

BRA/99/G32 – Hydrogen Fuel Cell Buses for Urban Transport in Brazil

(PIMS 543)

Atlas Project No. 00011660

Terms of Reference

Terminal Evaluation

December 2015

Country(ies):	Brazil
ATLAS Award ID:	00011660
PIMS Number:	543
GEF Focal Area:	Climate Change
GEF Strategic Objective:	Operational Programme 11
GEF Budget (USD):	12,274,000
Co-Financing Budget (USD):	2,166,822
Project Document Signature date:	October 15 th , 2001
Date of first disbursement:	February 01 st , 2002
Original Planned Closing Date:	November 30 th , 2006
Executing Agency:	UNDP
Date of Project Closure	December 31 st , 2015 – operational completion date

1 INTRODUCTION

UNDP/GEF Monitoring and Evaluation (M&E) policy

The Monitoring and Evaluation (M&E) policy at the project level in UNDP/GEF has four objectives:

- i) to monitor and evaluate results and impacts;
- ii) to provide a basis for decision making on necessary amendments and improvements;
- iii) to promote accountability for resource use;
- iv) to document, provide feedback on, and disseminate lessons learned.

A mix of tools is used to ensure effective project M&E. These might be applied continuously throughout the lifetime of the project – e.g. periodic monitoring of indicators -, or as specific time-bound exercises such as mid-term reviews, audit reports and final evaluations.

In accordance with applicable policies for UNDP/GEF projects, all GEF-funded projects implemented by UNDP are subjective to a mid-term and a final independent evaluation. According to the Project Document BRA/99/G32 - Hydrogen Fuel-Cell Buses for Urban Transport, a terminal evaluation is foreseen.

The current Terms of Reference of the Terminal Evaluation of the Fuel-Cell Bus Project outline what is expected from the Evaluator and briefly reflect key aspects of the project and its background. For any description on methodology, procedures and content of the evaluation report reference is made to the UNDP Evaluation Guidance for GEF Financed Projects (Annex 1).

Brief project description

The development objective of the project is to reduce GHG emissions through the introduction of a new energy source and propulsion technology for urban buses based upon fuel-cells operating on hydrogen. This project is designed to initiate and accelerate the process of the development and commercialization of fuel cell buses in Brazil. Together with similar future initiatives in other countries, it is intended to provide a major push to the accelerated development of relatively clean technology in the mega-cities of developing countries.

Over the longer term, assuming that this project and its successors perform as designed, this project will lead to an increased production in fuel cell propelled buses, and eventually, the reduction in their costs to the point where they will become commercially competitive with conventional, diesel buses. It has been designed to be consistent with GEF Operational Program 11 “Promoting Sustainable Transport”.

The immediate objective of the project is to demonstrate the operational viability of fuel cell drives in urban buses, together with the requisite re-fueling infrastructure, under Brazilian conditions. It will begin the process of commercialization and adaptation of the fuel-cell buses in Brazilian markets.

The results of the project are expected to be:

Output 1: A significant demonstration of the operational viability of fuel cell drives in urban buses and their refueling infrastructure under Brazilian conditions;

Output 2: A cadre of bus operators and staff trained in the operation, maintenance, and management of fuel cell buses;

Output 3: The accumulation of a substantial body of knowledge about reliability, failure modes and opportunities for improving the design of fuel cell buses for Brazil;

Output 4: Assessment of the performance of the electrolysis unit;

Output 5: A proposal for Phase III of the Brazilian Fuel-cell Bus program that lays the foundation for the expansion of the market for and use of fuel cell buses and increases the involvement of local engineering and production of buses; and

Output 6: Increased awareness and support of the public for an increased role for fuel cell buses in Brazil’s urban transport system.

2 OBJECTIVES OF THE EVALUATION

The Terminal Evaluation (TE) will be conducted according to guidance, rules and procedures for such evaluations established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects (Annex 1). A key principle of the evaluation is that it must provide clearly documented evidence and analysis, and unbiased assessment.

The overall objective of the TE is to analyze the implementation of the project, review the achievements made by the project to deliver the specified objectives and outcomes. It will establish the relevance, performance and success of the project, including the sustainability of results. The evaluation will also collate and analyze specific lessons and best practices pertaining to the strategies employed, and implementation arrangements, which may be of relevance to other projects in the country and elsewhere in the world.

The main stakeholders of this TE are: the Brazilian Cooperation Agency (ABC), the Ministry of Energy (MME), the São Paulo Urban Transportation Metropolitan Enterprise (EMTU/SP), the Projects and Studies Financing Agency (FINEP); and the private sector partners (Ballard Power Systems Inc., EPRI International Inc, Marcopolo S.A., Petrobras Distribuidora S.A., Hydrogenics Corporation, Tutto Indústria de Veículos e Implementos Rodoviários Ltda). The personnel directly involved in this project at the time of its implementation should be interviewed.

3 SCOPE OF THE EVALUATION

The evaluation will cover the five major criteria which are relevance, effectiveness, efficiency, results and sustainability. These five evaluation criteria should be further defined through a series of questions covering all aspects of the project intervention, broken out in three main sections:

- a) Project Formulation: Logical framework, Assumptions and Risks, Budget (co-finance) and Timing.
- b) Project Implementation: IA/EA supervision and support, monitoring (including use of tracking tools) and evaluation, stakeholder participation, adaptive management, co-financing and baseline.
- c) Achievement of Results: Outcomes, Impacts, Catalytic Effect, Sustainability, Mainstreaming (e.g. links to other UNDP priorities, including related support programmes set out in the UNDAF and CPD, as well as cross cutting issues).

The UNDP Evaluation Guidance for GEF Financed Projects (Annex 1) details which of the project components need to be rated as well as a definition of the six point rating scale (from Highly Satisfactory to Highly Unsatisfactory).

4 PRODUCTS EXPECTED FROM THE EVALUATION

The evaluation consultant is expected to deliver three products as described in the Guidance (Annex 1). The report will include the evaluation scope and method, findings, conclusions and recommendations.

- Oral presentation of main findings of the evaluation to UNDP CO and Project Team before the mission is concluded in order to allow for clarification and validation of evaluation findings.
- A draft Evaluation report with main findings and conclusions for comments/suggestions, in English.
- A final Evaluation Report, which is to be in line with the Report Outline described in the Guidance, in English for presentation to UNDP and GEF.

5 METHODOLOGY OR EVALUATION APPROACH

The TE methodology is to follow the GEF Guidance (Annex 1) and the Evaluation Consultant shall discuss with the UNDP-Brazil country Office and the project Coordination Unit on the methodological approach to be undertaken.

A list of documents to be reviewed by the Evaluation Consultant is attached in Annex 2.

6 EVALUATION CONSULTANT

The terminal evaluation will be undertaken by one external evaluator and must be performed in close cooperation with the Coordination Team of Brazilian Fuel-Cell Buses Project, which will assist and support with documents and all information needed for the evaluation process.

6.1. Consultant

In general terms this consultant should: ensure the assessment is carried out in an objective way to provide an external perspective to the immediate environment of the project, from his/her experience. Should lead the aspects of *management, financial, administrative; financial sustainability and aspects of policies for sustainable transportation*.

Specifically he/she will:

- Assess the capacity of the different instances of the project implementation, carefully reviewing the ability to carry out their specific responsibilities;
- Evaluate how different instances are related among themselves and as maintained a clear definition of roles and responsibilities;
- Assess managerial, financial and administrative aspects of the project including the compliance with the rules and procedures of the administrative system, financial and project reporting, making sure they are aligned with the financial rules and regulations of UNDP and GEF, and the public procurement rules when it applies, and co-financing from different stakeholders;
- Evaluate the cost effectiveness of the methodologies used by the project;
- Evaluate the design of the project, its relevance and progress towards the objectives set, and assess baseline and PIR information;
- Assess the achievement of impacts, especially in relation to the implementation of the project, financial sustainability and institutional capacity;
- Collect best practices that can provide knowledge gained from particular circumstances that are applicable to other GEF and UNDP interventions, drawing lessons learned.

The consultant in charge of the TE will be held to the ethical standards referred to in the Guidance (Annex 3) and is expected to sign the Code of Conduct (Annex 3) upon acceptance of the assignment. In order to undertake this assignment, the consultant should not present any previous involvement with this project implementation.

7 IMPLEMENTATION ARRANGEMENTS

Management Arrangements

The TE is a requirement of UNDP and GEF and solicited and led by the *UNDP-Brazil* as GEF implementing agency. The *UNDP-Brazil* has overall responsibility for the coordination and logistical arrangements of the evaluation as well as day-to-day support to the evaluator (travel, accommodation, office space, communications, etc.) and timely provision of per diems and contractual payments. The *UNDP-Brazil* will also organize the site missions (travel arrangements, meetings with key stakeholders and beneficiaries, interviews, field trips). The Evaluation Consultant will be briefed by the UNDP Country Office (UNDP-CO) and the Regional Coordination Unit (UNDP-GEF RCU) upon the commencement of the assignment, and will also provide a terminal briefing. Other briefing sessions may be scheduled, if deemed necessary.

Payment modalities and specifications: The evaluators will be contracted directly from the project budget. Payment will be 50% at the submission of the first draft of the Evaluation Report to the UNDP-CO, UNDP-GEF RCU and the Project Team, and the other 50% once the final report has been completed and cleared by both the UNDP-CO and UNDP-GEF RCU. The quality of the evaluator's work will be assessed by the UNDP-CO and UNDP-GEF RCU. If the quality does not meet standard UNDP expectations or UNDP-GEF requirements, the evaluators will be required to re-do or revise (as appropriate) the work before being paid final installments.

This Term of Reference follows the UNDP-GEF policies and procedures, and will be agreed upon by the UNDP-GEF RCU, UNDP Country Office and the Project Team. The final report must be cleared and accepted by UNDP before being made public, therefore, the UNDP-CO and UNDP-GEF-RCU will have to formally clear the report (as per the Approval Form in Annex 4).

7.1 Timeframe, resources, logistical support and deadlines

This Terminal Evaluation (TE) shall be carried out from December 2015 to March 2016. The total duration of the evaluation is estimated in 30 days according to the following plan:

Preparation before mission: (5 days including travel time)

- Acquaintance with the project document and other relevant materials with information about the project (PRODOC, PIRs, Baseline Tracking Tools, Steering Committee's reports and minutes, Annual Operational Plans (AOPs/POAs), any additional M&E report, Terms of Reference of ongoing studies, if applicable, etc.);
- Familiarization with overall development situation of country (based on reading of UNDP - Common Country Assessment and other reports on the country);
- Initial discussion with UNDP-GEF-Regional Technical Advisor (telephone/Skype) and with UNDP Country Office;
- Mission preparation, including methodology, in cooperation with the UNDP Country Office and the Project team, for comments and suggestions (email).

Mission: (8-10 days)

- Meetings with UNDP Country office in Brasília and Project Team in São Paulo;
- Meetings with key stakeholders. The itinerary will be set in agreement with consultant, but initially it will include: 02 days in Brasília, 05 days in São Paulo, 01 day in Caxias do Sul.
- Collection and review of all available materials, with focused attention to project outcomes and outputs in general and completed and ongoing activities.
- Oral presentation of main findings of the evaluation to UNDP-CO and Project Team.

Draft report (6-10 days): To be provided within two weeks of mission completion

- Drafting of report in proposed format;
- Final cross checking with UNDP-CO, UNDP-GEF RCU and Project team (telephone);
- Completing of the draft report and presentation of draft report for comments and suggestions (email).

Final Report (5 days)

- Completing of the final report based on previous comments and suggestions.
- Presentation of final evaluation report for UNDP and the Project coordination Team and special guests will held in Brasília.

8. ANNEXES

Annex 1: UNDP Guidance on Evaluation of GEF Financed Projects (Version for external evaluators)

Annex 2: List of Documents to be reviewed by the evaluators

Annex 3: Evaluation Consultant Code of Conduct Agreement Form

Annex 4: Evaluation Report Clearance Form to be completed by CO and RCU and included in the final document

Annex 2: List of Documents to be reviewed by the evaluators

- PRODOC;
- PIRs – Plan Implementation Reports (2013-2015);
- Steering Committee’s reports and minutes;
- Annual Operational Plans (AOPs/POAs);
- List of technical reports produced and or commissions and respective Terms of Reference;
- Financial data including co-funding data and audit reports, whenever applicable.

Annex 3: Evaluation Consultant Code of Conduct Agreement Form

Evaluators:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and: respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study limitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: _____

Name of Consultancy Organization (where relevant): _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at (place) on _____

Signature: _____

Annex 4: Evaluation Report Clearance Form to be completed by CO and RCU and included in the final document

Reviewed and Cleared by

UNDP Country Office

Name: _____

Signature: _____ Date: _____

UNDP- GEF- RCU

Name: _____

Signature: _____ Date: _____