

PROJECT PREPARATION GRANT (PPG)¹

PROJECT TYPE: Full size project
TYPE OF TRUST FUND: GEF Trust Fund

Submission Date: 4 February, 2013

GEF Project ID: ²5199

GEF Agency Project ID: TBD

Country (ies): Colombia

Project Title: Demonstration and assessment of battery-electric vehicles for mass transit in Colombia

GEF Agency (ies): IADB

GEF Focal Area(s): Climate Change

A. PROJECT PREPARATION TIMEFRAME:

Start Date of PPG	1 April 2013
Completion Date of PPG	30 October 2013

B. PROPOSED PROJECT PREPARATION ACTIVITIES

Describe the PPG activities and justifications: The proposed activities will support the preparation of the test of articulated, battery-electric buses in the bus rapid transit (BRT) system in Bogotá, and provide initial guidance to the discussion on policies, regulations and standards for battery-electric vehicles in Colombia.					
List of Proposed Project Preparation Activities	Output of the PPG Activities	Trust Fund	Grant Amount (a)	Co-financing (b)	Total c=a+b
1. Preparation of a field test of articulated, battery-electric buses	Protocol for the test of articulated, battery-electric buses, including recommendations on relevant technologies, the specification of driving cycles, fleet size, duration of tests, and the definition of the methodology and equipment required for the collection of data and the assessment of results.	GEFTF	0	52,000	52,000
2. Overview of current technologies for battery electric vehicles with an emphasis on applications for mass transit	Overview of current technologies for battery electric vehicles with an emphasis on applications for large mass-transit buses of the types used in Colombian BRT systems (e.g. 54 ft. articulated buses). The overview should include recent developments regarding battery and propulsion-system technologies, technology providers and relevant examples of prototypes' testing and commercial applications of such technologies.	GEFTF	0	19,200	19,200
3. Preliminary cost-benefit analysis (CBA) of battery electric buses	Preliminary cost-benefit analysis of battery electric buses in the context of Colombian BRT systems. The analysis should provide estimates of key capital expenditures (e.g. vehicles and supporting infrastructure), operational costs and savings (e.g. maintenance, fuel and electricity, etc.) and environmental and health benefits (e.g. greenhouse gas emissions, population exposure to criteria pollutants, etc.).	GEFTF	0	21,000	21,000
4. Feasibility study of battery	• Assessment of alternatives for the location,	GEFTF	0	12,000	12,000

¹ It is very important to consult the PPG preparation guidelines when completing this template.

² Project ID number will be assigned by GEFSEC

charging stations to be used for the test of battery-electric buses	number and configuration of the battery charging stations required to support the test of articulated, battery electric buses. • Feasibility study of battery charging stations, including a preliminary design and cost estimates of the electric and civil works required.				
5. Overview of battery-charging technical and safety standards	Overview of current technologies and standards for battery charging of electric vehicles in various applications (e.g. mass transit, taxis, urban delivery, etc.), with an emphasis on large mass-transit battery-electric buses, including an assessment of relevant cost, safety and harmonization issues.	GEFTF	21,000	0	21,000
6. Literature review and description of policies, plans and incentives for electric mobility	Summary of selected examples of policies, plans and incentives by national or local authorities to promote electric mobility in various applications (e.g. mass transit, taxis, urban delivery, etc.) and elaboration of recommendations for appropriate courses of action in Colombia.	GEFTF	18,000	0	18,000
7. Elaboration of full project proposal and coordination of activities	CEO endorsement request and GEF agency's project documentation, including detailed budget, co-financing commitments, estimation of global environmental benefits and project monitoring and evaluation plan.	GEFTF	21,000	30,000	51,000
		Choose an item.			
		Choose an item.			
		Choose an item.			
Total project preparation financing			60,000	134,200	194,200

C. FINANCING PLAN SUMMARY FOR PROJECT PREPARATION GRANT (\$)

	Project Preparation	Agency Fee
Grant Amount	60,000	5,700
Co-financing	134,200	0
TOTAL	194,200	5,700

D. PPG AMOUNT REQUESTED (IN \$) BY AGENCY(IES), FOCAL AREA(S) AND COUNTRY(IES)³

Trust Fund	GEF Agency	Focal Area	Country name / Global	PPG (a)	Agency Fee (b)	Total C = a + b
GEF	IADB	CC	Colombia	60,000	5,700	65,700
Choose an item.	Choose an item.	Choose an item.				
Choose an item.	Choose an item.	Choose an item.				
Choose an item.	Choose an item.	Choose an item.				
Choose an item.	Choose an item.	Choose an item.				
Choose an item.	Choose an item.	Choose an item.				
Total PPG Amount				60,000	5,700	65,700

³ In case of a single Focal Area, single country, single GEF Agency project, and single Trust Fund, no need to provide

E. PPG BUDGET

COST ITEMS	TOTAL ESTIMATED PERSON WEEKS FOR GRANT (PW)	GRANT AMOUNT (\$)	CO-FINANCING (\$)	TOTAL (\$)
LOCAL CONSULTANTS*	22	21,000	12,000	33,000
INTERNATIONAL CONSULTANTS*	49	39,000	122,200	161,200
TOTAL PPG BUDGET		60,000	134,200	194,200

* Annex A for Consultant cost details should be prepared first before completing this table. See notes on Annex A for the required information. This table is the sum for all local and international consultants presented in Annex A.

F. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies and procedures and meets the GEF/ LDCF/ SCCF Trust Fund criteria for project identification and preparation.

Agency Coordinator, Agency name	Signature	Date (mm/dd/yyyy)	Project Contact Person	Telephone	Email Address
Michael Collins, IDB-GEF Executive Coordinator		04/06/2013	Francisco Arango	+1 202 - 623 2393	farango@iadb.org

Consultants financed by the Project Preparation Grant (PPG)

Type of Consultant	Position / Titles	\$ / Person Week⁴	Estimated PWs⁵	Tasks to be performed
International	Expert on vehicle technologies	4,000	13	Preparation of a field test of articulated, battery-electric buses (co-financing)
International	Expert on vehicle technologies	3,200	6	Overview of current technologies for battery electric vehicles with an emphasis on applications for mass transit (co-financing)
International	Expert on vehicle technologies	3,000	7	Preliminary cost-benefit analysis of battery electric buses (co-financing)
Local	National electric engineer	1,500	8	Feasibility study of battery charging stations to be used for the test of battery-electric buses (co-financing)
International	Expert on battery-electric vehicles	3,000	7	Overview of battery-charging technical and safety standards (GEF project preparation grant)
International	Expert on battery-electric vehicles	3,000	6	Literature review and description of policies, plans and incentives for electric mobility (GEF project preparation grant)
International	Lead consultant	3,000	10	Elaboration of full project proposal (co-financing)
Local	Supporting local consultant	1,500	14	Elaboration of full project proposal and local coordination (GEF project preparation grant)
Choose an item.				
Choose an item.				
Choose an item.				

⁴ Provide dollar amount per person week

⁵ Provide person weeks needed to carry out the task