

## TC ABSTRACT

### I. Basic project data

▪ Country/Region:	Central America and Caribbean Region
▪ TC Name:	Support for Cofinancing for Renewable Energy and Energy Efficiency (CORE)
▪ TC Number:	RG-T2480
▪ Team Leader/Members:	Christiaan Gischler (INE/ENE) Team Leader; Shohei Tada (INE/ENE) Co-Team Leader; Adriana M. Valencia (INE/ENE); Camila Gonzalez (INE/ENE); Haydemar Cova (INE/ENE); supervised by Alejandro Melandri (INE/ENE)
▪ Indicate if: Operational Support, Client Support, or Research & Dissemination.	Client Support
▪ Reference to Request <sup>1</sup> : (IDB docs #)	NA
▪ Date of TC Abstract:	April 09, 2014
▪ Beneficiary:	Regional
▪ Executing Agency and contact name:	The Inter-American Development Bank (IDB) through the Energy Division (INE/ENE)
▪ IDB Funding Requested:	US\$1,500,000
▪ Local counterpart funding, if any:	US\$1,500,000 will be provided by Japan International Cooperation Agency (JICA)
▪ Disbursement period (includes execution):	4 years
▪ Required start date:	April 2014
▪ Types of consultants:	International consulting firm and individual consultants
▪ Prepared by Unit:	The Energy Division (INE/ENE)
▪ Unit of Disbursement Responsibility:	IDB Headquarters
▪ Included in Country Strategy (y/n);	n/a
▪ TC included in CPD (y/n):	n/a
▪ GCI-9 Sector Priority:	Climate change, Integration, and supporting development in small and vulnerable countries.

### II. Objective and Justification

- 2.1 The **general objective** of the TC is to support the development of mechanisms to reduce the dependency on fossil-fuels and to mitigate the negative impact of climate change in Central America and the Caribbean region by promoting Cofinancing for Renewable Energy and Energy Efficiency (CORE).
- 2.2 Electricity generation in most countries in Central America and Caribbean depends on imported fuels (residual and diesel oil) and is vulnerable to high and volatile international oil prices. In Central America, the power sector has contributed to the increase in oil consumption in the region due to a substantial increase in the participation of fossil fuels in the generation mix during the last decades (from 18% in 1990 to 42% in 2010), resulting in high generation costs. In the Caribbean, the cost of electricity generation is even higher because of imported fuels and system inefficiency due to the limited size of these isolated markets, making the region one of the regions with the highest electricity tariffs in the world (over US\$0.40/kWh).
- 2.3 CORE is a cofinancing mechanism between Japan International Cooperation Agency (JICA) and the Inter-American Development Bank (IDB) to address such dependency on fossil-fuels and possible negative impact of climate change in the regions, by promoting renewable energy (RE) and energy efficiency (EE). CORE is structured and formalized through signing of Memorandum of Understanding (MOU) on January 14, 2011 and of Framework Agreement (FA)<sup>2</sup> on March 16, 2012, in which JICA declares its intention to provide in five years up to US\$300 million of concessional term cofinancing resource. As of March 2014, cumulative commitment amount of JICA exceeds US\$600 million,

<sup>1</sup> A copy of the Letter of Request, Programming/Portfolio Review Mission Aide Memoire or Report requesting the TC should be submitted with the Abstract.

<sup>2</sup> The proposal for signing of the CORE Framework Agreement (GN-2656) was approved by the Board on March 2012.

proving CORE to be an effective approach for the promotion of RE and EE for both the Bank and JICA. In March 2014 both parties agreed on an amendment to the MOU and FA to increase the amount of JICA cofinancing up to US\$1,000 million, as well as to extend eligible countries to uppermost middle income countries.

- 2.4 Under such renewed MOU and FA both parties will continue promoting RE and EE in the regions, where there is a potential to develop RE and EE programs and the need for support such as CORE cofinancing as is the case with; (i) geothermal development in Eastern Caribbean countries, (ii) EE programs for the public sector, RE and interconnection in Belize, (iii) RE and EE programs in El Salvador, (iv) strengthening of hydropower in Honduras, among others.
- 2.5 Integration can play a key role in reducing dependency on fossil-fuels and mitigating the negative impact of climate change in Central America and the Caribbean. On the one hand, the lack of economies of scale and relative isolation of Caribbean countries forces dependency on fossil fuels. On the other hand, Central America has shown progress in addressing energy challenges within a framework of regional dialogue and cooperation through, for example, SIEPAC, the Interconnection System for Central American countries.
- 2.6 Either by developing regional infrastructure or interconnecting countries' electricity grids in some places, bundling carbon emissions reductions and purchases of RE and EE equipment, or sharing expertise and best practices across the region, integration efforts are well suited to address the dual challenge of climate change mitigation and the energy sector's overdependence on fossil fuels. Thus, this operation is consistent with the scope of the FIRII (GN-2344-8) as expressed in Paragraph 3.13 of the Fund's bylaws<sup>3</sup>.
- 2.7 The operation is aligned with the IDB's institutional priorities as outlined in the Ninth General Capital Increase in Resources for the IDB Report (GCI-9, AB-2764) as it contributes to the goals of supporting: a) development in small and vulnerable countries; b) regional integration (through assessing potential investments in energy infrastructure in the region); and c) climate change initiatives, renewable energy and the environment, which includes the 'need to increase the knowledge base, strengthen frameworks and build capacity'. In addition, the Program is in line with the Integrated Strategy for Climate Change Adaptation and Mitigation, and Sustainable and Renewable Energy (GN-2609-1).

### III. Description of activities and outputs

**Component I. Baseline and RE and EE potential survey.** This component will finance studies to determine the relevant baselines required to identify the potential for Energy Efficiency (EE) and Renewable Energy (RE) programs in selected country(s) in Central America and the Caribbean Region. The component comprises the following activities: (a) Develop baseline information for the existing energy matrices, identifying sources, uses and users, generation costs and key players; (b) Develop a baseline for electricity consumption, distribution and generation as well as for CO2 emissions; (c) Identify local and regional stakeholders involved and develop a baseline for institutional capabilities and current regional cooperation efforts around energy and climate change goals; (d) Identify existing financial mechanisms to promote EE and RE investments; (e) Identify technical, financial, legal and institutional bottlenecks for the promotion of RE and EE; (f) Assess the potential of EE, by conducting energy audits to evaluate energy savings by user group (residential, commercial, industrial, public sector) derived from the implementation of EE practices, standards and technologies, estimating also financial savings; (g) Assess the potential for RE, such as solar, wind, geothermal, hydro and other possible RE sources for electricity generation, estimating generation cost (US\$/MWh of energy delivered and US\$/MWh of installed capacity) for potential RE generation and compare to current generation costs; and (h) Identify a project pipeline prioritized by cost and benefit analysis.

**Component II. Pre-investment studies.** Component II will finance the studies required to determine the feasibility of the EE and RE project pipeline that will allow seizing the identified EE and RE potential in the Central American and Caribbean regions. The component comprises the following activities: (a) Perform

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<sup>3</sup> "(...) the expected outcome of the Integration Fund is to help the countries in the preparation of good integration projects including the economic, social and environmental perspectives. This, in turn, will have a positive impact in the sustained development of the region, and help attract to the pipeline of the Bank good infrastructure operations"

the technical and economic evaluation for prioritized project(s) in the pipeline identified in Component I (h); (b) Perform the social and environmental studies for the prioritized project(s) in the pipeline identified in Component I (h); and (c) Perform other studies required to assess feasibility for the prioritized project(s) in the pipeline identified in Component I (h).

**Component III. Capacity building, institutional strengthening and regional coordination.** This component will provide resources to achieve an adequate institutional setting both at the local and regional levels for the development of identified EE and RE potential in the Central American and Caribbean regions. The component comprises the following activities: (a) Assess the human resources, legal and institutional framework and budget required to develop the project pipeline identified in Component I (h); (b) Assess the training and capacity building requirements both at a national level and to enable participation in cross-border and regional programs; (c) Design a set of institutional strengthening activities in EE and RE to implement both at a national and regional level; (d) Design and prepare capacity building and institutional strengthening education plans; (e) Identify national and regional level actions needed to tap into the identified EE and RE potential; and (f) Design and prepare regional coordination protocols, if required, to develop the identified EE and RE potential in the region.

**Component IV. Dissemination and public awareness.** This component will finance the public outreach activities required to ensure public awareness as well as the necessary stakeholder engagement and participation during the execution of the consultancies and activities that this TC entails. The component comprises the following activities: (a) Design a public outreach plan and the communications campaigns necessary to deploy it; (b) Hold workshops with relevant stakeholders to present, discuss and disseminate the findings and results obtained during and from the execution of this TC; and (c) Execute the communications campaigns necessary to deploy the public outreach plan.

#### IV. Budget

##### Indicative Budget

Activity/ Component	Description	IDB Funding (FIRII) US\$	JICA (in kind) US\$	Total Funding US\$
Component I	Baseline and potential survey	450,000	700,000	1,150,000
Component II	Pre-investment studies	450,000	700,000	1,150,000
Component III	Capacity building, institutional strengthening and regional coordination	350,000		350,000
Component IV	Dissemination and public awareness	100,000	100,000	200,000
<b>Project management</b>		<b>150,000</b>		<b>150,000</b>
<b>TOTAL</b>		<b>1,500,000</b>	<b>1,500,000</b>	<b>3,000,000</b>

#### V. Executing agency and execution structure

Given the regional nature of this TC, the Executing Agency will be the Inter-American Development Bank through the Energy Division in constant collaboration with JICA. IDB and JICA will have independent procurement; nevertheless, both parts will discuss and share the terms of reference used for such purposes.

#### VI. Project Risks and issues

The major risk for this TC is the coordination risk since the project has multiple beneficiaries. This risk is mitigated by hiring a Project Manager, who will manage the execution of the components and activities, and centralize the communication among different government agencies and stakeholders.

#### VII. Environmental and Social Classification

There are no envisioned environmental or social risks associated with the Program. C classification expected.