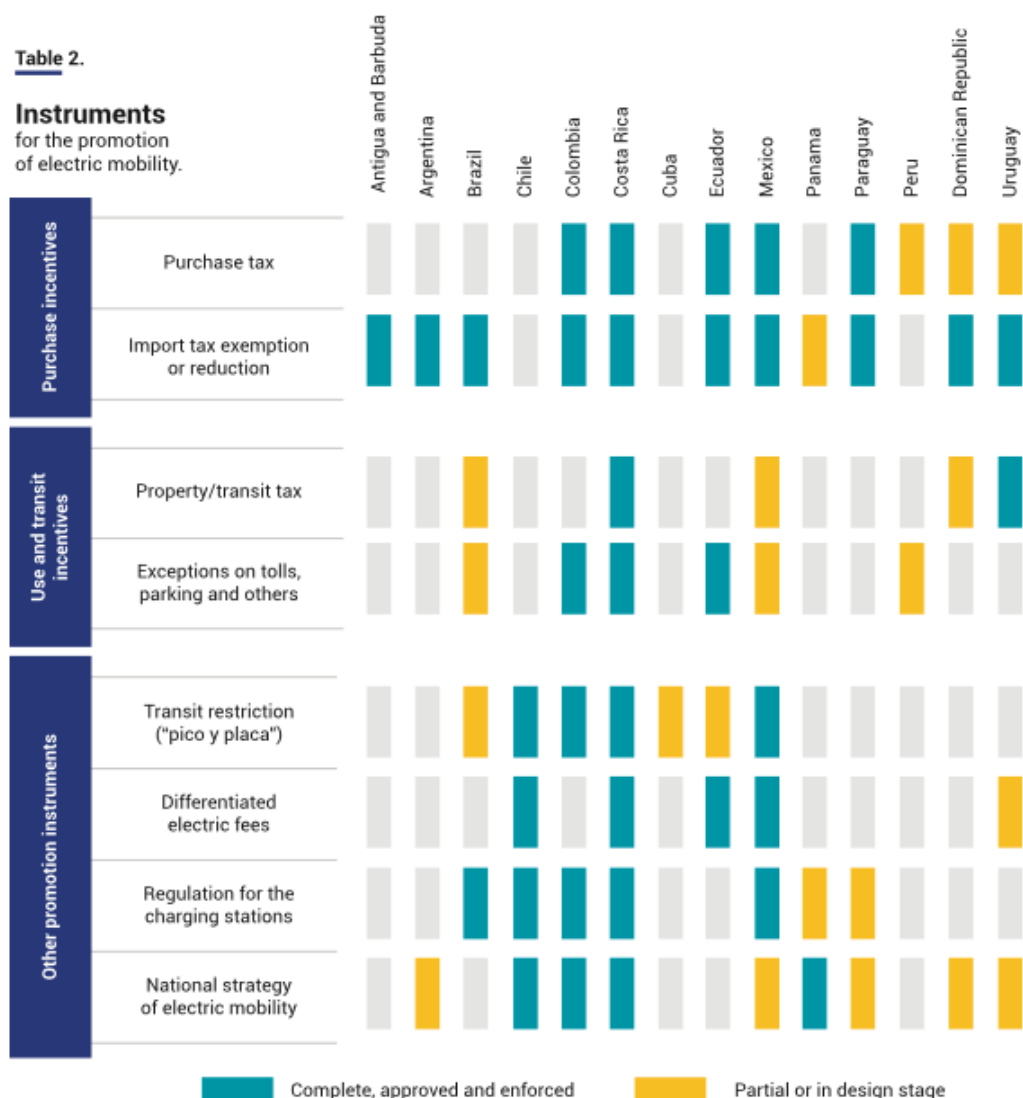
⁶⁰ Barbados Ministry of Energy & Water Resources, 2019: National Energy Policy 2019-2030," p. 22.

⁶¹ UNEP, 2019: Electric mobility: status in Latin America and the Caribbean and opportunities for regional collaboration 2019, page 22.

The United Nations also analyzed the enabling environment for such targets to be achievable, including purchase incentives, use, and transit incentives, and other promotion instruments. Figure 19 shows that countries most advanced with purchase incentives comprise Colombia, Costa Rica, Ecuador, Mexico, and Panama. Concerning use and transit incentives, Costa Rica is the most advanced.

Other promotion incentives such as exception from transit restrictions, differentiated electric fees, or regulation for charging stations are most advanced in Chile, Costa Rica, and Mexico.

Figure 19: Instruments for the promotion of e-mobility



Source: UNEP, 2019: Electric mobility: status in Latin America and the Caribbean and opportunities for regional collaboration 2019, page 21.

Where does the additional electricity come from?

How will countries produce additional electricity to move towards e-mobility in the transport sector boldly? Countries certainly need to ensure that this increased production will be based on clean energy, because, otherwise, decision-makers would just be translating pollution from

cities to areas where energy plants are located. Considering that currently, 25% of the world's total energy is generated with renewable energy, this is a huge opportunity to continue the energy transition for existing and upcoming needs of energy. In LAC, energy generation is relatively clean: renewable energy (considering large hydroelectric projects) is actually 68% of the total production⁶².

OAS Member States in pool position for e-mobility

IDB (2020) finds that e-mobility is rightfully high on the clean energy agenda in the Americas. Latin America and the Caribbean is a region particularly suitable for the proliferation of electromobility solutions, as “it is a region that is notable for its clean electricity generation matrix. Its levels of emissions for every kWh of energy produced is below worldwide average. For every kWh of electricity produced, 386 g of carbon dioxide are emitted in LAC, while in other regions such as Southeast Asia, 453 g of carbon dioxide are emitted and in the Middle East and North Africa, the carbon dioxide emitted are 634 g.

The energy sector in Latin America and the Caribbean is also remarkable for its success in lowering renewable energy prices. The combination of technology advances and effective policies that has prevailed in the region has achieved prices for a Megawatt hour (MWh) equal or less to 20 US\$⁶³.

⁶² European University Institute. Robert Schuman Center for advanced studies. Florence School of Regulation, 2020: *Electromobility in Latin America and the Caribbean. Can electromobility help solve health, traffic, environment and energy problems in Latin America and the Caribbean (LAC)?*

⁶³ Inter-American Development Bank, 2020: *ELECTROMOBILITY IN LATIN AMERICA AND THE CARIBBEAN*, p.12

4. Effectiveness: were project results achieved, and how?

This section analyses the achievement of ECPA V results under the evaluation criterion of effectiveness. The sub-criteria follow the evaluation TOR and based on the agreed evaluation matrix and work plan. Those effectiveness sub-criteria encompass: i) the achievement of program objectives using the logframe indicators at the goal level (3 indicators), purpose level (4 outcome indicators) and output level (5 indicators); ii) effects on ECPA stakeholders; iii) behavior change and institutional results; iv) factors influencing program results; v) unintended program results, and vi) results for women. In total, the evaluation rated 15 sub-criteria.

The data sources used as the evidence base for the effectiveness section are the document review, interviews, and the online survey.

Key findings: ECPA V achieved most of the planned results and showed good effectiveness.

- The program shows good progress to achieving targets for two out of the three goal level indicators by 2020 and 2025, respectively; only an increase from the high US \$ 10 billion clean energy foreign investment baseline in 2017 seems very challenging, particularly in the context of the COVID-19 crisis;
- Three out of four targets for outcome indicators are met; 11 out of 14 targets are met for the five output indicators;
- Stakeholders rated ECPA V most successfully in disseminating information on advancing clean energy in the Americas (78%) and the technical and administrative support to the ECPA Steering Committee (78%);
- Least prosperous areas comprise shared leadership and cooperation on: i) financing mechanisms to de-risk energy transition (41%); ii) resilient energy infrastructure planning (49%), and iii) implementation of technical cooperation (53%);
- Stakeholders rate the attribution of ECPA's effects as high (74%), particularly by giving smaller OAS Member States a voice and a learning platform;
- Most robust performance in enhancing the preparedness of dealing with energy-related issues due to enhanced knowledge of relevant tools, processes, products, and practices (79%) and improvements on policy capacity of governments in the energy sector (78%);
- Internal factors affecting program performance are i) Small but very highly skilled, efficient, and responsive project team on the positive side and the lack of funding and the absence of specific technical cooperation projects under ECPA on the negative side;
- External factors affecting program performance are i) Strategic importance of the energy sector for the U.S and the private sector pushing clean energy agenda. Negative factors are the economic effects of COVID-19 on the implementation of clean energy agendas;
- Unintended results: the switch from program events in Washington DC and program countries to virtual events due to the COVID-19 pandemic saved significant amounts of time and money, enabling the project team to increase the share of its technical work from about 20% to 80% as the administrative burden for organizing in-person events vanished;
- In response to a recommendation in the final evaluation of ECPA IV, the project team tried to position gender more dominantly on the ECPA V agenda. However, ECPA V falls short of a fully-fledged gender component.



The evaluation finds that ECPA V shows a very high effectiveness, with a score of 76 out of 100 ("green")⁶⁴.

4.1 Achievement of program objectives

GOAL

"To contribute to the adoption and widespread use of clean energy in the Americas."

For the goal level, ECPA V used three performance indicators with targets set beyond the timeframe of the program funding (2022 and 2025). As the goal level states the program's intended impact, targets dated beyond the program funding are acceptable. The evaluator assessed the progress made against the goals level targets in this sub-section and provides ratings for the three goal level indicators.



Goal level indicator 1.1 Private financing mobilized for renewable energy and energy efficiency deployment increases by 15% by 2022 (source: Climatescope 2017)

Status 2018: 33% decrease from the US \$ 10 billion clean energy foreign investment baseline the 2017 to US \$ 6.7 billion in 2018⁶⁵



Goal level indicator 1.2 By 2022, 10 member states are ranked amongst the 20 most attractive emerging markets for clean energy investment globally (source: Climatescope 2017)

Status 2019: 6 member states (Brazil, Mexico, Chile, Uruguay, Argentina, and Peru) are ranked amongst the 20 most attractive emerging markets for cross-border clean energy investment globally. Honduras follows on position 21, Panama on position 24, and Costa Rica on position 25⁶⁶.



Goal level indicator 1.3 By 2025, 25 Member States are implementing initiatives related to energy infrastructure, energy efficiency, or energy integration priorities

Status 2018: Investments in renewable energy capacity documented for 17 OAS Member States (Climatescope 2019 and Frankfurt School of Finance and Management/UNDP, 2019).

Starting from a high ECPA baseline, those investments mostly dropped in 2018, but significant investments were still undertaken. Results are as follows: Mexico (US \$ 3.8 billion, -38%), Brazil (US \$ 3.4 billion, -44%), Argentina (US \$ 1.9 billion +15%), Chile (1.3 billion, -38%), Dominican Republic (US \$ 0.4 billion, +86%), Colombia (US \$ 0.2 billion, +1870%), and Panama US \$ 0.2 billion, +358%)⁶⁷

⁶⁴ The ratings for the evaluation sub-criteria by sub-sections 4.1 to 4.6 in this effectiveness chapter of the evaluation report are as follows : 4.1 = 0, 2 and 2 at the goal level, 3, 3, 3 and 3 at the purpose level and 3, 3, 3, 2, and 3 at the output level; 4.2 = 2; 4.3 = 2; 4.4 no rating; 4.5 no rating; 4.6 = 1. Total score: 34 out of a maximum score of 45 (15*3). Overall performance = $\text{SUM}(34/45) * 100$ (75,555%)

⁶⁵ Source: <https://global-climatescope.org/assets/data/reports/climatescope-2019-report-en.pdf>, page 37)

⁶⁶ Source: <https://global-climatescope.org/clean-energy-investments> 2019).

⁶⁷ Frankfurt School of Finance and Management/UNDP, 2019: Global trends in renewable energy investment 2019

Besides those 7 OAS Member States, Climatescope identified cross-border clean energy investments in 2019 also in other countries: Uruguay, Peru, Honduras, Costa Rica, Nicaragua, Bolivia, El Salvador, Guatemala, Jamaica, and Ecuador. Hence investments in renewable energy capacity are documented in a total of 17 OAS Member States. The United Nations Conference on Trade and Development's (UNCTAD) World Investment Report (2019) makes no further references to renewable energy investments in additional OAS Member States⁶⁸.

⁶⁸ World Investment Report (2019)

Project purpose (outcome):

“Shared leadership and cooperation in energy infrastructure, energy efficiency, and energy integration strengthened at the regional level”

Based on RPPI data from March 2020, the evaluation finds that the outcome is mainly achieved, with three out of the four targets for the outcome level indicators already met nine months before the project's end. Given the volatility of the energy sector, the evaluation finds that targets were realistically set.



Outcome indicator 1: *At least 3 governments in the region assume a leading role in organizing and hosting one or more dialogues, public-private meetings, workshops, technical exchange missions, or senior expert visits at the end of project execution.*

According to the fifth RPPI, three countries assume a leading role under the ECPA umbrella: **Chile, Costa Rica, and Jamaica.**

Jamaica: The fifth RPPI states that the “Government of Jamaica is assuming a leading role in renewable energy in the Caribbean, especially wind and solar, and is using ECPA as a partnership to advance its leadership. The ECPA Ministerial held in Montego Bay on February 27-28, 2020, serves as an indication of the country's leadership in renewable energy”⁶⁹ The evaluation finds this leading role verified by the Government of Jamaica's high share of funding for the 2020 Ministerial Meeting (US \$ 324,241, 69,6%).

Chile is assuming a leading role in electric mobility in the Americas and is using ECPA as a partnership to advance its leadership, as reported in the forth RPPI⁷⁰. The evaluation coincides with the project team that this leadership role is shown by the ECPA event the country hosted in May 2019, as verified by the evaluation. Section 2.3 also underpinned that leadership role.

Costa Rica is assuming a leading role in decarbonization in the Americas, as shown by the Steering Committee's discussions, the events it hosted in April 2019, and the one it hosted in October during Pre-COP25. The country uses several international fora as vehicles to advance its leadership, ECPA being one of them⁷¹.



Outcome indicator 2: *By the end of the project, 2 or more beneficiaries or partners are cooperating in initiatives addressing specific energy infrastructure, energy efficiency, or energy integration priorities identified in the ECPA Action Plan.*

By March 2020, ECPA V managed to facilitate three cooperation initiatives, exceeding the logframe target.

1. OAS/DSD facilitated collaborative actions on energy efficiency between Mexico and the Dominican Republic. Mexico offered to support the Dominican Republic in its efforts to improve energy management and efficiency by putting together an initial capacity building

⁶⁹ OAS, 2019: RPPI - Energy and Climate Partnership for the Americas (ECPA) V. October 2019 – March 2020. Page 15.

⁷⁰ OAS, 2019: RPPI - Energy and Climate Partnership for the Americas (ECPA) V. April - September 2019. Page 13.

⁷¹ Ibid.

webinar. A technical exchange programmed for the first quarter of 2020 was postponed due to the Covid-19 outbreak⁷².

2. The fifth RPPI reports that “Jamaica, in collaboration with the OAS, the IDB, the World Bank, Americas Business Dialogue, IRENA, the CARICOM Secretariat, the SICA Secretariat, United Nations (UN) Environment, and other partners, joined forces to convene the ECPA Ministerial meeting. The collaboration included financial and in-kind support to the organization of the event.

3. Finally, the OAS, the IDB, the Inter-American Dialogue, and New Energy Events worked jointly and collaborated with several countries to advance the issue of electric mobility in the Americas, according to the fifth RPPI.



Outcome indicator 3: *“By the end of the project, at least 80% of the Member States that have identified initiatives in the Action Plan are implementing one or more of them”.*

The evaluation finds that the target for this indicator is met. At the ECPA Ministerial meeting held in Montego Bay, Jamaica, in February 2020, 29 delegations shared their country's progress concerning the ECPA Action Plan.



Outcome indicator 4: *“By the end of the project, at least 80% of ECPA focal points (NFP) express that discussions under ECPA have facilitated cooperation or partnerships”.*

No data is available for this indicator in the RPPIs. The project team plans to conduct a survey among NFPs and Permanent Missions engaged in the project by the end of the ECPA V project cycle. However, the evaluation used several proxy indicators to assess progress on this outcome level indicator. 24 NFPs and Permanent Missions representing 13 OAS Member States rated the utility of ECPA V events as very high (87%). 23 out of the 24 respondents were satisfied, with only one respondent being unsatisfied (4%).

Concerning the satisfaction rate of ECPA as a multi-sector forum on clean energy, 71,4% of respondents⁷³ provided high to very high satisfaction ratings according to the evaluator's online survey. 81% of stakeholders rated their overall satisfaction with ECPA V achieving its objectives as high or very high⁷⁴.

⁷² OAS, 2019: RPPI - Energy and Climate Partnership for the Americas (ECPA) V. October 2019 – March 2020.

Page 13. and OAS, 2019: RPPI - Energy and Climate Partnership for the Americas (ECPA) V. October 2019 – March 2020. Page 16.






⁷³ n=21

⁷⁴ n=21

Outputs

Even before the end of the project cycle and often using data from March 2020, the project meets targets for four out of five output level indicators with a good result. Figure 20 summarizes the output level results.

Figure 20: Achievement of ECPA V output level indicator targets

ECPA V outputs	Logframe indicator target achievement	Comments
 Output 1. <i>“Multi-sector forum on clean energy facilitated”</i>	3 out of 3 targets	
 Output 2. <i>“Technical cooperation on energy infrastructure, energy efficiency, and energy integration implemented”</i>	3 out of 4 targets	Target for indicator 2.4 was in progress of being met in March 2020.
 Output 3. <i>“Technical and administrative support to the ECPA Steering Committee and Ministerial Meetings provided”</i>	2 out of 2 targets	
 Output 4. <i>“Information on the actions of ECPA geared toward advancing clean energy in the Americas disseminated”</i>	2 out of 4 targets	Data on one indicator pending data collection at the end of the project.
 Output 5 <i>“Project planning, monitoring and evaluation”</i>	1 out of 1 target mostly met	The quality of RPPIs is very high, which is not captured in the indicator.



Output 1. *“Multi-sector forum on clean energy facilitated”*

The evaluation finds that output 1 is met, with the targets for all three indicators being exceeded.

Indicator 1.1: *“By the end of the first half of the project, at least 50 participants attend the public dialogues, and, by the end of the project, a total of 160 participants (men and women) attend said dialogues”*. By March 2020, already 476 stakeholders attended ECPA V events, according to the fifth RPPi⁷⁵. The participants' lists annexed to the RPPIs serve as sources of evidence to verify that the target has been exceeded. Besides, those stakeholder lists served the evaluator for contacting stakeholders to participate in the evaluation's online survey for the sampled events.

⁷⁵ Again, the evaluation finds that the targets were realistically set in the project document, given the volatility of the energy sector.

Indicator 1.2: *“By the end of the first half of the project, at least 50 participants attend the meetings to facilitate public-private partnerships and, by the end of the project, a total of 160 participants (men and women) attend said meetings”.*

The evaluation finds that this target was again exceeded. According to the RPPIs, 202 participants attended events on public-private partnerships. The participants’ lists are annexed to the respective RPPIs.

Indicator 1.3: *“80% of participants surveyed after the events consider that the meetings and public dialogues allow for the establishment of partnerships”.* The RPPI reports a 96% satisfaction rate of the participants, exceeding the 80% target based on project-administered surveys.



Output 2. *“Technical cooperation on energy infrastructure, energy efficiency, and energy integration implemented”*

The evaluation finds that output 2 is mostly met, with the targets for three out of the four indicators being met or exceeded. The target for indicator 2.4 was in progress of being met in March 2020.

Indicator 2.1 *“By the end of the first half of the project, 2 countries share their experiences, practices or lessons learned with other countries in the region and, by the end of the project, a total of 6 countries do so”.*

The fifth RPPI states that the target of 6 countries had already been exceeded by March 2020, with 15 countries sharing their experiences during various ECPA V events between 2017 and 2020. Those countries are Antigua and Barbuda, Argentina, Barbados, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Jamaica, Mexico, Panama, Paraguay, Saint Lucia, United States, and Uruguay. The fifth RPPI lists the events and also contains the participants’ list, for example:

- Costa Rica shared its experiences in urban mobility during an event held at the Pre-COP25
- Antigua and Barbuda and Barbados shared experiences on gender and energy during a public dialogue held at the OAS
- Chile, Colombia, Mexico, Saint Lucia, and the United States shared their experience in building urban resilience during a public dialogue held at the OAS
- Argentina, Brazil, Chile, Colombia, and United States shared an analysis on natural gas to increase grid reliability and resilience during a dialogue held at the OAS

Indicator 2.2 *“By the end of the first half of the project, at least 8 countries participate in workshops, technical exchange missions, or senior expert visits either as recipients or providers of technical cooperation and, by the end of the project, the number of participating countries is 20”*

The fifth RPPI states that a total of 21 countries participated in technical meetings convened on the sidelines of the ECPA Ministerial in Montego Bay, Jamaica, either as recipients or providers of technical cooperation. The evaluation validated the participation through participant’s lists.

Indicator 2.3: *“80% of participants surveyed after each workshop, exchange mission or senior expert visit, consider that the activity has strengthened their technical capacity in a specific field of clean energy”*

The RPPI reports an 86.5% satisfaction rate of the participants, exceeding the 80% target based on project-administered surveys.

Indicator 2.4: “By the end of the project, 5 concrete collaboration actions are facilitated”

By March 2020, the project team reported four actions with details and further evidence in the RPPI annexes. The fifth RPPI specifies those actions as follows:

- Instance #1: OAS/DSD facilitated communications between Mexico and the Dominican Republic for a webinar on energy efficiency.
- Instance #2: During the Steering Committee meetings, Chile and Costa Rica discussed instances in which they collaborated with each other on issues pertaining to electric mobility facilitated by ECPA.
- Instance #3: The IDB, the World Bank, and the OAS collaborated with Jamaica, under the auspices of ECPA, to convene the ECPA Ministerial meeting. The collaboration included financial and in-kind support to the organization of the event.
- Instance #4: OAS and ABD are collaborating to promote private sector engagement under the ECPA umbrella. Additional activities are being planned for 2020, in furtherance of greater private sector engagement. Some of these activities are being delayed due to the lockdown imposed in several countries in response to the Covid-19 outbreak.



Output 3. “Technical and administrative support to the ECPA Steering Committee and Ministerial Meetings provided”

The targets for outputs 4 are met based on the two respective logframe indicators.

Indicator 3.1: By the end of the first half of the project, Permanent Missions to the OAS and/or National Focal Points meet virtually or in-person for at least 12 Steering Committee meetings and, by the end of the project, a total of 30 meetings is convened.

The fifth RPPI lists 27 meetings by March 2020, with the project being on route to meet the logframe target by the end of December 2020.

Indicator 3.2: By the first semester of 2019 at least 20% of the Member States that have identified initiatives in the Action Plan have presented information to the Steering Committee related to their initiatives, and by the first semester of 2020, the number of Member States that are reporting information increase from 20% to at least 40%

During the First Regional Preparatory Meeting of the ECPA Ministerial convened on November 8, 2018, in Miami, 22 Member States (64,7%) presented information about current actions implemented at the national level. The logframe target is met. The most important themes were addressed in eight side events convened on the ECPA Ministerial Meeting sidelines in Jamaica in 2020. The fifth RPPI presents further evidence in annexes.



Output 4. “Information on the actions of ECPA geared toward advancing clean energy in the Americas disseminated”

For output 4, two out of four targets are met, with data on one indicator pending data collection at the end of the project.

Indicator 4.1 *"By the end of the first half of the project, webpage views increase from 34,000 to 36,000 per year, and, by the end of the project, page views increase from 36,000 to 39,000 per year".*

The number of ECPA website views amounted to 39,512 despite an interruption in reporting between March-September 2019 due to the web host's cancellation of data collection without prior notice. The breakdown of website views by RPPI is as follows:

RPPI #1: 10,708
RPPI #2: 10,912
RPPI #3: 11,240
RPPI #4: No data
RPPI #5: 6,652
Total: 39,512

Indicator 4.2 *"By the end of the first half of the project, the newsletter subscriber mailing list increases from 3,000 to 3,100, and, by the end of the project, the subscriber mailing list increases from 3,100 to 3,300".*

The fifth RPPI reports that the total number of newsletter subscribers for the reporting period is 3,019, with further evidence provided in an annex. As such, the total number of subscribers scarcely increased from the 2017 baseline.

Indicator 4.3: *"One ECPA newsletter published each month, for a total of 36 newsletters at the end of the project, featuring at least 8 news or articles addressing gender, or highlighting the work of women in clean energy".*

My March 2020, ECPA produced 30 newsletters in English and Spanish, according to the fifth RPPI. The search on the ECPA website showed that newsletters are added monthly, for example, for July, August, and September 2020.

Hence, the project team exceeded the target of 36 newsletters.

ECPA published nine stories that "highlight women's work in clean energy," including a story from Haiti or that make it a point to quote female experts or mention the specific impact of a policy on women or men.

Indicator 4.3: *"By the end of the project, 75% of the NFPs and Permanent Missions engaged in the project are satisfied with the quality, timeliness, and usefulness of the information provided by the ECPA website".*

No data is available for this indicator. The project team plans to conduct a survey among NFPs and Permanent Missions engaged in the project by the end of the project.



Output 5 "Project planning, monitoring and evaluation"

Indicator 5.1 *By the end of the project, 7 half-yearly Reports on Project Progress in Implementation and 1 Final Project Report are submitted.*

By March 2020, the project team had produced five half-yearly reports, and a sixth one is due in November 2020. While the target of seven reports might not be met by one report⁷⁶, more importantly, the quality of those RPPIs is very high, with evidence provided for the data reported. The attention to detail and quality is reflected in the multiple annexes to each RPII.

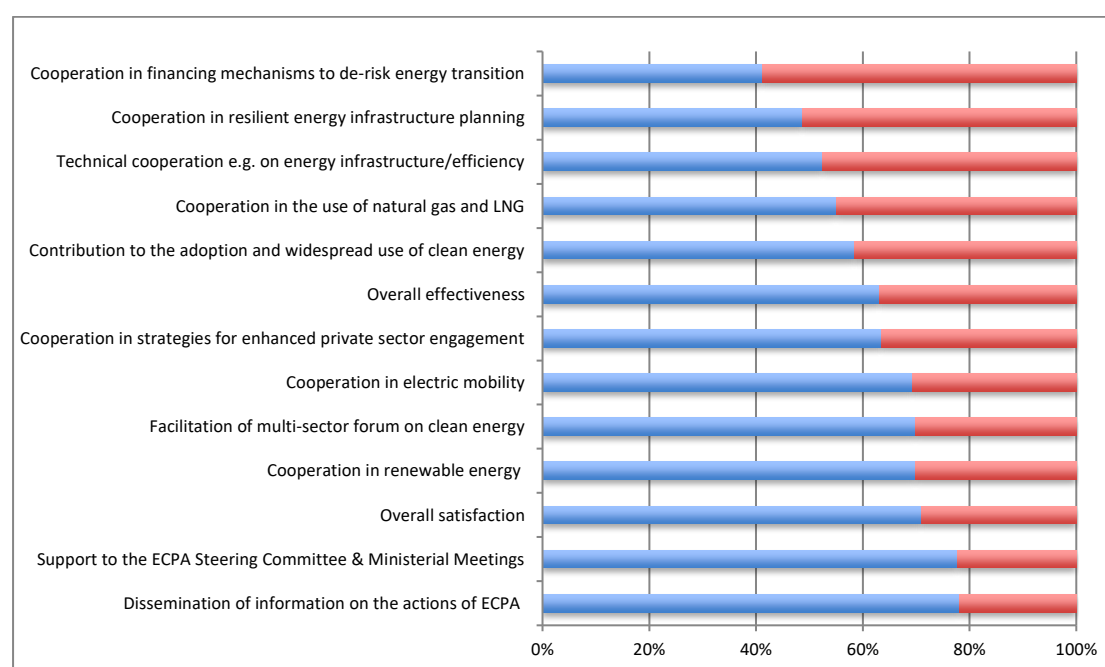


4.2 Effects on ECPA stakeholders

The evaluation aims to complement the program's performance assessment of logframe indicators by assessing ECPA V's results from a stakeholder perspective. For this purpose, the evaluators used the logframe indicators and the thematic areas addressed during EVPA V based on ECPA's seven pillars, as shown in Figure 21.

Stakeholders rated ECPA V most successfully in disseminating information on advancing clean energy in the Americas (78%) and the technical and administrative support to the ECPA Steering Committee (78%), with an overall satisfaction rate of 71%. Least prosperous areas comprise shared leadership and cooperation on: i) financing mechanisms to de-risk energy transition (41%); ii) resilient energy infrastructure planning (49%), and iii) implementation of technical cooperation (53%).

Figure 21: ECPA V results from a stakeholder perspective



Source: evaluation survey, n=21



4.3 Behavior and institutional change

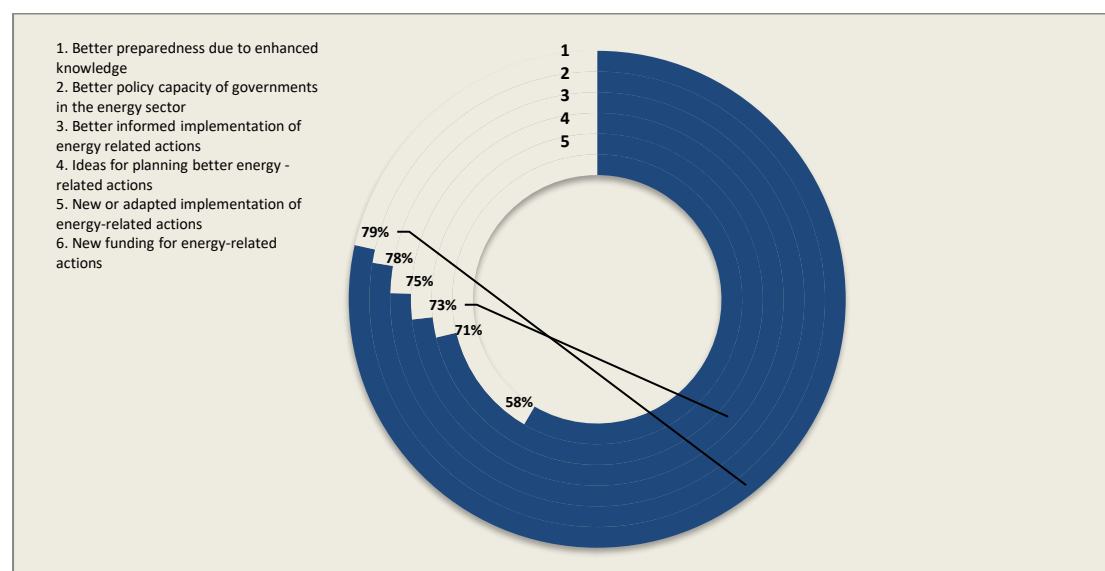
Section 3.8 and 3.9 explored in detail the theoretical attribution of program results and analyzed cause-effects relationships. This section elaborates on the effects of ECPA capacity building and knowledge exchange on the capacities of ECPA stakeholders.

⁷⁶ DPE commented that probably the target set was incorrect from the outset. Due to the 36 duration of the program, 5 semiannual reports and 1 final report would have been required for ECPA V.

Figure 22 summarizes the evaluation survey results, enquiring to what extent ECPA contributed to the change of stakeholder practices. In the Kirkpatrick model, those changes would corresponded to levels 3 and 4, behavior and institutional change.

Overall, the results are positive, with stakeholders rating the effects of ECPA V at a median of 74%.

Figure 22: Effects of ECPA V on stakeholders (levels three and four of the Kirkpatrick model)



Source: evaluation online survey; n = 20 for items 2 and 3; n=21 for items 1,4,5 and 6

For example, the impetus ECPA created with concrete issues for moving towards cleaner energy is one reason for this positive attribution. Particularly for smaller OAS Member States, learning from other countries and being aware of what is possible in implementing a decarbonization agenda even without visiting those countries is a specific value ECPA adds. Besides, ECPA increased its attribution by targeting decision-makers directly in the energy sector and strategically engaging the private sector. The latter engagement is one of the key distinctive features of ECPA compared to other bilateral and multilateral initiatives in the energy sector in the Western Hemisphere or its sub-regions, as stated by various stakeholders.

“The Member States are in the driving seat to implement the decarbonization agendas. However, ECPA plays an important role as a facilitator, a forum for dialogue where also the private sector participates”.

Source: ECPA stakeholder in Central America

The statements below reflect a slightly more critical view of ECPA.

“Though the energy and climate space is quite crowded in the Americas, ECPA brings a voice to the Caribbean countries. The question is though whether the hemispheric focus is enough to keep ECPA relevant”.

"Countries would have advanced with the clean energy agenda also without ECPA, but ECPA's contribution is about 50% to 60% in Central America and up to 70% in the Caribbean. The contribution to more advanced economies such as Brazil, Argentina, Chile, or Mexico is minor. However, those decision-makers still listen".

Source: ECPA stakeholders

The most substantial effects show on the preparedness of dealing with energy-related issues in governments, organizations, or companies due to enhanced knowledge of relevant tools, processes, products, and practices (79%). The improvements in governments' policy capacity in the energy sector reach 78%, followed by enhancement in informed implementation of energy-related actions (75%). ECPA V also contributed to stimulating ideas for planning better energy-related action (73%) and new or adapted implementation of energy-related actions (71%).

The effects on new funding for energy-related actions are less robust, showing a rating of 58%. Unfortunately, stakeholders failed to specify the monetary value of new funding, despite being invited to doing so in the evaluation survey.



4.4 Factors influencing program results

Figure 23 presents the internal and external factors affecting project performance, both positively and negatively. The factors stakeholders mentioned most frequently are highlighted in bold. This sub-criterion is not rated, as it is beyond the control of the project team.

On the positive side, the project team's qualities are paramount for the performance of ECPA V, while the lack of program funding affects ECPA V. Those factors are internal. For the external factors, the strategic importance of the energy sector for the U.S. seems the main driver for ECPA V.

“The U.S. Department of State’s investment in ECPA is of strategic national importance. We are alarmed about donors not sharing the OAS’ values of democracy and human rights, invading the energy sector in the Americas”.

Source: ECPA stakeholder

Besides, the private sector investments create facts on the ground, even where countries might have changed their priorities in clean energy agendas. Particularly in the Caribbean, external pressures drive ECPA V due to the small island states' vulnerability to global warming and rising sea levels. Negative factors are also listed in Figure 23, referring mainly to the lack of program funding, lack of specific technical cooperation projects under ECPA, and economic effects of COVID-19 on the implementation of clean energy agendas.

Figure 23: Internal and external factors influencing the results of ECPA V

Internal factors	External factors
Positive <ul style="list-style-type: none"> • Small but very highly skilled, efficient, and responsive project team • OAS leadership in ECPA events • Efficient Steering Committee 	Positive <ul style="list-style-type: none"> • Strategic importance of the energy sector for the U.S • Private sector pushing clean energy agenda through long-term investments despite changes in political priorities of some Member States • Strategic support by US, Jamaica, Chile, Panama, Costa Rica or Dominican Republic • External pressures demanding an acceleration of the decarbonization of economies (<i>effects of global warming, vulnerability of countries, and volatility of oil prices</i>)
Negative <ul style="list-style-type: none"> • Lack of funding • Lack of specific technical cooperation projects under ECPA • A grant-funded project team with a high level of job uncertainty 	Negative <ul style="list-style-type: none"> • COVID-19 delaying achievement of energy targets due to devastating economic effects • Low institutional capacities of some Member States • U.S. being the only ECPA donor • Lack of donor coordination in some sub-regions

Source: Evaluation interviews and survey

Based on the above assessment of stakeholder views, the following suggestions emerged for accelerating the achievement of ECPA V results.

- Increasing program budget through a diversified donor base (despite interview showing that this is unlikely to happen in the context of COVID-19);
- Facilitation of see funding for technical cooperation projects under the ECPA umbrella to fund initiatives based on the countries' common clean energy priorities;
- Support countries in donor coordination in the energy sector;
- Greater prioritization of the energy sector in the OAS Secretariat while at the same time sharpening the thematic focus of ECPA.



"The achievement of these results could be accelerated with the financing of effective measures focused on the implementation of renewable energy and energy efficiency plans and projects through studies, consultancies, support in pilot plans, in ECPA member countries."

Source: ECPA stakeholder in the Caribbean

4.5 Unintended program results

The evaluation did not encounter any significant unintended project results, neither positive nor negative. Hence, no rating is provided for this sub-criterion.

Concerning the impact of COVID-19, the project team implemented mitigation actions and undertook events remotely in the final months of the program cycle. The reduction of time spent on the logistics of ECPA events was significant. According to the project team, the switch from program events in Washington DC and program countries to virtual events saved significant amounts of time and money, enabling the project team to increase the share of its technical work from about 20% (with 80% administrative tasks) to 80%.

For one ECPA stakeholder, the Ministerial Meeting in Jamaica helped the newly elected government representatives of a Member State "make a flying start" and continue its engagements in the Steering Committee. The meeting created momentum and the necessary motivation for this smooth transition.

From a stakeholder perspective, the practical approach was a positive surprise for a new ECPA stakeholder, as shown in the box below.

"For me, it was a real surprise that ECPA is so hands-on. Somehow I expected more lecturing, but instead, the demonstrations of installed renewable energy systems and discussions with operators were really useful. It made a difference".

Source: ECPA stakeholder in the Caribbean



4.6 Results for women

As stated in the evaluation matrix and workplan for this evaluation, the evaluation of phase IV of ECPA⁷⁷ identified gender-differentiated issues related to energy and climate change as one of the program's weaker points and made a related recommendation for phase V design.

At the same time, the significance of gender considerations in energy projects and programs is well researched (Adams et al., 2006⁷⁸, Skutsch, 2005⁷⁹, UNDP, 2004⁸⁰, OAS/Engelhardt, 2017⁸¹). As a result, this evaluation addressed the gender-related issues for the design and implementation of ECPA, phase V, following the ToR.

The evaluation finds that the project team tried to position gender more dominantly on the ECPA V agenda, with newsletter articles and a technical meeting in Washington, DC, on women's participation in the energy sector. The demand for the technical meeting on gender was reflected in a large number of participants. The project team also encouraged the

⁷⁷ OAS, 2018: evaluation of the efficiency and effectiveness of the energy and climate partnership of the America's clearinghouse (ECPA clearinghouse), page iv.

⁷⁸ Adams, S. et al., 2006: Monitoring and Evaluation in Energy for Development (M&EED) International working group <http://www.hedon.info/docs/MandEEDGuideFinalVersionEnglish.pdf>

⁷⁹ Skutsch, M. M. (2005). Gender analysis for energy projects and programmes in *Energy for Sustainable Development* Vol 9 No 1 Skutsch MM. Tooling up for gender and energy. Paper prepared for ENERGIA available at www.energia/pubs/index.asp

⁸⁰ UNDP and Energia 2004. Gender and Energy for Sustainable Development: A Toolkit and Resource Guide. New York NY: UNDP

⁸¹ OAS/Engelhardt, A., 2017: Evaluation of the Program Sustainable Communities in Central America and the Caribbean

participation of both men and women in events and aimed to invite female speakers. However, ECPA V falls short of a fully-fledged gender component.

Given the absence of technical cooperation projects at the country level, the inclusion of a gender component also seems more difficult to achieve beyond the project team's effort. The box below highlights how gender components in technical cooperation projects could be designed and showcases possible effects.

Gender differentiated technical cooperation projects in the energy sector^{82, 83, 84, 85}.

Adams et al. (2006) found that "men and women have different energy needs. This is largely as a result of their different roles and responsibilities in the household and in society. Energy for cooking, cleaning and child-care are the obvious examples for women's needs, but women's equally important and often less obvious energy needs include energy for water pumping (for household and irrigation), energy for labour intensive tasks such as husking and milling, and energy for home-based enterprises which are usually run by women. Similarly, men may argue that they need energy for power tools or leisure activities".

OAS/Engelhardt (2017) found that under the OAS sustainable cities and communities program, "in the Dominican Republic (project No 1, Phase 1 CAREL) 45 communities benefit from hydro-powered rural electrification with an average of 75 families per community. In the family context, over 3000 mothers and an estimated additional 3000 daughters are likely to increase their income four times, as impact studies have shown in the region ten years after rural electrification.

Reasons are a better integration into the economic activities as valuable time is saved for household related tasks such as collecting firewood. Time savings at the household level are also a reason why the income of men does not show significant changes after rural electrification".

However, also unintended negative effects on gender emerged in energy projects. Skutsch (2005) identified mechanized ploughing and planting by men which increases the area under cultivation, but it also increases women's work of weeding and harvesting. Similarly it has been noted that electric lighting, which enables increased working hours, may mean that women (who generally work longer hours than men and sleep less), have their work days extended unbearably .

⁸² Adams, S. et al., 2006: Monitoring and Evaluation in Energy for Development (M&EED) International working group, page 91.

⁸³ OAS/Engelhardt, A., 2017: Evaluation of the Program Sustainable Communities in Central America and the Caribbean

⁸⁴ Attigah, B. and Mayer-Tasch, L. (2013): The Impact of Electricity Access on Economic Development - A Literature Review. In: Mayer-Tasch, L. and Mukherjee, M. and Reiche, K. (eds.), Productive Use of Energy (PRODUSE): Measuring Impacts of Electrification on Micro-Enterprises in Sub-Saharan Africa. Eschborn.

⁸⁵ Adams, S. et al., 2006: Monitoring and Evaluation in Energy for Development (M&EED) International working group, page 91. quoting Skutch, page 91

5. Sustainability: are results lasting?

This section assesses the extent to which ECPA results are lasting. Sub-criteria used are i) partners' ownership of ECPA objectives; ii) institutional and financial sustainability of ECPA results, and; iii) OAS Member States' willingness to financially support the ECPA Secretariat. The evaluation uses interviews and the online survey as principal data sources for this section.

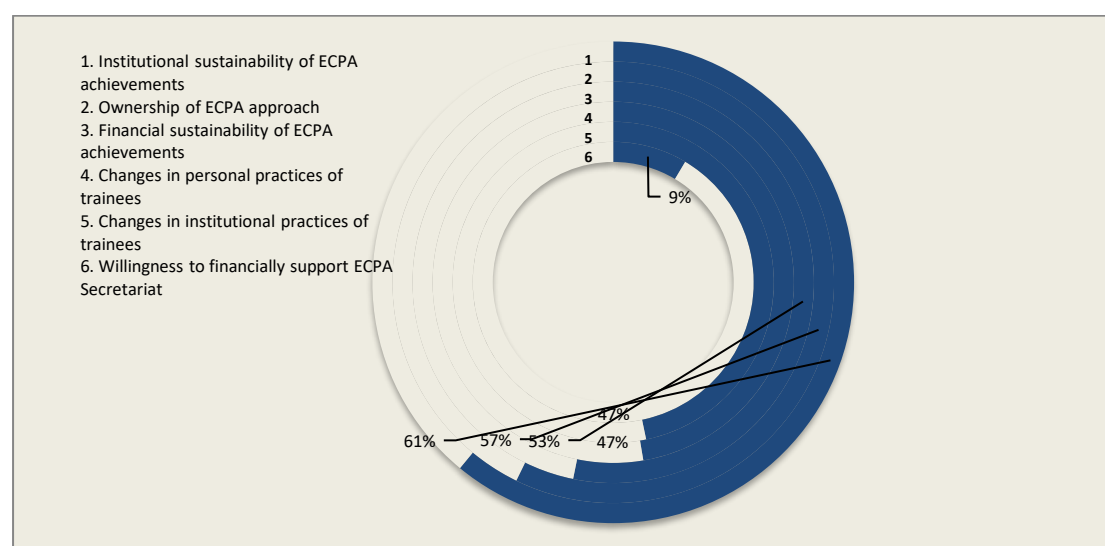
Key findings: The evaluation finds challenges in the sustaining ECPA V results

- ECPA partners' ownership of the ECPA approach is medium and reaches 57%, with National Focal Points appreciating less ECPA's engagement of the Permanent missions in Washington D.C.;
- ECPA stakeholders rate institutional sustainability (61%) and financial sustainability (53%) as medium. Institutional capacities are uneven across the OAS Member States to sustain ECPA achievements. However, Ministers' active participation in ECPA shows essential leadership at the highest political level;
- Financial sustainability: many representatives from ministries of Energy or related energies would be no longer able to attend regional events if ECPA would not provide funding for logistics arrangements
- OAS Member States' willingness to financially support the technical ECPA Secretariat in the OAS reached 9% only, with governments prioritizing the mitigation of the COVID-19 pandemic.



The evaluation finds that the sustainability of ECPA V shows partial achievement in two areas, with no achievement concerning the willingness of partners to support the ECPA Technical Secretariat in the OAS financially. The score for sustainability is "amber-red" (44% out of 100%⁸⁶). Figure 24 summarizes the sustainability ratings of ECPA V.

Figure 24: Sustainability of ECPA V



Source: Evaluation interviews; n=21

⁸⁶ The ratings for the evaluation sub-criteria by sub-sections 5.1 to 5.3 in this effectiveness chapter of the evaluation report are as follows: 5.1 = 2; 5.2 = 2; 5.3 = 0. Total score: 4 out of a maximum score of 9 (3*3). Overall performance = $\text{SUM}(4/9) * 100$ (44,444%).

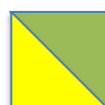


5.1 Partners' ownership of ECPA and its objectives

The evaluation interviews showed that ECPA partners' ownership of the ECPA approach is medium and reaches 57%, as shown in Figure 24.

Several ECPA national focal points observed that the ECPA Secretariat dedicated a considerable amount of program resources for Washington DC meetings, targeting OAS Member States Permanent missions.

While the project team clarified that this diplomatic-level engagement was vital for maintaining the communication channels with decision-makers in capital cities through the OAS Member States Permanent missions, some ECPA national focal points deemed that this approach had less value, affecting the ratings for ECPA ownership.



5.2 Institutional and financial sustainability of ECPA achievements

ECPA stakeholders rate institutional sustainability (61%) and financial sustainability (53%) as medium.

The institutional capacities are uneven across the OAS Member States to sustain ECPA achievements, except for the Mercosur. The good participation of ministers across the Western Hemisphere shows essential leadership at the highest political level.

“The active involvement of ministers at the Ministerial Meeting in Jamaica was inspiring. ECPA is a good partnership arrangement”.

Source: ECPA stakeholder from the Caribbean

The sustainability of capacities built through ECPA events reaches 47% for personal and institutional capacities, showing medium to low results. For example, in the Permanent Missions, frequent staff turnover limits the institutionalization of personal knowledge gained through attending ECPA events. Besides, representatives of Permanent Missions are diplomatic rather than technical experts.

Concerning financial sustainability, many representatives from ministries of Energy or related energies would no longer be able to attend regional events if ECPA would not provide funding for logistics arrangements like travel and accommodation any longer.



5.3 Willingness to financial support the ECPA Technical Secretariat

The evaluation also inquired about OAS Member States' willingness to support the OAS's technical ECPA Secretariat financially. Ratings reached 9% only. While many stakeholders stressed a general willingness to support ECPA, this support seems mostly in-kind during in-country events. Financial limitations are significant in many Member States due to changes in the government's spending priorities resulting from mitigating the COVID-19 crisis and its economic aftermath. Also, countries in the Caribbean suffer from past hurricane seasons, with one representative outlining that the last two hurricanes destroyed islands, generating 30% of the countries income.

Section III: Conclusions, recommendations and lessons learned

Based on the key findings presented at the beginning of the finding section for each evaluation criterion, the evaluator draws conclusions, leading to recommendations. The logical flow is transparently presented in one table showing key findings, related conclusions and recommendations in Figure 25.

The clear alignment to the evaluation criteria allows to unambiguously answering all evaluation questions listed in the ToR and to make this evaluation comparable to other OAS evaluations, including the aggregation of OAS performance in a specific sector or over a timeframe.

6. Conclusions

Relevance: if ECPA did not exist, it would need to be invented, being the only hemispheric initiative on clean energy.

For the donor U.S., the OAS engagement in the energy sector contributes to its own national security and the defence of human rights and democracy in the wider Western Hemisphere.

The need for ECPA V clearly shows for stakeholders, though its relevance for women is sub-optimal.

ECPA V was logically designed in 2017. OAS Member States limited willingness to fund defined joint priorities affects however concrete technical cooperation initiatives. A need for some kind of incentive mechanism emerges for governments to fund joint initiatives.

Efficiency: OAS shows good program management practices with ECPA V.

There is room to further enhance the cost-efficiency of ECPA. As an incentive for government funding of joint initiatives, a need shows for ECPA seed funding to co-fund such initiatives.

The project design and implementation are of high quality. Its adaptive project management and robust multi-stakeholder approach are a good practice worth replication across OAS technical cooperation projects, particularly concerning the engagement of the private sector.

ECPA V shows a theoretical contribution, for example, to air pollution-related welfare losses in OAS Member States through promoting e-mobility.

Effectiveness: ECPA V is highly effective.

In a highly uncertain economic context in the aftermath of the COVID-19 pandemic, the quality of the project team was the cornerstone for the success of ECPA V.

The private sector investments in the decarbonization agenda serve as an external driver of change, complementing or in some cases substituting the leadership of governments. Hence ECPA's strategy to stronger engage the private sector was farsighted.

While physical meetings have value for ECPA, the use of virtual meetings significantly alleviated the capacities of the project team to focus on technical assistance.

ECPA is still struggling to fully accommodate a gender-responsiveness.

Sustainability: The lasting effects of ECPA are mixed.

While a stronger country-level engagement of ECPA would be desirable, the investment in meetings at the diplomatic parquet in Washington DC are crucial to ensure buy-in of OAS Member States at the political level.

With its comparatively small budget, ECPA contributes to strengthening institutional capacities of OAS Member States, however, with a long way to go is the economically less advanced countries.

The diversification of ECPA's funding base is not progressing.

7. Recommendations

Relevance:

R1: Donor: continue funding OAS engagement in the energy sector with ECPA as an umbrella program to promote clean energy and the OAS values in the Western Hemisphere.

Prioritization: very high. Next 3 months

R2a: Project team: for any future phase of ECPA, the program budget should accommodate seed funding for beneficiary countries' joint initiatives for cost-sharing purposes. At least 30% of initiatives should have a specific focus on women.

Prioritization: very high. Next 3 months

Relevance and efficiency:

R2b: Project team: To fund a technical cooperation seed funding mechanism, comprising about 15% of the project budget (around US\$200K). Several options emerge: i) additional donor funding; ii) significantly reducing funds for the outputs on dialogue for technical cooperation and communication/ dissemination; iii) costs savings through replacing several physical meetings with virtual events; iv) a combination of i, ii, and iii.

Prioritization: very high. Next 3 months

Effectiveness:

R 3: Project team: Further strengthen the private sector's involvement in ECPA events and possibly technical cooperation initiatives to leverage this external driver of change fully.

Prioritization: very high. Next 3 months

R 4: Project team: To further enhance the cost-effectiveness of ECPA, a balance between virtual and physical meetings should be considered for any future phases of the program. Cost savings could be allocated for a "technical cooperation seed funding" program component.

Prioritization: very high. Next 3 months

Sustainability:

R 5: Project team: In line with R4, virtual meetings should be used as an additional communication channel, particularly with national focal points, to engage the OAS Member States directly and ultimately further enhance ownership of ECPA and its values.

Prioritization: very high. Next 3 months

R 6: OAS Secretariat: Consider the institutionalization of a Chief Energy Specialist's position through the OAS regular fund to contribute to the sustainability of ECPA and its required on-going support to OAS member states.

Prioritization: very high. Next 3 months

R 7: Project team: Build on the private sector's successful engagement to expand the ECPA donor base and ensure the sustainability of ECPA. Offer the most interested companies to co-fund, for example, the ECPA technical cooperation project component in specific priority sectors, which are both relevant to ECPA members and the private sector.

This approach could provide private sector actors with exposure in economically attractive markets, receive risk-sharing in less stable markets (through the OAS co-funding) and advance the clean energy agenda both at a political and technical level under the umbrella of the OAS. The private sector might also be interested in co-funding ECPA meetings in Washington DC if this would allow them access to those events.

Prioritization: very high. Next 3 months

8. Lessons learned

Multi-stakeholder approach and private sector engagement

The main lessons learned for the evaluation of ECPA V is that a labor and time-intensive *multi-stakeholder approach and private sector engagement* serves as an example of good project management. In a long-term program such as ECPA with its five phases, political priorities of OAS Member States are bound to vary, even change. As such, the private sector can serve as an additional driving force. In the case of ECPA, the private sector mutated from an external driver of change to an internal driving force due to the project team's strategic engagement of the private sector.

During the evaluation process, this leadership role of the private sector was reflected in the international news. A global leader in energy sector, a U.S. corporation, declared in September 2020 its “exit from the new build coal power market while focusing on and investing in its core renewable energy and power generating business (...) that have attractive economics and a growth trajectory”⁸⁷.

Those driving forces can be leveraged by a multi-stakeholder approach with an active private sector engagement.

9. Good practices

Assessing capacity building results

The systematic use of post-workshop questionnaires is a good practice of ECPA V to evaluate the results of project-funded capacity building. For longer trainings events, over 1 days long, pre and post course questionnaires would be useful, too.

The use of such questionnaires supports results-based management and evidence-based decision making to continuously improve capacity building, as required.

⁸⁷ <https://www.ge.com/news/press-releases/ge-pursue-exit-new-build-coal-power-market>

Figure 25: Key findings, conclusions, and recommendations

	Key evaluation findings	Conclusions	Recommendations
Relevance	ECPA V is aligned to relevant OAS General Assembly resolutions.	For the donor U.S., the OAS engagement in the energy sector contributes to its own national security and the defence of human rights and democracy in the wider Western Hemisphere. The need for ECPA V clearly shows for stakeholders, though its relevance for women is sub-optimal.	R1: Donor: continue funding OAS engagement in the energy sector with ECPA as an umbrella program to promote clean energy and the values of the OAS in the Western Hemisphere. Prioritization: very high. Next 3 months R2a: Project team: for any future phase of ECPA, the program budget should accommodate seed funding for beneficiary countries’ joint initiatives for cost-sharing purposes. At least 30% of initiatives should have a specific focus on women. Prioritization: very high. Next 3 months R2b: Project team: to fund a technical cooperation seed funding mechanism, comprising about 15% of the project budget (around US\$200K). Several options emerge: i) additional donor funding; ii) significantly reducing funds for the outputs on dialogue for technical cooperation and communication/ dissemination; iii) costs savings through replacing several physical meetings with virtual events; iv) a combination of i, ii and iii. Prioritization: very high. Next 3 months
	For the donor, ECPA contributes to Objective 2.3 and Performance Goal 2.3.1 of the Joint Strategic Plan FY 2018 – 2022 of the U.S. Department of State and USAID, referring to energy security and access to diversified, affordable, and reliable energy sources.		
	Member States: the relevance for 22 Member States is high, reaching 68%, ECPA being the only hemispheric initiative on clean energy, also bringing together ministers; however, relevance of ECPA for women reached 28% only.		
	The design of ECPA V was sound and based on a valid (reconstructed) Theory of Change. The only limitation to the reconstructed Theory of Change is that technical cooperation is rather dialogue-based; in the absence of specific pilot projects or initiatives, the contribution of technical cooperation to the purpose and goal of ECPA is somehow limited. This design limitation is based on the inaccurate assumption that project actions would be coupled with funding at the national level to support the priorities.		
Efficiency	To further enhance cost-efficiency and address stakeholder needs, it might have been interesting to create a budget line for ECPA technical cooperation seed funding by significantly reducing funds for the outputs on dialogue for technical cooperation and communication/ dissemination.	There is room to further enhance the cost-efficiency of ECPA. As an incentive for government funding of joint initiatives, a need shows for ECPA seed funding to co-fund such initiatives.	Prioritization: very high. Next 3 months
	Overall, indicators are SMART, and their quality is given. However, the appropriateness of some indicators could be further strengthened.		
	The evaluation finds fair use of results-based management principles. The project team produced five monitoring reports of high quality, including detailed annexes using DPE’s standardized RPPI template. The project team used post-event questionnaires/surveys for many of its events, though with a relatively low participation rate.	The project design and implementation are of high quality. Its adaptive project management and robust multi-stakeholder approach are a good practice worth replication across OAS technical cooperation projects, particularly concerning the engagement of the private sector.	No recommendation. See section on good practices for <i>multi-stakeholder approach and private sector engagement</i> .
	The project team applies adaptive project management and drives a robust multi-stakeholder approach, involving actively the private sector.		
	A fully-fledged cost-benefit analysis for ECPA V is not possible due to the absence of the number of beneficiaries and any specific technical cooperation results. As a proxy, the evaluation finds that a 1.95% decrease in the air pollution-related welfare loss in 20 OAS member States would equal the total investment in ECPA V, which promotes e-mobility.		

Effectiveness	The program shows good progress to achieving targets for two out of the three goal level indicators by 2020 and 2025, respectively. Three out of four targets for outcome indicators are met; 11 out of 14 targets are met for the five output indicators.	ECPA V is highly effective.	See R 1 and R 2 Prioritization: very high. Next 3 months
	Stakeholders rated ECPA V most successfully in disseminating information on advancing clean energy in the Americas (78%) and the technical and administrative support to the ECPA Steering Committee (78%). Least prosperous areas comprise shared leadership and cooperation on: i) financing mechanisms to de-risk energy transition (41%); ii) resilient energy infrastructure planning (49%), and iii) implementation of technical cooperation (53%).		
	Stakeholders rate the attribution of ECPA's effects as high (74%), particularly by giving smaller OAS Member States a voice and a learning platform. Most robust performance in enhancing the preparedness of dealing with energy-related issues due to enhanced knowledge of relevant tools, processes, products, and practices (79%) and improvements on policy capacity of governments in the energy sector (78%)		
	Internal factors affecting program performance are i) Small but very highly skilled, efficient, and responsive project team on the positive side and the lack of funding and the absence of specific technical cooperation projects under ECPA on the negative side. External factors affecting program performance are i) Strategic importance of the energy sector for the U.S and the private sector pushing clean energy agenda. Negative factors are the economic effects of COVID-19 on the implementation of clean energy agendas.	In a highly uncertain economic context in the aftermath of the COVID-19 pandemic, the quality of the project team was the cornerstone for the success of ECPA V. The private sector investments in the decarbonization agenda serves as an external driver of change, complementing or in some cases substituting the leadership of governments. Hence ECPA's strategy to stronger engage the private sector was farsighted.	R 3: Project team: Further strengthen the private sector's involvement in ECPA events and possibly technical cooperation initiatives to leverage this external driver of change fully. Prioritization: very high. Next 3 months
	Unintended results: the switch from program events in Washington DC and program countries to virtual events due to the COVID-19 pandemic saved significant amounts of time and money, enabling the project team to increase the share of its technical work from about 20% to 80% as the administrative burden for organizing in-person events vanished	While physical meetings have value for ECPA, the use of virtual meetings significantly alleviated the capacities of the project team to focus on technical assistance.	R 4: Project team: To further enhance the cost-effectiveness of ECPA, a balance between virtual and physical meetings should be considered for any future phases of the program. Cost savings could be allocated for a "technical cooperation seed funding" program component. Prioritization: very high. Next 3 months
	In response to a recommendation in the final evaluation of ECPA IV, the project team tried to position gender more dominantly on the ECPA V agenda. However, ECPA V falls short of a fully-fledged gender component.	ECPA is still struggling to fully accommodate a gender-responsiveness.	See R 2.

Sustainability	<p>ECPA partners' ownership of the ECPA approach is medium and reaches 57%, with National Focal Points appreciating less ECPA's engagement of the Permanent missions in Washington D.C.</p>	<p>While a stronger country-level engagement of ECPA would be desirable, the investment in meetings at the diplomatic parquet in Washington DC are crucial to ensure buy-in of OAS Member States at the political level.</p>	<p>R 5: Project team: In line with R4, virtual meetings should be used as an additional communication channel particularly with national focal points to directly engage the OAS Member States and ultimately further enhance ownership of ECPA and its values.</p> <p>Prioritization: very high. Next 3 months</p>
	<p>ECPA stakeholders rate institutional sustainability (61%) and financial sustainability (53%) as medium. Institutional capacities are uneven across the OAS Member States to sustain ECPA achievements. However, Ministers' active participation in ECPA shows essential leadership at the highest political level</p>	<p>With its comparatively small budget, ECPA contributes to strengthening institutional capacities of OAS Member States, however, with a long way to go is the economically less advanced countries.</p>	<p>R 6: OAS Secretariat: Consider the institutionalization of a Chief Energy Specialist's position through the OAS regular fund to contribute to the sustainability of ECPA and its required on-going support to OAS member states.</p> <p>Prioritization: very high. Next 3 months</p>
	<p>Financial sustainability: many representatives from ministries of Energy or related energies would be no longer able to attend regional events if ECPA would not provide funding for logistics arrangements</p>		
	<p>OAS Member States' willingness to financially support the technical ECPA Secretariat in the OAS reached 9% only, with governments prioritizing the mitigation of the COVID-19 pandemic</p>	<p>The diversification of ECPA's funding base is not progressing.</p>	<p>R 7: Project team: Build on the private sector's successful engagement to expand the ECPA donor base and ensure the sustainability of ECPA. Offer the most interested companies to co-fund, for example, the ECPA technical cooperation project component in specific priority sectors, which are both relevant to ECPA members and the private sector.</p> <p>This approach could provide private sector actors with exposure in economically interesting markets, receive risk sharing in less stable markets (through the OAS co-funding) and advance the clean energy agenda both at a political and technical level under the umbrella of the OAS.</p> <p>The private sector might also be interested to co-fund ECPA meetings in Washington DC, if this would allow them access to those events.</p> <p>Prioritization: very high. Next 3 months</p>

Annex 1: Terms of Reference



**GENERAL SECRETARIAT OF THE ORGANIZATION OF AMERICAN
STATES
STRATEGIC COUNSEL FOR ORGANIZATIONAL DEVELOPMENT
AND MANAGEMENT FOR RESULTS
DEPARTMENT OF PLANNING AND EVALUATION**

Call for Resumes:

**External Evaluation of the Project: “Implementation of the Energy and
Climate Partnership of the Americas” Phase V**

Type of Appointment: Individual consultancy

Organizational Unit: Department of Planning and Evaluation

Duration: approximately 4 months (35 non-consecutive days).

Consulting Fee: based on experience, education and skills

Duty Station: Washington DC, Member Countries and consultant’s place of residence

Deadline: no later than XXXX XXth, 2020 to Jacqueline Cook at
jcook@oas.org

Profile: The Consultant must demonstrate a minimum 10 years of expertise in project and program evaluation. Experience in energy matters, and/or institutional strengthening will be a plus. The Consultant should also have attained a graduate degree in public policy, economics, management or related area; and experience working in Latin America and the Caribbean. The Consultant must be proficient in English, both oral and written. Proficiency in Spanish is not required but desirable. Experience working with an international organization in the Americas and in the evaluation of similar projects is a plus.

I. BACKGROUND

- 1.1 At the request of the US Permanent Mission the Department of Planning and Evaluation (DPE) is coordinating an external assessment of the program Energy and Climate Partnership of the Americas Clearinghouse (ECPA Clearinghouse), Phase V. As with the evaluation of Phase IV in 2017, this assessment is part of the DPE greater efforts to conduct formative and summative evaluations of projects and programs executed by the OAS. Such efforts, coordinated and supervised by the DPE, began over 10 years ago with the evaluation of initiatives financed by the Spanish Fund for OAS and has been extended to operations financed by other donors, such as Canada and the United States of America. These evaluations, in addition to systematizing and documenting the results of the interventions, have the goal of capitalizing on these experiences for the improvement of future project and program formulations and designs, and institutionalizing best practices in monitoring and evaluation within the Organization.

Energy and Climate Partnership of the Americas Clearinghouse (ECPA Clearinghouse)

- 1.2 The ECPA has its beginnings at the April 2009 Summit of the Americas in Port of Spain, Trinidad and Tobago, where the leaders of the Americas underscored that energy is among the most important issues confronting the future of the Americas, and reaffirmed their commitment to work together toward a clean energy future. The ECPA Clearinghouse project was developed to address these concerns and systematize information exchange, dialogue and cooperation among governments, NGOs, the private sector and academia with the ultimate goal of affecting the course of clean energy and climate policies and actions in the Western Hemisphere. To this end the project and the OAS took advantage of their network of energy experts, government officials, NGOs, and businesses to engage them in on-going dialogue through a ministerial meeting, workshops and specialized forums, direct engagement with stakeholders at the national, regional and international levels as well as social networks. It was expected then that this combination of tools would allow for the implementation of both bottom-up and top-down approaches to Partnership dialogue, collaboration and trust.
- 1.3 The OAS Department of Sustainable Development (DSD) has operated the ECPA Clearinghouse since 2009. In this capacity, it has facilitated sustained dialogue and technical cooperation on energy among key stakeholders in dozens of meetings, workshops, forums and other

gatherings, as well as several projects. In April 2010, the OAS also hosted the Energy and Climate Ministerial of the Americas jointly with the Inter-American Development Bank, and worked in close collaboration with the Government of Mexico to support a second ECPA ministerial in Merida, Yucatan, on May 25-26, 2015, in conjunction with the 6th Clean Energy Ministerial.

- 1.4 In addition, the OAS/DSD has built several tools to enable regional dialogue, foster knowledge sharing and support the implementation of energy initiatives across the Americas under the ECPA umbrella. These tools include regional technical workshops, public discussion forums, a bilingual website and monthly newsletter, and social media sites on Facebook and Twitter. Additionally, the OAS has established highly productive working relationships with a wide cross-section of partners at the behest of ECPA, thereby contributing to enhanced regional dialogue. Through technical cooperation, the OAS has built a robust network of national focal points, which are essential conduits for dialogue among nations seeking to establish priorities, share best practices, and promote common clean energy goals.

Phase IV: ECPA Clearinghouse (SID-1408) (US\$1.2 million)

- 1.5 The objective of the project's Phase IV was to strengthen dialogue and technical cooperation on sustainable energy practices, policies, laws and regulations, among governments, private sector, financiers, academics and other stakeholders. The subcomponents that were executed were as follows:
 - i) Foster dialogue and awareness on sustainable energy policy development and practices among governments, academia, NGOs, and the private sector.
 - ii) Increase the capacity of OAS member states through technical assistance and the exchange of best practices and lessons learned in sustainable energy among key stakeholders.
 - iii) Promote ECPA as a hemispheric forum for dialogue and cooperation through the creation of information platforms.
 - iv) Implement a new ECPA governance structure.
- 1.6 Phase IV finalized operations on June 2017 and a final evaluation was conducted between 2017 and 2018. In terms of effectiveness, the results indicate that, at the purpose level, the project contributed to strengthening dialogue and technical cooperation around sustainable energy and climate

change, meeting its target of four new actions undertaken by participating countries during the project timeframe. ECPA also achieved three of its four outputs, providing five forums for stakeholder dialogue, disseminating information through a multi-pronged online presence, and implementing the project's new governance structure, the ECPA Steering Committee. The development and work of the Steering Committee was perhaps the greatest achievement of this phase, firmly establishing member countries' commitment to and ownership of the project, an achievement that will contribute significantly to the project's sustainability.

- 1.7 However, the project fell short of achieving the target to enable technical cooperation and provide technical support all 20 participating countries. It did not address gender-differentiated issues related to energy and climate change and no research or stakeholder feedback related to these issues was undertaken, despite project documentation indicating it would.

Phase V: Implementation of the Energy and Climate Partnership of the Americas (SID-1702) (US\$1.2 millions)

- 1.8 The objective of Phase V was to strengthen the leadership and cooperation in energy infrastructure, energy efficiency, and energy integration at the regional level. The subcomponents that were executed are as follows:
 - i) Facilitate a multi-sector forum on clean energy.
 - ii) Implementation of a technical cooperation on energy infrastructure, energy efficiency, and energy integration.
 - iii) Provide technical and administrative support to the ECPA Steering Committee and Ministerial Meetings.
 - iv) Disseminate information on the actions of ECPA geared toward advancing clean energy in the Americas.
- 1.9 The present evaluation will focus on Phase V achievements.

II. OBJECTIVE OF THE CONSULTANCY

- 2.1 The objective of the Consultancy is to evaluate the relevance, efficiency, effectiveness and sustainability of the Phase V of the ECPA program. The evaluation will specifically focus on the delivery of the main Outputs, and the Immediate and Intermediate Outcomes for the project.

A. Scope of the evaluation.

- 2.2 To achieve the objective the Consultant shall:
 - ix) Conduct a summative evaluation in order to identify the main achievements and results of the project.

- x) Determine the efficiency and effectiveness of the project as best reflected in the available results.
 - xi) Critically analyze the formulation, design, implementation and management of the project and make recommendations as needed.
 - xii) Assess the institutional and financial sustainability of the interventions financed by the project.
 - xiii) Document lessons learned related to the formulation, design, implementation, management and sustainability.
 - xiv) Make recommendations, as appropriate, to improve the formulation, design and implementation for future similar interventions.
 - xv) Assess if and how the project addressed the crosscutting issue of gender perspective and to what results.
 - xvi) Identify the social costs and economic and social benefits of the project to properly assess whether the benefits outweigh the costs of the operation. Specifically, conduct a cost benefit analysis by determining the internal rate of return and net present value of the investment at a 12% discount rate.
- 2.3 In addition to the above, the consultancy will make every attempt to answer the following performance questions:
- i) Was the project's implicit Theory of Change effective?
 - ii) Were the project's objectives achieved? (Include a matrix to establish achievement and justification)
 - iii) Were the identified outcome indicators appropriate to measure success?
 - iv) Are the project's achievements sustainable institutionally and financially?
 - v) Are the project's indicators S.M.A.R.T.?
 - vi) Did the project team apply results-based management principles from inception to conclusion? Please describe which ones.
 - vii) Was the process for the selection of beneficiaries conducted based on pre-established criteria? And, were the criteria appropriate?
 - viii) Were best practices taken into account during the design and applied during the implementation?

- ix) Were lessons learned and recommendation from the previous evaluation of phase IV taken into account during the design and applied during the implementation of Phase V?
- x) Did the project include specific requirements for conducting follow-up of training activities in order to measure: increased capacity on energy matters, increased skills, awareness and abilities among recipients; and the strengthening of institutions where such individuals work, among others?
- xi) Was the monitoring mechanism used as an efficient and effective tool to follow-up on the progress of project's actions?
- xii) Are there clear examples of results that came from the partnerships and knowledge exchanges promoted by the project?
- xiii) Were there any unforeseeable/not planned results or outcomes?
- xiv) Are beneficiary countries, other Member States and donors willing to financially support the work of the ECPA Technical Secretariat?

B. Information sources.

2.4 Among other sources the Consultant will review the following:

- i) Project documents (Phases IV and V).
- ii) Progress implementation reports (Phase V).
- iii) Completion report (Phase V).
- iv) Project indicators identified and used throughout the execution (Phase V).
- v) Products derived from the implementation of the project and means of verification (Phase V).
- vi) Evaluation report (Phase IV)
- vii) Any other document deemed relevant for the completion of the work.

C. Stakeholders.

2.5 Among other stakeholders the Consultant will consider the following:

- i) Project Team.
- ii) Member States.
- iii) Local and national counterparts.

- iv) Donors.
- v) U.S. State Department.
- vi) Department of Planning and Evaluation, OAS.
- vii) Beneficiaries, individuals and Member States.

III. ACTIVITIES

- 3.1 This consultancy will be coordinated and supervised by the Department of Planning and Evaluation (DPE).
- 3.2 The evaluation process will take a participatory approach and take account of the views of all key stakeholders. In general, the evaluation will be based on interviews, analysis of documents, use of relevant evaluation instruments (i.e. application of surveys, focus groups, etc.) and all available data sources, as required. **All conclusions and recommendations have to be based on evidence, not opinion.**

A. Phase I: Preparatory activities.

- 3.3 To achieve the objectives of the Terms of Reference, the consultancy shall carry out the following activities, without prejudice to other tasks that are necessary to complete the work:
 - i) Conduct initial conference calls with key stakeholders such as members of the Project Team, and the U.S. Permanent Mission to the OAS officials; and assess more accurately the scope of the work and request the necessary information to perform effectively. As a result, the consultancy will submit a preliminary work plan to the DPE/OAS, which will include the description and chronology of the activities to be carried out, the reports to be submitted, and the deliverables of the evaluation.
 - ii) Develop an Evaluation Framework (EF) after conducting the first wave of interviews, which will contribute to determine if the project was implemented efficiently and effectively, and generated the expected results. The EF shall include the following sections among other:
 - (a) A description of the methodology or design of evaluation strategy, including the sampling framework to be used for the collection of data; and the evaluation matrix. The methodology to be used to conduct the cost-benefit analysis.

The evaluation methodology must consider qualitative and quantitative measurements.

- (b) Data collection protocols and analysis of information.
- (c) The identification of data collection instruments.
- (d) The identification and measurement of output and outcome indicators (initial, intermediate and final) to measure the project's efficiency and effectiveness, in addition to those previously identified during the design of the project, if any. Both groups of indicators are expected to include their definition and methodologies for the collection and calculation.
- (e) The instruments for the collection of information and related materials.
- (f) The updated work plan for the consultancy, including the collection, analysis and production of reports (see paragraph 3.3 (i);
- (g) A proposal of the table of contents of the final report, among others.

B. Phase II: Collection and analysis of information, and Midterm Report.

- iii) Review all the relevant documentation including those produced during the formulation and design of the project.
- iv) Conduct interviews and collect information from additional key stakeholders, including: government officials, and direct and indirect beneficiaries, among others (see paragraph 2.5).
- v) Conduct interviews and focus groups to validate the implicit chain of results (Logic Model) for the project, by determining if it was adequate and valid for the expected and actual results.
- vi) Establish the project's efficiency and effectiveness, identifying lessons learned and making recommendations for future executions. This assessment should include a robust cost-benefit analysis of the operation (CBA), by: identifying and quantifying the social and economic costs and benefits of the program; collecting the necessary data to validate the CBA proposal; conduct a literature review to support theoretically the social and economic costs and benefits and monetize them; estimate the returns to the investment by calculating the Net Present Value (NPV), and the Internal Rate of return at 12%.

- vii) Assess the management of the project in the use of planning and implementation tools, such as annual operations plans, logical framework, and project monitoring reports among others.
- viii) Assess the technical and economic feasibility of the project, including the sustainability of its benefits.
- ix) Determine the relevance of the criteria used for the targeting of beneficiaries; including member countries and agencies benefiting from the project and make appropriate recommendations for similar initiatives in the future.
- x) Analyze how and if the project incorporated a gender perspective approach in the execution of its components, and if there were any such efforts, determine how consequential they were. Were they relevant?
- xi) Measure the project's performance in terms of efficiency and effectiveness. The consultancy shall review and suggest adjustments to the indicators identified in the Logical Framework. In addition, the consultancy shall identify, propose and measure indicators that were not considered in the design. The consultancy shall analyze the extent to which the expected results were achieved, as well as identify unplanned results that may have occurred.
- xii) Produce a Midterm Report describing the progress of the evaluation and the findings to date. The report will be accompanied by a Power Point presentation.
- xiii) Present the Midterm Report to the project team and the donor.

C. Phase III: Presentation of final report.

- xiv) Produce a Final Report analyzing and describing the execution, outputs and outcomes of the supported actions; lessons learned, recommendations and conclusions; a section for sustainability and beneficiaries, among others. The report will be accompanied by a Power Point presentation.
- xv) Conduct one mission to OAS headquarters to present the Final Report (if possible).

IV. PRODUCTS AND DELIVERABLES

- 4.1 The Consultant will produce and deliver the following documents taking into consideration each of the activities described in the above section:
- i) A detailed preliminary work plan and the evaluation Framework **within 15 days** of signing the contract.
 - ii) A Midterm Report on the progress of the consultancy including, a revised Logical Framework, the theory of change and a Power Point to be presented in OAS headquarters at a date to be agreed upon.
 - iii) Final Evaluation Report including a cost-benefit analysis, all products mentioned above and a Power Point Presentation to be presented in OAS headquarters at a date to be agreed upon.

V. TIMEFRAME & PAYMENT SCHEDULE

- 5.1 It is expected that the consultancy will require a total of 35 non-consecutive working days between July and November 2020.
- 5.2 The payment schedule is as follows:
- 15% Upon signing the contract.
 - 20% Upon delivery of a detailed Work Plan and Evaluation Framework
 - 30% Upon delivery of a Midterm Report accompanied by a Power Point presentation.
 - 35% Upon delivery of the Final Evaluation Report accompanied by a Power Point presentation

VI. PROCUREMENT PROCESS

- 6.1 The contracting will follow the procurement processes outlined by OAS tender regulations, ensuring the application of competitiveness and transparency principles.
- 6.2 The Organization of American States does not discriminate against any individual on the basis of race, color, marital status, religion, age, gender, disability, sexual orientation, gender identity, or status as a parent.
- 6.3 Consultants interested in participating in the selection process should send the expression of interest and CV no later than July XXth, 2020 to Jacqueline Cook at jcook@oas.org

Annex 2: Documentation reviewed

Adams, S. et al., 2006: Monitoring and Evaluation in Energy for Development (M&EED) International working group
<http://www.hedon.info/docs/MandEEDGuideFinalVersionEnglish.pdf>

¹ Attigah, B. and Mayer-Tasch, L. (2013): The Impact of Electricity Access on Economic Development - A Literature Review. In: Mayer-Tasch, L. and Mukherjee, M. and Reiche, K. (eds.), Productive Use of Energy (PRODUCE): Measuring Impacts of Electrification on Micro-Enterprises in Sub-Saharan Africa. Eschborn
Barbados Ministry of Energy & Water Resources, 2019: National Energy Policy 2019-2030,”

Castalia Strategic Advisors, 2019: “CARICOM Sustainable Energy Path Final Report: Report to the Inter-American Development Bank”.

Center for Strategic and International Studies, 2019: Virtual influence in Latin America

Engelhardt, A./OAS, 2019: evaluation of the Coordination of CARICOM’s Caribbean Sustainable Energy Roadmap and Strategy (C-SERMS)”

European University Institute. Robert Schuman Center for advanced studies. Florence School of Regulation, 2020: Electromobility in Latin America and the Caribbean. Can electromobility help solve health, traffic, environment, and energy problems in Latin America and the Caribbean (LAC)?

Foreign Policy at Brookings (2016): The geopolitics of China’s ride in Latin America. Geo-economics and global issues paper 2. November 2016

Frankfurt School of Finance and Management/UNDP, 2019: Global trends in renewable energy investment 2019

Inter-American Development Bank, 2020: ELECTROMOBILITY IN LATIN AMERICA AND THE CARIBBEAN

IMF, 2016: CARIBBEAN ENERGY: MACRO-RELATED CHALLENGES

OAS/Engelhardt 2020: Evaluation of the Energy and Climate Partnership of the Americas V. Evaluation matrix and workplan.

OAS, 2020: Report on the Progress of Project Implementation. Implementation of the Energy and Climate Partnership of the Americas (2017-2020). SID1702.

OAS, 2019: RPPI - Energy and Climate Partnership for the Americas (ECPA) V. October 2019 – March 2020.

OAS, 2019: RPPI - Energy and Climate Partnership for the Americas (ECPA) V. April - September 2019.

OAS, 2018: evaluation of the efficiency and effectiveness of the energy and climate partnership of the America's clearinghouse (ECPA clearinghouse)

OAS/Engelhardt, A., 2017: Evaluation of the Program Sustainable Communities in Central America and the Caribbean.

OAS General Secretariat, 2017: Implementation of the Energy and Climate Partnership of the Americas (2017-2020) SID1702. Project document

OAS Secretary-General, 2016: Coordination of CARICOM's Caribbean Sustainable Energy Roadmap and Strategy (C-SERMS) SID1603. Project document.

South China Morning Post, 2019: China in Latin America: partner or predator. BY RAQUEL CARVALHO MAY 25, 2019

Skutsch, M. M. (2005). Gender analysis for energy projects and programmes in *Energy for Sustainable Development* Vol 9 No 1 Skutsch MM. Tooling up for gender and energy. Paper prepared for ENERGIA available at www.energia/pubs/index.asp

UNCTAD, 2019: Word Investment Report 2019

United Nations Development Programme, 2010: Modeling the transformational impacts and cost of sea-level rise in the Caribbean

UNDP and Energia 2004. Gender and Energy for Sustainable Development: A Toolkit and Resource Guide. New York NY: UNDP

UNEP, 2019: Electric mobility: status in Latin America and the Caribbean and opportunities for regional collaboration 2019

U.S. Department of State and USAID, 2018: Joint Strategic Plan FY 2018 – 2022

Vergara, W, J V. Fenhann, and M C. Schletz. "Zero Carbon Latin America - A pathway for net decarbonization of the regional economy by mid-century: Vision paper." 2015. UNEP DTU Partnership.

WHO, 2016: Ambient Air pollution: a global assessment of exposure and burden of disease. Annex 2: Deaths, YLLs and DALYs attributable to ambient air pollution, by country

World Bank, 2020: Rethinking power sector reform in the developing world.

World Bank and Institute for Health Metrics and Evaluation University of Washington, Seattle, 2016 : The cost of air pollution. Strengthening the economic case for action.

World Bank, 2015: "There's tremendous interest in adopting renewables across the Caribbean."

World Bank, 2012: Latin America: are we forever at the mercy of high oil prices?
<https://blogs.worldbank.org/latinamerica/latin-america-are-we-forever-at-the-mercy-of-high-oil-prices>

Internet sources:

Global Climatescope

<https://global-climatescope.org/assets/data/reports/climatescope-2019-report-en.pdf>

UK's Independent Commission for Aid Impact

<http://icai.independent.gov.uk/wp-content/uploads/ICAI-Review-UK-aids-contribution-to-tackling-tax-avoidance-and-evasion.pdf>

U.S. Congress

<https://www.congress.gov/bill/114th-congress/house-bill/4939/text>

Annex 3: List of people interviewed

The ECPA program team shared the list of program stakeholders with the external evaluator. Due to ethical considerations, the names of the interviewees are not published in this report to safeguard respondents' anonymity. The OAS/DPE endorsed this decision, which is in compliance with the ethical standards of the United Nations Evaluation Group.

Annex 4: Evaluation matrix

	Evaluation questions	Proposed evaluation tools	Data source
Relevance: Is ECPA doing the right thing?			
	Is the project's implicit Theory of Change valid and effective? <ul style="list-style-type: none"> Are change pathways relevant for ECPA beneficiaries? Do the main assumptions hold? 	ToC validation meeting with OAS project team Document review Key stakeholder validation through an online survey	Project profile and other documents; project stakeholders
	To what extent did the intervention address issues of exclusion of vulnerable groups, including women? How?		
Efficiency: Were resources used appropriately to achieve results?			
	Were best practices taken into account during the design and applied during the implementation?	Document review Interviews (telephone interviews with the project team in OAS and the donor)	Project profile, monitoring reports, and other documents; project stakeholders;
	Did the project team apply results-based management principles from its inception? If yes, which ones?		
	Are the project's indicators S.M.A.R.T.? Were the identified outcome indicators appropriate to measure success? Did the project have any positive returns to the investment?		
	Was the process for the selection of beneficiaries conducted based on pre-established criteria? And, were the criteria appropriate?		
	Have the lessons learned and recommendations drawn from the evaluation of phase IV been taken into account during the design and implementation of Phase V?		

	Evaluation questions	Proposed evaluation tools	Data source
	Was the monitoring mechanism used as an efficient and effective tool to follow-up on the progress of the project's actions? Did the project include specific requirements for conducting follow-up of training activities in order to measure: increased capacity on energy matters, increased skills, awareness and abilities among recipients, and the strengthening of institutions where such individuals work, among others?		
Effectiveness: were project results achieved, and how?			
	To what extent were program outputs and outcomes achieved? What are the results for women?	Document review, Online survey, telephone interviews	Project team, project stakeholders, logframe, RPPIs
	Are the results achieved from the partnerships and knowledge exchanges promoted by ECPA attributable to the operation's actions?		
	What are the major internal and external factors that influenced the implementation of the project to date? What are the implications for the remaining project period?		
	Were there any unforeseeable/not planned results or outcomes?		
Sustainability: Is change lasting?			
	Are the project's achievements sustainable institutionally and financially?	Document review, Online survey. Telephone interviews	Project team, project stakeholders, RPPIs
	Are beneficiary countries, other Member States, and donors willing to support the work of the ECPA Technical Secretariat financially?		
	To what extent do supported institutions have ownership of the ECPA and its approach?		
	To what extent does a change in awareness, skills, and abilities of trainees result in lasting changes of practices, both personally and institutionally?		

Annex 5: Evaluation questionnaire for telephone interviews

Name	Position	Organization/Enterprise	Country	Date

(A) Relevance

1. To what extent are the OAS' **assumptions** valid for functioning ECPA in your country?

	Very high	High	Medium	Low	Very low	No answer
Clean energy remains as a high-level priority in OAS member states, and the						
Governments provide guidance for the development of current and future ECPA Action Plans.						
OAS Member States are using ECPA as a mechanism to advance clean energy, energy efficiency, and energy integration.						
Governments show an institutional ability, as well as the inclination to cooperate with one another.						
Governments lead the development of clean energy solutions.						
OAS remains a neutral and trusted partner in the energy sector						
OAS remains an efficient multilateral partner in the Americas						
OAS convening power remains high						

Please explain your assessment:

In the case of "medium," "low," and "very low" ratings, please explain:

2. To what extent did the intervention address the needs of your institution? To what extent does ECPA address issues of exclusion of vulnerable groups, including women and youth? How?

Needs of:	Very high	High	Medium	Low	Very low	No answer
Your institution						
Women						
Youth						
Ethnic minorities						
Others						

Please explain how this was achieved in case of "high" and "very high" ratings:

(B) Effectiveness: the achievement of project results

3. To what extent is ECPA making progress in achieving planned project objectives in your country?

Achievement of planned objectives	Very high	High	Medium	Low	Very low	No answer
Contribution to the adoption and widespread use of clean energy in the Americas						
Strengthened shared leadership and cooperation in resilient energy infrastructure planning						
Strengthened shared leadership and cooperation in renewable energy						
Strengthened shared leadership and cooperation in electric mobility						
Strengthened shared leadership and cooperation in financing mechanisms to de-risk energy transition						
Strengthened shared leadership and cooperation in the use of natural gas and LNG						
Strengthened shared leadership and cooperation in strategies for enhanced private sector engagement						
Facilitation of multi-sector forum on clean energy						
Technical cooperation on energy infrastructure, energy efficiency, and energy integration implemented						
Technical and administrative support to the ECPA Steering Committee and Ministerial Meetings provided						
Dissemination of information on the actions of ECPA geared toward advancing clean energy in the Americas						
Overall, how satisfied are you with the results ECPA achieved?						

4. To what extent are the ECPA results achieved to date attributable to the actions of the operation?

5. What are the major internal and external factors that influenced the implementation of the project to date?

6. Please suggest how the achievement of results could be accelerated

7. Were there any unforeseeable/not planned results or outcomes?

(C) Efficiency: use of project resources

8. To what extent is ECPA leveraging resources for its implementation?

Degree of leveraging resources	Very high	High	Medium	Low	Very low	No answer

Please explain how this was achieved in case of “high” and “very high” ratings:

9. To what extent is ECPA systematically assessing the results of capacity building activities (e.g., through surveys or end of training questionnaires)

Degree of systematic capacity building results assessment	Very high	High	Medium	Low	Very low	No answer

(D) Sustainability: is change lasting?

10. To what extent is change created by ECPA lasting?

Degree of lasting change	Very high	High	Medium	Low	Very low	No answer
Institutional sustainability of ECPA achievements						
Financial sustainability of ECPA achievements						
Willingness to financially support the work of the ECPA Technical Secretariat						
• Benefitting OAS Member States						
• Other OAS Member States						
• Donors						
Ownership of the ECPA and its approach						
Changes in <u>personal practices</u> of trainees following ECPA-funded capacity building						
Changes in <u>institutional practices</u> of trainees following ECPA-funded capacity building						

Annex 6: Online survey

1. To what extent reflected the OAS event the needs and priorities of your institution?

Needs of:	Very high	High	Medium	Low	Very low	No answer
Your institution						

2. To what extent has the event helped you do things differently in your job in one of the following areas?

Areas:	Very high	High	Medium	Low	Very low	No answer
Cooperation in resilient energy infrastructure planning						
Cooperation in renewable energy						
Cooperation in electric mobility						
Cooperation in financing mechanisms to de-risk energy transition						
Cooperation in the use of natural gas and LNG						
Cooperation in strategies for enhanced private sector engagement						
New funding for energy/climate-related actions						

Please specify the new funding assured in USD.

3. How has the OAS capacity building/networking impacted your job?

- Ability to share learning informally with colleagues
- Ability to share learning formally with colleagues
- (More) involvement in work at the workplace
- More responsibility in energy-related work at the workplace
- Leadership role in energy-related work at my workplace
- New position in my workplace
- New position in a new workplace

4. What were the strengths, weaknesses, opportunities, and threats of ECPA capacity building/networking events?

5. How would you assess the overall utility of the capacity building/networking event?

Annex 6: Suggestions on how to strengthen the results focus of ECPA logframe indicators

Narrative Summary of Objectives and Activities	Indicators ECPA V	Suggestion of enhancing the results-based focus of indicators (in bold italics)
<p>GOAL</p> <p>To contribute to the adoption and widespread use of clean energy in the Americas.</p>	<p>Private financing mobilized for renewable energy and energy efficiency deployment increases by 15% by 2022.</p> <p>By 2022, 10 member states are ranked amongst the 20 most attractive emerging markets for clean energy investment globally.</p> <p>By 2025, 25 Member States are implementing initiatives related to energy infrastructure, energy efficiency, or energy integration priorities.</p>	<p>Private financing mobilized for renewable energy and energy efficiency deployment increases by 15% by 2022.</p> <p>By 2022, 10 member states are ranked amongst the 20 most attractive emerging markets for clean energy investment globally.</p> <p>By 2025, 25 Member States are implementing initiatives related to energy infrastructure, energy efficiency, or energy integration priorities.</p>
<p>PURPOSE</p> <p>Shared leadership and cooperation in energy infrastructure, energy efficiency, and energy integration strengthened at the regional level.</p>	<p>1. At least 3 governments in the region assume a leading role in organizing and hosting one or more dialogues, public-private meetings, workshops, technical exchange missions, or senior expert visits at the end of project execution.</p> <p>2. By the end of the project, 2 or more beneficiaries or partners are cooperating in initiatives addressing specific energy infrastructure, energy efficiency, or energy integration priorities identified in the ECPA Action Plan.</p>	<p>1. <i>A co-financing rate of 50% for those events</i> of at least 3 governments in the region assume a leading role in organizing and hosting one or more dialogues, public-private meetings, workshops, technical exchange missions, or senior expert visits at the end of project execution</p> <p>2. By the end of the project, <i>X%</i> or more beneficiaries or partners <i>have signed cooperation agreements to promote</i> initiatives addressing specific energy infrastructure, energy efficiency, or energy integration priorities identified in the ECPA Action Plan.</p>
<p>OUTPUTS</p> <p>1. Multi-sector forum on clean energy facilitated</p> <p>2. Technical cooperation on energy infrastructure, energy efficiency, and energy integration implemented</p>	<p>1.1 By the end of the first half of the project, at least 50 participants attend the meetings to facilitate public-private partnerships, and, by the end of the project, a total of 160 participants (men and women) attend said meetings.</p> <p>1.2 By the end of the first half of the project, at least 50 participants attend the public dialogues, and, by the end of the project, a total of 160 participants (men and women) attend said dialogues.</p> <p>2.1 80% of participants surveyed after each workshop, exchange mission, or senior expert visit, consider that the activity has strengthened their technical capacity in a specific field of clean energy.</p> <p>2.2 By the end of the first half of the project, 2 countries share their experiences, practices, or lessons learned with other countries in the region</p>	<p>1.1 By the end of the first half of the project, at least 50 participants attend the meetings to facilitate public-private partnerships, and, by the end of the project, a total of 160 participants (men and women) attend said meetings.</p> <p>1.2 By the end of the first half of the project, at least 50 participants attend the public dialogues, and, by the end of the project, a total of 160 participants (men and women) attend said dialogues.</p> <p>2.1 80% of participants surveyed after each workshop, exchange mission or senior expert visit, consider that the activity has strengthened their technical capacity in a specific field of clean energy.</p>

<p>3. Technical and administrative support to the ECPA Steering Committee and Ministerial Meetings provided</p> <p>4. Information on the actions of ECPA geared toward advancing clean energy in the Americas disseminated</p> <p>5. Project planning, monitoring, and evaluation</p>	<p>and, by the end of the project, a total of 6 countries do so.</p> <p>2.3 By the end of the first half of the project, at least 8 countries participate in workshops, technical exchange missions, or senior expert visits either as recipients or providers of technical cooperation and, by the end of the project, the number of participating countries is 20.</p> <p>2.4 By the end of the project, 5 concrete collaboration actions are facilitated.</p> <p>3.1 By the end of the first half of the project, Permanent Missions to the OAS and/or National Focal Points meet virtually or in-person for at least 12 Steering Committee meetings and, by the end of the project, a total of 30 meetings is convened.</p> <p>4.1 By the end of the first half of the project, the newsletter subscriber mailing list increases from 3,000 to 3,100 and, by the end of the project, the subscriber mailing list increases from 3,100 to 3,300.</p> <p>4.2 By the end of the first half of the project, webpage views increase from 34,000 to 36,000 per year and, by the end of the project, page views increase from 36,000 to 39,000 per year.</p> <p>4.3 One ECPA newsletter published each month, for a total of 48 newsletters at the end of the project, featuring at least 8 news or articles addressing gender, or highlighting the work of women in clean energy.</p> <p>5.1 By the end of the project, 7 half-yearly Reports on Project Progress in Implementation and 1 Final Project Report are submitted.</p>	<p>2.2 By the end of the first half of the project, 2 countries share their experiences, practices or lessons learned with other countries in the region and, by the end of the project, a total of 6 countries do so.</p> <p>2.3 By the end of the first half of the project, at least 8 countries participate in workshops, technical exchange missions, or senior expert visits either as recipients or providers of technical cooperation and, by the end of the project, the number of participating countries is 20.</p> <p>2.4 By the end of the project, 5 concrete collaboration actions are facilitated.</p> <p>3.1 Number of specific technical cooperation actions resulting from Steering Committee meetings which are agreed and implemented</p> <p>4.1 Each year, the newsletter content consists of 75% of ECPA funded research/studies</p> <p>4.2 The annual user satisfaction of the ECPA website reaches 75%.</p> <p>4.3 The annual user satisfaction of the ECPA newsletter reaches 75%.</p> <p>5.1 By the end of the project, 7 half-yearly Reports on Project Progress in Implementation and 1 Final Project Report are submitted with DPE attesting satisfactory quality.</p>
---	---	---

Annex 7: Endnotes

CIDI/RIMDS-II/DEC.1/10

DECLARE THAT: 17) The Inter-American networks established within the framework of the OAS are of great relevance as tools to promote cooperation, and the exchange of experiences with respect to integrated water resources management, renewable energy, biodiversity information, disaster risk management, climate change adaptation, and environmental law and to promote synergies with other pertinent sub regional mechanisms.

CIDI/RIMDS-II/DEC.1/10

43. To continue to strengthen the exchange of information, experiences, best practices and lessons learned in member states on integrated water resources management, sustainable energy, biodiversity, sustainable land management, disaster risk management, climate change adaptation, and policies, strategies and legal and institutional frameworks on sustainable development, through inter-American networks established in the framework of the OAS on these issues

AG/DEC. 52 (XXXVII-O/07)

Their request that the General Secretariat, in coordination with other institutions and experts: • Continue to promote instructional and training programs for relevant actors in the public and private energy sectors, taking into account the possibilities offered by the Scholarship and Training Programs of the OAS and other possible funding sources; • Maintain, update, and distribute a registry of specialists of the member states who, at the request of the countries of the region, can offer cooperation on energy matters; and • Support regional dialogue for the creation and strengthening of markets and the promotion of energy efficiency and conservation for sustainable development.

AG/DEC. 52 (XXXVII-O/07)

Their request to the General Secretariat of the OAS to promote the support and synergy of states, international organizations, civil society, the private sector, and the academic community, to promote the contents of this Declaration of Panama, and to report on a regular basis to the Permanent Council and to the Inter-American Council for Integral Development.

AG/RES. 2312 (XXXVII-O/07)

To instruct the General Secretariat to collaborate, through the Executive Secretariat for Integral Development (SEDI), with authorities in the sustainable development sector in implementing the actions and agreements adopted during the First Inter-American Meeting of Ministers and High-Level Authorities on Sustainable Development and to report periodically on this process to the Permanent Executive Committee of the Inter-American Council for Integral Development (CEPCIDI).

AG/RES. 2816 (XLIV-O/14)

35. To request the General Secretariat to promote regional dialogue toward developing reliable, cleaner, more affordable, and renewable and sustainable energy systems that facilitate access to energy and energy-efficiency technologies and practices in households and in the public and private sectors.

AG/RES. 2253 (XXXVI-O/06)

To request the General Secretariat, within available resources, to support member states' efforts to develop sustainable energy plans and to implement measures that foster greater use of clean conventional energy and commercially viable renewable energy, such as wind, geothermal, biofuel, hydroelectric, and solar energy, as well as to adopt policies designed to achieve greater energy efficiency, as a means of better addressing the challenges associated with economic growth and the environment.

AG/RES. 2253 (XXXVI-O/06)

To enhance cooperation between the OAS, the Inter-American Development Bank (IDB), the Inter-American Institute for Cooperation in Agriculture (IICA), and other international and regional organizations in order to: a. Implement renewable energy measures and energy efficiency projects that lower dependence on fossil fuels while promoting the development and efficient use of local natural resources to produce fuels for electricity generation and transportation; and b. To promote increased provision of novel energy services to neglected communities, particularly rural and indigenous communities, as a means of promoting economic development, sustainable management of natural resources, and capacity to deliver community services, including education, health, and agricultural extension services.
