Status of ESMAP Portfolio of Projects:

As of June 30, 2003

Special Series

August 2003

JOINT UNDP / WORLD BANK ENERGY SECTOR MANAGEMENT ASSISTANCE PROGRAMME (ESMAP)

PURPOSE

The Joint UNDP/World Bank Energy Sector Management Assistance Programme (ESMAP) is a special global technical assistance partnership sponsored by the UNDP, the World Bank and bi-lateral official donors. Established with the support of UNDP and bilateral official donors in 1983, ESMAP is managed by the World Bank. ESMAP's mission is to promote the role of energy in poverty reduction and economic growth in an environmentally responsible manner. Its work applies to low-income, emerging, and transition economies and contributes to the achievement of internationally agreed development goals. ESMAP interventions are knowledge products including free technical assistance, specific studies, advisory services, pilot projects, knowledge generation and dissemination, trainings, workshops and seminars, conferences and roundtables, and publications. ESMAP work is focused on three priority areas: access to modern energy for the poorest, the development of sustainable energy markets, and the promotion of environmentally sustainable energy practices.

GOVERNANCE AND OPERATIONS

ESMAP is governed by a Consultative Group (the ESMAP CG) composed of representatives of the UNDP and World Bank, other donors, and development experts from regions which benefit from ESMAP's assistance. The ESMAP CG is chaired by a World Bank Vice President, and advised by a Technical Advisory Group (TAG) of independent energy experts that reviews the Programme's strategic agenda, its work plan, and its achievements. ESMAP relies on a cadre of engineers, energy planners, and economists from the World Bank, and from the energy and development community at large, to conduct its activities under the guidance of the Manager of ESMAP.

FUNDING

ESMAP is a knowledge partnership supported by the World Bank, the UNDP and official donors from Belgium, Canada, Denmark, Finland, France, Germany, the Netherlands, Norway, Sweden, Switzerland, and the United Kingdom. ESMAP has also enjoyed the support of private donors as well as in-kind support from a number of partners in the energy and development community.

FURTHER INFORMATION

For further information, a copy of the ESMAP Annual Report, or copies of project reports, etc., please visit the ESMAP website: www.esmap.org. ESMAP can be reached by email at esmap@worldbank.org or by mail at:

ESMAP

c/o Energy and Water Department
The World Bank Group
1818 H Street, NW
Washington, D.C. 20433, U.S.A.
Tel.: 202.458.2321

Fax: 202.522.3018

Copyright © 2003
The International Bank for Reconstruction and Development/THE WORLD BANK 1818 H Street, N.W.
Washington, D.C. 20433, U.S.A.

All rights reserved Manufactured in the United States of America First printing August 2003

ESMAP Reports are published to communicate the results of the ESMAP's work to the development community with the least possible delay. The typescript of the paper therefore has not been prepared in accordance with the procedures appropriate to formal documents. Some sources cited in this paper may be informal documents that are not readily available.

The findings, interpretations, and conclusions expressed in this paper are entirely those of the author(s) and should not be attributed in any manner to the World Bank, or its affiliated organizations, or to members of its Board of Executive Directors or the countries they represent. The World Bank does not guarantee the accuracy of the data included in this publication and accepts no responsibility whatsoever for any consequence of their use. The Boundaries, colors, denominations, other information shown on any map in this volume do not imply on the part of the World Bank Group any judgment on the legal status of any territory or the endorsement or acceptance of such boundaries.

The material in this publication is copyrighted. Requests for permission to reproduce portions of it should be sent to the ESMAP Manager at the address shown in the copyright notice above. ESMAP encourages dissemination of its work and will normally give permission promptly and, when the reproduction is for noncommercial purposes, without asking a fee.



Project Title: Best Practices for Grid Electrification - Phase 2

Region / Country: Global

Netherlands: Core Origin of Funds:

Task Manager: **Douglas French Barnes**

Project Development Objective

The adoption of best practices by institutions extending grid electricity to rural areas in developing countries.

Number of new or existing companies adopting best practices recommended in the study and increasing effectiveness of rural electrification.

Key Indicator

Expected Outputs

Methodology for conducting case studies on success factors.

Main factors leading to success of rural electrification in countries that have achieved significant levels of electrification.

Expanded knowledge based on best practices.

Key Indicators

Case studies and final report that address the main issues

Completed workshop

I accord loorned from colooted countries

Implementation Progress

Component Activities

Complete Case Studies; Complete Case Studies Bangladesh; Complete Case Studies China; Complete Case Studies Mexico; Complete Case Studies Tunisia; Disseminate Findings at Workshop; Initiation of Project and Preparatory Work; Synthesize Findings of Case Studies

Approval Date: 12/1/1997

Expected Dates for: Original Revised 01/31/2004 Project Completion (all project activities completed): 06/01/2000 Project Closing (all financial transactions executed): 01/31/2004 08/01/2000



07/30/2003: The activities editing of the Tunesia case study has been completed. At present, the China case study is in the process of being edited. A case study on how the rural electrification program succeeded in the United States is under preparation. At the present time, all case studies have been completed. This includes Bangladesh, Philippines, Thailand, Tunisia, Costa Rica, Chile, China, and Mexico. Also, we will have reports on Ireland and USA as well.

The work has already started to have a significant impact on rural electrification as it is carried out in the Bank. The experience of the best practices has been applied to the rural electrification projects in Vietnam and Bangladesh. Also, the rural electrification strategy being discussed in India based much of its work on this project. A presentation of the best practices was given to a delegation from Mozambique. NRECA held a one-day workshop on rural electrification in developing countries, and they allocated one session to this work.

The project will complete disbursement during the next one-half year. The remaining funds are approximately \$25,000.

The only recent change in the project is that the experiences of both Ireland and the United States will be included in the final report. These were added because of frequent questions from officials in developing countries about how programs were implemented in the developed world. This was carried out within the existing project budget.

;09/15/2003: The editing of the China, Ireland, and United States case studies have now been successfully edited. At this point the task manager will begin editing and writing the final report. The report will consist of an introduction, conclusion, and case studies of Costa Rica, Thailand, Tunesia, Chile, Bangladesh, Philippines, China, Mexico, United States, and Ireland. Each case study will provide background and analysis of how each country developed a

	(A)	A Aijocaéeid (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$279,860	\$279,860	\$16,500	\$2,761	\$244,522	\$35,337
World Bank (BB) Non-ESMAP Trus	\$0 t \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$279,860	\$279,860	\$16,500	\$2,761	\$244,522	\$35,337



Project Title: Training Program for Key Group Representatives From Indigenous People

Regional Organizations/Rural Energy Development, Phase 2

Latin America and Caribbean--Bolivia Region / Country:

Origin of Funds: Canada: Core

Task Manager: Eleodoro O. Mayorga Alba

Project Development Objective

- . Provide general knowledge and training on hydrocarbon sector and rural electrification project, i.e., industry, laws, institutions and social environmental regulations enforcement
- . Provide linkage with indigenous peoples (IP) of other countries

Key Indicator

- ·20 IP representatives undergo training and 5 are selected as local trainers for another 20 to be trained.
- Linkage with indigenous peoples (IP) of other countries

Expected Outputs

- Enhanced knowledge on hydrocarbon sector and rural electrification projects
- Full understanding of IP representatives role and participation in hydrocarbon sector regulations enforcement and rural electrification projects
- In house capability to deliver similar training
- Linkage with indigenous peoples (IP) of other countries

Key Indicators

- Development of training program.
- Training sessions delivered
- In house trainers deliver training
- Participation of indigenous peoples (IP) of other countries in the process and training

Implementation Progress

Component Activities

First Phase: Preparation of training program; Second Phase: training activities and dissemination of lessons learned

Approval Date: 3/1/1999

Expected Dates for: Original Revised

Project Completion (all project activities completed): 05/01/2000 06/30/2003

Project Closing (all financial transactions executed): 07/01/2000 08/31/2003



07/28/2003: Until June 2003, the project has achieved the expected results. In relation to the training component, five specialization workshops have taken place covering subjects of interest for the indigenous organization and more than 12 months of knowledge socialization – dissemination activities have been carried out by the UTH.

In relation to the small scale gas applications component, three natural gas pilot projects in rural areas have been evaluated and the consultants presented the project recommendations and 'road map" for the formulation and implementation of similar projects in the fifth specialization workshop

Moreover, CIDOB has agreed on the importance of maintaining and improving the level of knowledge of its UTH. The issue of sustainability of these sub-regional units is seriously considered. In addition to more specialized training, the search for sustainability includes proposals for allowing the UTH to enter into monitoring services and/or specific productive activities.

Activities for the Reporting Period

Workshop #4 (Santa Cruz - 15 - 19 Jan. 2003). The topics covered were the sustainability of the UTHs, the distribution of oil rents rural electrification and the progress on the small scale gas pilot studies. This workshop comprised presentations from representatives of the Canadian First Nations on the legal, social and commercial issues linked to the development of these communities and their relevance for the indigenous peoples of Bolivia. Participants visited the OSCA and the Hydrocarbons Chamber.

Workshop # 5 (Santa Cruz - April 2003) focus on the review of the results of the consultants work in relation to the small scale gas applications, the theme of sustainability of the UTH and the discussion of project final report.

Project Achievements:

- Development of indigenous trainers Participation to the specialization workshops was concentrated on the indigenous trainers that started learning on the industry basic features and impacts and on the indigenous rights during the previous CIDA-ESMAP Program. As a result CIDOB dispose of a core group of about 12 indigenous representatives with a significant knowledge.
- Socialization program These representatives are leading the socialization effort of the UTH. Using concepts and materials (a legal compendium and 5 cartillas) funded by the Program they are developing a dissemination effort in their communities. Typically, in a three months period, in each UTH 4 to 6 small workshops are delivered.
- Monitoring of the industry and negotiations for compensations The same representatives have been actively involved in socio-environmental monitoring of hydrocarbon projects and in the consultations and negotiations of compensations.
- Small Scale Gas Applications --- Preparation of three pilot projects in different size rural communities for the use of natural gas in electricity generation and industry. Selected communities approved the starting of the evaluations. Rural energy experts of the Min. of Energy and Hydrocarbons were extensively consulted in the preparation of project preliminary reports. Also a proposal for an organization to implement the projects has been prepared for discussion with Government and CIDOB.

The project activities progressed smoothly. However, delays originated for the following reasons:

- Preparation of cartillas for the socialization effort took a longer time than expected due to the process of revisions requested by the members of the Steering Committee. In particular, difficulties appeared with the Cartilla on Consultation

due to the fact that the proposed Reglamento for operations in Indigenous Lands has not been approved.

- CIDOB's lack of administrative capacity delayed the initiation of the socialization effort. It took a specific coordination effort to agree on accounting and reporting procedures.
- The initial team of consultants selected for the Small Scale Gas Applications components decided to drop the proposed contract. SaskEnergy indicated that they were not familiar with Bolivia gas industry and rural working conditions and lacked Spanish speaking engineers. After a new selection process an Argentinean Consulting Company was appointed for this project component.
- Delays also originated with the change of Government and the delicate political situation of the last 4 months.



Budget Summary as of June 30, 2003

Disbursed Remaining Balance Outstanding Disbursed Jan 1 -Jun 30, 2003 A**A floc vaée**kt Commitments to Date (B) (G=B-(A) (*C*) (D) (*E*) **ESMAP Trust Funds** \$857,616 \$0 \$857,616 \$55,292 \$834,310 \$23,306 World Bank (BB) \$30,000 \$0 \$0 \$0 \$0 \$0 Non-ESMAP Trust \$0 \$0 \$0 \$0 \$0 \$0 Total \$887,616 \$857,616 \$0 \$55,292 \$834,310 \$23,306



Project Title: Brazil - Rural Electrification Strategy

Region / Country: Latin America and Caribbean--Brazil

Origin of Funds: Netherlands

Task Manager: Jayme Porto Carreiro

Project Development Objective

Rural Electrification projects, based on effective public interventions and increased private participation, are implemented to provide sustainable energy services to poor population, using modern and cost-effective technologies.

Key Indicator

- By 2005, rural electrification projects, addressed to meet the needs of rural poor, are implemented in two-thirds of the Brazilian states incorporating sustainable delivery mechanisms and using modern and efficient technologies. In 10 of these states, projects are implemented with private participation

Expected Outputs

A long term Rural Electrification Strategy to substantially increase access of poor rural population to modern energy services, using efficient technologies with increased private sector participation.

Strategy incorporates the findings of studies presented in intermediate/final reports on:

- 1. Characterization of the energy market in selected rural areas of Brazil
- 2. Diagnosis of current implementation conditions and appraisal of past and current programs
- 3. Innovative delivery mechanisms for rural electrification projects in a restructured energy sector
- 4. Rationale for public intervention Participative design of RES, action plan, assistance to

Kev Indicators

Rural Electrification Strategy is completed, incorporating the inputs of intermediate reports.

Performance indicators of intermediate/final reports are:

- 1. Quantitative knowledge of current energy uses and needs, payment capacity, and potential demand for rural electric services is acquired/updated
- 2. Lessons learned on implementation of rura electrification programs are identified
- 3. Innovative delivery mechanisms are designed and assessed
- 4. Rationale for public intervention is validated and its potential impact is assessed

RES and action plan are completed after final discussion with main stakeholders, required assistance to implement strategy is identified, and results are

Implementation Progress

Component Activities

1. Study of the main characteristics of the energy market in rural areas of selected Brazilian states;2. Diagnosis of current implementation conditions and appraisal of past and current rural electrification programs;3. Design and evaluation of innovative delivery mechanisms including private participation in the restructured Brazilian;4. Study of impact and validation of rationale for public interventions to be included in the rural electrification stra;5. Participative design of RES, preparation of action plan, identification of required assistance for implementation, an



Approval Date: 1/20/2001

Expected Dates for: Original Revised

Project Completion (all project activities completed): 09/30/2002 06/30/2003

Project Closing (all financial transactions executed): 12/31/2002 08/31/2003

Summary of Current Project Status, Issues and Actions:

06/26/2003:

June 2003 update:

The final draft of the report on Rural Electrification Strategy Options for Brazil has been prepared, based on the second draft report (including the conclusions of the stakeholder workshop) and the initial comments of the new GOB. The final draft was discussed with GOB in June 2003. GOB has expressed their agreement with the report. The recent rapid changes of the national framework for rural electrification, as summarized in the new report, reflect several of the issues that were discussed in the draft version that had been presented to Brazilian key stakeholders in 2002.

The report will be adapted one last time to include the final comments by GOB an indication on how the new framework can be made operational in a fast, efficient and sustainable way. After an internal peer review, the final

	(A)	A Aijocraéei d (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$250,000	\$250,000	\$11,117	\$22,161	\$128,210	\$121,790
World Bank (BB) Non-ESMAP Trus	\$50,000 t \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$300,000	\$250,000	\$11,117	\$22,161	\$128,210	\$121,790



Project Title: Technical Assistance to Proposed Expansion of Solar-Net Village Program

Region / Country: Latin America and Caribbean--Honduras

Origin of Funds: Netherlands

Task Manager: Clemencia Torres

Project Development Objective

To improve access to telecommunications, microenterprise development, social services and basic education in remote rural areas through the Solar-Net Village Program

Key Indicator

- No. of microenterprises created or assisted
- No. of children in remote areas participating in computer-based learning programs
- No. of GOH staff and private persons trained in remote power system design and maintenance

Expected Outputs

1. Alternative expansion plan, with new criteria for village selection and optimal design of ICT and solar power supply systems completed;2. Two training workshops and one consultation seminar completed;3. Guidance and instructional materials on systems and service packages developed;4. Integrated telecenter "partnering" concept demonstrated

Key Indicators

Positive feedbacks from MST and COHCIT, workshop participants, community leaders;;;

Implementation Progress

Component Activities

1. Consultant Studies: design of Sustainable Expansion Plan for Aldeas Solares Program; technical design of IT and solar; 2. Demonstration Component; 3. Workshops/seminar; 4. Publication, Dissemination

Approval Date: 5/15/2001

Expected Dates for:

Original Revised

Project Completion (all project activities completed):

06/30/2002

04/30/2004

Project Closing (all financial transactions executed):

09/30/2002

12/31/2003



07/30/2003: The purpose of this ESMAP-financed technical assistance activity is to support the Government of Honduras' Council for Science and Technology (COHCIT) in its expansion plan for the Aldeas Solares Program. This initiative will provide centers for information and communication technologies (ICT) in remote rural areas for social, educational and microbusiness development purposes.

The ESMAP pilots are carried out in the communities of La Montagna Grande and Las Trojes, both about 810 kilometers (line-of sight) from the town of Santa Lucia where a telecenter built by the International Telecommunications Union (ITU) is operational and will be the source of the internet connection by radio. COHCIT has managed the bidding procedure for the PV equipment for the two sites with support of experts from Sandia and the New Mexico State University. COHCIT and ESMAP have already procured the necessary equipment. COHCIT expects to set up the centers until early July. These two centers will be piloted and monitored for a period of about six-months.

Hondutel, the Secretary of Education, ITU and COHCIT have agreed to assign the operation of the ICT to the community, most probably to the AECO (Asociaciones Educativas Comunitarias), which is a community organization founded within PROHECO (Proyecto Hondureno de Educacion Comunitaria).

Given the potential capability of the planned ICTs to provide social and educational services, the ESMAP-project has developed working linkages with the PROFUTURO project and the Programa Asignación Familiar (PRAF), an initiative of the Presidency that seeks to improve social and economic conditions of the poorest sectors of the populations.

The aim of the business development component is to help low-income micro and small businesses raise earnings by increasing their business skills, market access and competitiveness. Amitigra, a national NGO working in the area of the pilot sites, is preparing a report to evaluate the possibilities of the ICTs to increase the income of these communities through business development especially in the field of agriculture, flower business and ecotourism. Amitigra has finished the field survey in the two pilot communities and has sent the cleaned field survey database recently. The final report is expected to be ready end of July.

COHCIT and ESMAP are organizing a workshop which will be held in Santa Lucia, Honduras, in August or September, 2003, after completion of equipment installations. National and international experts will give presentations about the technology options, the models for operation and maintenance and the possible uses of the rural info-centers. The workshop will be followed by a pilot operation phase lasting 46 months. During this phase, COHCIT will collect data on actual usage of the infocenters and the cost of operation and maintenance.

NAVA AND THE ABOVE TO THE ADVENTURE OF THE ADVENTURE ABOVE THE STREET OF THE ADVENTURE ABOVE THE ABOVE THE

	(A)	Афроваесі (В)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$197,000	\$187,000	\$52,203	\$1,120	\$71,759	\$115,241
World Bank (BB) Non-ESMAP Trus	\$0 s t \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$197,000	\$187,000	\$52,203	\$1,120	\$71,759	\$115,241



Project Title: Energy Poverty and Access

Region / Country: Middle East and North Africa--Yemen

Origin of Funds: Core

Task Manager: Kyran O'Sullivan

Project Development Objective

To increase access to efficient and affordable modern energy for the rural people of Yemen.

Key Indicator

- Increased numbers of businesses and households making use of modern energy;
- Increasing levels of use of modern energy for commercial and household purposes;
- Reduced household health impacts from energy use.

Expected Outputs

- GoY poverty reduction goals that energy interventions might influence identified;
- Hypotheses of what interventions will have a positive effect on poverty reduction identified and tested:
- Underpinning analysis/synthesis of existing household energy demand and supply;
- Costs and benefits of each hypothesized intervention established/agreed;
- Interventions prioritized, best options selected;
- Framework Paper ('Energy for Poverty Reduction') for implementing selected options written;
- Capacity to analyze and implement improved;
- "" -

Key Indicators

- GoY poverty reduction goals that energy interventions might influence identified;
- · Hypotheses of what interventions will have a positive effect on poverty reduction identified and tested;
- Underpinning analysis/synthesis of existing household energy demand and supply;
- Costs and benefits of each hypothesized intervention established/agreed;
- Interventions prioritized, best options selected;
- Framework Paper ('Energy for Poverty Reduction') for implementing selected options written;
- · Capacity to analyze and implement improved;
- T 11'4 04'50

Implementation Progress

Component Activities

1. Stakeholder Development and Capacity Building;1.1 Hypothesis development by consultative group;1.2 Stakeholder workshops;1.3 Framework paper;2. Surveys and Analysis;2.1 Household energy survey ;2.2 Participatory assessments in 4 governorates;2.3 Surveys of energy supply side ;2.4 Analysis/synthesis of survey results;3. Economic and Financial Analysis

Approval Date: 8/20/2002

Expected Dates for:

Project Completion (all project activities completed):

Od/30/2004

No revision

Project Closing (all financial transactions executed):

06/30/2004

No revision



06/30/2003:

06/30/2003: Progress

The task was initiated with a mission in September/October 2002. During that mission, the following tasks were undertaken:

Identification and selection of consultants to carry out household survey

Identification and selection of consultants to carry out participatory survey

First meeting of the multi-sectoral steering group

Liason with other donors (especially Netherlands and Germany) with a view to cofinancing project.

Following this mission the participatory survey consultants designed survey instruments in December 2002. Field work took place in January 2003 and results were processed by April '03. The consultants presented the reults at a meeting chaired by the country coordinator of the Yemen Extended Team on June 11 at Bank HQ (funded under MNA funds for PSIA).

The methodology of participatory assessment in the energy sector in Yemen is an important capacity building objective of the ESMAP task. The methodological approach followed by NHL is therefore worth noting. The steps in the methodology were as follows.

- Adoption of sampling frame (that resulted in choice of 10 rural and two urban study locations) according to criteria of geographical zones, poverty level and accessibility, and access to grid, fuel and biofuels.
- Design of the field guides (for facilitators) using PRA tools and techniques to question 40 persons per location.
- Design of Analysis forms (for both facilitators and data compilers)
- Training of facilitators followed by a pilot study tour.
- Review of field guides and PRA tools.
- Field data collection.
- Monitoring and evaluation
- Field notes compilation aided by analysis forms
- Thematic data collation in relational database.
- · Establishment of key findings
- Traditionally, men are responsible for LPG provision, while women are responsible for wood collection and dung preparation.
- Women are aware of health consequences of using wood and dung for cooking.
- Girls education is related to wood usage.
- Electricity may impact on girls education, especially for households with no access to electricity.
- Initial costs of LPG and to a larger extent, electricity, are considered high and in some regions LPG usage is considered unsafe.
- The shift in energy portfolios is directly related to income level, price and availability.
- Wood and dung remain portfolio components for all categories.
- Wood component in energy portfolios is
- Price (or income) sensitive, with LPG viewed as suitable alternative
- Expedience (or cash flow sensitive), with Kerosene viewed as a flexible complement
- Considered a sunk cost item in cases of the very poor.

The household survey consultants have started basic design work but depend on inputs from the participatory survey before the instrument can be finalized and tested. That is expected to take place in February 2003. The original plan was for field work to start in March but that is no longer feasible.

The steering group meeting was quite successful. Attached are the briefing note given to attendees and the write up



Ministry of Planning and Development also indicated that it wished to form a core counterpart group consisting of senior level staff who would work on substantive issues raised by the activity.

Other donors expressed interest in the work and appear glad that the Bank/ESMAP has taken the lead in this field. GTZ expressed interest in co-financing or parallel financing the activity from its Yemen funds. This will be followed up. Norwegian TF for Environmentally and Socially Sustainable Development (NTFESSD) have agreed to co-finance some activities under the task.

Problems encountered/Reasons for delay

Owing to national elections at the end of April 2003, the team has been advised that survey work cannot take place after the end of Februrary. The team has thus decided to postpone the field work for the household survey until May 2003. Although this will cause delay, other tasks can go on in the meantime.

Changes in project design made or considered

The project analytical phase now includes a social as well as economic analysis. In addition, the project team is considering extending the economic analysis to compare direct poverty interventions (as envisaged will be identified in the task as it is currently designed) with indirect interventions (such as expanding grid coverage or improving the quality of grid supply). This was requested by Ministry of Planning and Development. A final decision has yet to be taken.

Assessment of expected results

No change to the assessment made in the proposal.

Expected date of completion

Still mid 2004, provided there are no further delays. But note the process (and associated capacity building) is as important as the output.

- 1. Household Energy (HE) Survey.
- (a) Finalize the sampling frame, pilot the questionnaire in several locations, finalize the survey questionnaire, translate the questionnaire survey and arrange for its printing. (Tuntivate and local consultants assisted by O'Sullivan and Mukherji);
- (b) Convene technical focus group to advise on and to validate the investigative framework including the design of the survey (O'Sullivan and Mukherji);
- (b) Implement training workshop for survey supervisors and enumerators (Tuntivate);
- (c) Confirm coordination arrangements with CSO for implementation of the survey (O'Sullivan assisted by local consultants);
- (d) Prepare and finalize contractual details for supervisors and enumerators (O'Sullivan, Mukherji and Shenbagam).
- 2. Participatory Assessment
- (a) Present findings of the participatory assessment to stakeholders including officials from Ministry of Planning and International Cooperation (NHL local consultants and Meskerem Brhane with O'Sullivan and Mukherji).
- 3. Prepare analytical framework for 2nd phase of investigative work.
- (a) Initiate additional data and information gathering (e.g. of fuel suppliers) that will be needed in carrying out economic analysis (O'Sullivan and Mukherji).
- 4. Discuss arrangements for formation of core counterpart group.
- (a) During the launch mission of the task in Sept Oct '02 the Ministry of Planning and International Cooperation (MoPIC) had suggested that it should form a core counterpart group with participation from the Ministries of Electricity, Water and Environment, Oil and Mineral Development and possibly Local Affairs and Environment. Social line ministries should also be represented in the counterpart group. The findings of the analysis and the policy



Planning and International Cooperation (MoPIC) and with officials in the Ministry of Electricity and with officials in the other line ministries in order to clarify arrangements for the counterpart group. (O'Sullivan and Mukherji).

5. Meet with the other donors.

Keep other donors informed of progress on the task and identify any opportunities for joint work. (O'Sullivan and Mukherji).

6. Mission Outputs.

Outputs of the mission will be:

Finalized household energy survey questionnaire;

Launch of the household survey with field work beginning on or about 11 August '03;

The analytical framework for the 2nd phase of work;

Agreed arrangements for a core counterpart group.

;06/30/2003: 06/30/2003: Progress

The task was initiated with a mission in September/October 2002. During that mission, the following tasks were undertaken:

Identification and selection of consultants to carry out household survey

Identification and selection of consultants to carry out participatory survey

First meeting of the multi-sectoral steering group

Liason with other donors (especially Netherlands and Germany) with a view to cofinancing project.

Following this mission the participatory survey consultants designed survey instruments in December 2002. Field work took place in January 2003 and results were processed by April '03. The consultants presented the reults at a meeting chaired by the country coordinator of the Yemen Extended Team on June 11 at Bank HQ (funded under MNA funds for PSIA).

The methodology of participatory assessment (PRA) in the energy sector in Yemen is an important capacity building objective of the ESMAP task. The methodological approach followed by NHL is therefore worth noting. The steps in the methodology were as follows.

- Adoption of sampling frame (that resulted in choice of 10 rural and two urban study locations) according to criteria of geographical zones, poverty level and accessibility, and access to grid, fuel and biofuels.
- Design of the field guides (for facilitators) using PRA tools and techniques to question 40 persons per location. an important feature was that the methodology incoparated people's own definition of what defines being poor and non-poor.
- Design of Analysis forms (for both facilitators and data compilers); Training of facilitators followed by a pilot study tour.; Review of field guides and PRA tools.
- Field data collection.; Monitoring and evaluation; Field notes compilation aided by analysis form; Thematic data collation in relational database.
- Establishment of key findings

The PRA revealed the following - i.e. people's own attitudes

- Traditionally, men are responsible for LPG provision, while women are responsible for wood collection and dung preparation.
- Women are aware of health consequences of using wood and dung for cooking.
- People recognize that when girls collect wood, school attendance suffers
- Initial costs of LPG and to a larger extent, electricity, are considered high and in some regions LPG usage is considered unsafe.
- Income level, price and availability all affect people's decision to consume different fuels.
- Wood and dung are consumed by all categories (ppor and non-poor).
- Wood component in energy portfolios is price (or income) sensitive, with LPG viewed as suitable alternative;
 Expedience (or cash flow sensitive), with Kerosene viewed as a flexible complement;
 Considered a sunk cost item in cases of the very poor.



Owing to national elections at the end of April 2003, the team were advised that the household energy survey work could not take place until after the elections.

Assessment of expected results

No change to the assessment made in the proposal.

Expected date of completion

Still mid 2004, provided there are no further delays. But note the process (and associated capacity building) is as important as the output.

Budget Summary

as of June 30, 2003

	(A)	AAHowateld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$447,980	\$320,000	\$41,946	\$31,904	\$119,629	\$200,371
World Bank (BB) Non-ESMAP Trus	\$50,000 at \$25,000	\$32,730 \$0	\$0 \$0	\$29,983 \$0	\$32,730 \$0	\$0 \$0
Total	\$522,980	\$352,730	\$41,946	\$61,887	\$152,359	\$200,371



Project Title: Towards Formulating a Rural Energy Strategy

Region / Country: South Asia--Bangladesh

Origin of Funds: Core; Sweden

Task Manager: Douglas French Barnes

Project Development Objective Key Indicator

Implementation of rural energy strategy. Strategy endorsed by the GOB and supported by Govt.

agencies, NGOs, donors.

Expected Outputs Key Indicators

1. Rural energy strategy for Bangladesh (report).

Availability of the report at BBS, research organizations, institutions of higher learning by end of project.

Dissemination program implemented.
 Report is complete and of good quality.

Survey and study results complete according to

echadiila

Implementation Progress

Component Activities

Assessment of Rural Energy Delivery Mechanisms; Cooking and Lighting Alternatives Study;;Compilation of Existing Rural Energy Data;;Final Rural Energy Strategy; and Strategy Dissemination.;Prepare Draft Rural Energy Strategy; Rural Energy Strategy Workshop;;Rural Household Energy Survey; Rural Industry Energy Survey;

Approval Date: 7/1/1999

Expected Dates for: Original Revised

Project Completion (all project activities completed): 01/04/2002 10/30/2003

Project Closing (all financial transactions executed): 02/28/2002 12/31/2003



07/30/2003: The microenterprise survey has been completed. The household survey is still under way and will be completed in Fall 2003. The microenterprise survey is the first one of its kind to be completed by the World Bank. Interestingly, it shows that nearly all enterprises in the growth centers of Bangladesh have electricity. They get it from the grid supplier, from a neighbor connected to a grid supplier, or from their own generation.

The project will disburse about \$70,000 in the next one-half year.

The household survey was delayed because of the enforcement contracts now requires certain types of insurance, some of which are difficult to get in Bangladesh. These contractual problems had to be worked out before the household survey could begin. The survey as initiated in March, 2003.

The firm conducting the household survey was hired in March 2003. It is the Bangladesh Institute of Development Studies.;09/15/2003: The household survey is in mid-execution. The reports for the main contractor are that everything is going very well and they are on schedule to finish the survey by December. The microenterprise survey data is being cleaned and prepared for analysis. The team will conduct a seminar on energy and microenterprise development sometime in October. This will provide the basis for the report chapter on energy and microenterprise

	(A)	AAHowateld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$310,000	\$228,542	\$79,375	\$39,757	\$67,251	\$161,291
World Bank (BB) Non-ESMAP Trus	\$20,000	\$171,572 \$0	\$0 \$0	\$23,172 \$0	\$171,572 \$0	\$0 \$0
Total	\$330,000	\$400,114	\$79,375	\$62,929	\$238,823	\$161,291



Project Title: Energy Efficiency in Water Utilities - Seed Funding

Region / Country: East Asia and Pacific--China

Origin of Funds: Core

Task Manager: Salvador Rivera

Project Development Objective

After presentation of project concept proposal and numerous follow consultations with EASUR, ASTAE has identified suitable candidate water supply and wastewater utilities for the development of an Energy Efficiency Pilot Project. It was determined that the cities of Shijiazhuang and Tangshan would be the best candidates for the proposed pilot initiative. Water utilities in both cities will be receiving assistance in the Hebei Urban Environment Project (LN 4569-CN, approved 6/00). The pilot project concept has received approval from ASTAE, EASEG, EASUR and the TM for the Hebei

Expected Outputs

ASTAE intends to submit a larger proposal to ESMAP and other donors to support a larger follow-up initiative to replicate and transfer technology, know-how, and "practical lessons from experience" on improving energy efficiency practices at water utilities in China to overcome the technical, institutional, and financial barriers inhibiting implementation of cost-effective energy efficiency projects for municipal water utilities. It is foreseen that ESMAP funding will be sought in Spring 2002 to finance knowledge dissemination and outreach efforts (including workshops and consultations with water associations, financial institutions, and other stakeholders) to scale up the pilot project and encourage significant follow up investment activity at water utilities both through IBRD lending products and through domestic financial institutions. This initiative has good potential for replication both within EAP and in other regions, and future components will make use of the wide range of Bank expertise in this area (LAC, ECA).; The mission will take place in conjunction with the next Bank EASUR supervision mission, October 10-20, 2001. The outputs of the reconnaissance activities will be a report on financial and energy savings potential at the selected entities, identification of investments with good potential for large amounts of cost-effective savings, preliminary estimates of cost effectiveness and payback period of efficiency unaradae, and identification of data needs for follow-un

Key Indicator

Key Indicators

;



Implementation Progress Component Activities

Approval Date: 9/17/2001

Expected Dates for: Original Revised

Project Completion (all project activities completed):

Project Closing (all financial transactions executed):

Summary of Current Project Status, Issues and Actions:

10/23/2003: On 10/13/03 the task manager wrote:

- 1. During Jan-Jun 2003, how did the activity advance towards the ACHIEVEMENT OF its OBJECTIVES (as set out in the proposal approved by ESMAP) Please be sure to focus your progress report on substantive issues, not logistics--our donors are more interested in reporting on the substantive issues. A final report was presented and discussed with the Chinese counterparts in April 2003. The report's main findings, and invesment recommendations, have been accepted and implementation will take place within the context of the Hubei Environmental Project.
- 2. What is the IMPACT of this work to date? Twofold: a) it has shown the linkages between water and energy sectors, introducing savings on both energy and water areas; b) it has introduced a new concept to reduce operational costs that could be used to increase coverage.
- 3. DISBURSEMENT projections. Please indicate projections for each half-year 'till the end of the project. All disbursement has been completed.
- 4. CHANGES in project design/expected date of completion. Please also report problems encountered/causes for delays. final report has been presented to Chinese counterpart and fully accepted by them.
- 5.CONSULTANTS HIRED. none under ESMAP financing, consultants were hired using ASTAE funds.

	(A)	A Aijocraéei d (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$9,993	\$9,993	\$0	\$0	\$10,009	-\$16
World Bank (BB) Non-ESMAP Trus	\$0 1 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$9,993	\$9,993	\$0	\$0	\$10,009	-\$16



Project Title: Lithuania - Heating supply to small cities/towns

Region / Country: Europe and Central Asia--Lithuania

Origin of Funds: Core

Task Manager: Gary Stuggins

Project Development Objective

To identify, test, implement and showcase results of least-cost option(s) for supplying heat to small towns with improved access to more affordable heat.

Key Indicator

- Least-cost option(s) for supplying heat to towns are identified.
- · Identified method(s) are successfully piloted. Pilot results are disseminated and full-scale implementation in remaining 4-6 Lithuanian towns are initiated and successfully completed.

Expected Outputs

Phase I: Final report including comprehensive information and recommendations on ownership strategies and the least-cost methods of delivering heat to towns.

The results will be discussed in public in order to seek private investors to participate in Phase II and III.

Phase II: Pilot programs using recommended heat supply method in 2-4 of the 8 towns included in the study.

Phase III: Full involvement of all 8 towns in implementing the least cost solution to heat supply

Key Indicators

Phase I:

Draft final report (white cover) that includes a thorough technical, institutional and economic analysis of the issue and specific recommendations for pilot programs will be completed by February 2003.

Final report (green cover) will be completed by April 2003.

Recommendations are endorsed by the Government by July 2003.

Phase II:

Investments under the pilot program(s) identified by December 2003.

Raising the funding for Phase II July 2004 Implementation of Phase II 2004/2005

Results from heating season under pilot program(s) available in May 2006.

Phase III:

Full-scale implementation (investment) of project in

Implementation Progress Component Activities

Phase I:

- Gather information on current situation in each of 8 towns.
- Determine least-cost methods of supplying heat



Approval Date: 11/14/2000

Expected Dates for: Original Revised

Project Completion (all project activities completed): 12/15/2002 09/30/2003

Project Closing (all financial transactions executed): 03/15/2003 12/31/2003

Summary of Current Project Status, Issues and Actions:

07/10/2003: During the January-June 2003 period, the funding for the project was finalized, enabling us to proceed with procurement of consultants. The procurement process was completed and contracts delivered in June 2003. As a result, there is not much available, of substance, to report.

However, recent discoveries in fuel cell technology (reduction in platinum requirements) point to a significant drop in production costs that will improve its economic viability. This indicates that we may be on the right track.

The duration of the study will be roughly 8 months, so that the project should be completed in the first half of Calendar 2004. We expect that 60% of the disbursements will take place in the first half of FY04 and the remaining

	(A)	A Aijocraéci d	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$278,441	\$278,441	\$234,281	\$0	\$18,086	\$260,355
World Bank (BB) Non-ESMAP Trus	\$69,000	\$557 \$0	\$0 \$0	\$0 \$0	\$557 \$0	\$0 \$0
Total	\$347,441	\$278,998	\$234,281	\$0	\$18,643	\$260,355



Project Title: Developing Financial Intermediation Mechanisms for Energy Efficiency Projects in Brazil, China and India

Region / Country: Global

Origin of Funds: ; Netherlands; Core

Task Manager: Robert P. Taylor

Project Development Objective

To develop (strengthen/improve) new and/or existing energy efficiency delivery systems which successfully package financial and technical expertise.

Expected Outputs

Improved operations of EE delivery systems in the three target countries through implementation of in-country activities

Improved Capability of commercial financing institutions to appraise and process financing applications for efficiency projects

Improved Cross-country and cross regional cooperation

Key Indicator

- The levels of investment mobilized by new/ improved energy efficiency delivery system entities.
- The existence/ participation of new actors (financial, technical, or a combination) into the delivery chain.

Key Indicators

- Outputs from Country Team sub-projects
- Levels of information exchange between three country teams
- Recommendations and Proceedings from International Workshops

Implementation Progress

Component Activities

1. Three country Reports on development of commercial banking window activities; 2. In country seminars; 3. Two Internat

Approval Date: 10/5/2000

Expected Dates for: Original Revised

Project Completion (all project activities completed): 01/31/2004 No revision

Project Closing (all financial transactions executed): 03/31/2004 No revision



06/23/2003: Robert P. Taylor wrote on 04/16/2003 05:09 PM

Commercial bank EE lending component. All three country teams are now working to complete both closure of pilot projects involving innovative domestic financing arrangements and applied research efforts on local financing mechanisms by the end of 2003. Following their decision last month to try to implement a number of non-traditional EE loans through the domestic banks, the China team organized an EE projects financing meeting with delegates from banks, investment companies, venture capital companies, a guarantee company and EE project suppliers during April 10-11, with a view towards moving ahead on pilot projects. TORs on applied research work, under the leadership of Huaxia Bank, are almost completed. The India team also is moving ahead to develop pilot new EE project products through commercial banks, The team is actively discussing with various banks who have been associated with the project, and developing ideas on how to identify good candidate projects to propose. Contracts for work on defining appraisal methods for EE loans, and for innovate loan structures for the EE market are close to being awarded. As discussed further below, the Brazil team is developing a competitive mechanism for ESCOs to proposed projects for our project's Core Group to then broker to interested banks or equity investors. Their goal is to close at least four new ESCO financing projects by end-November. They also are actively working on development of both equity financing mechanisms and a possible guarantee fund for ESCOs.

The Brazil team suggests that we convene the next major three-country cross-exchange on EE financing through the banks in Rio de Janeiro in mid-January of 2004. The WB team is optimistic that we will have many practical lessons learned and experiences to share from the pilot projects, and deeper and stronger thinking and ideas on appraisal methods and loan structuring for this market.

ESCO Mini-exchange in China. The plan remains to convene the mini-exchange in Shandong, China, beginning May 25. However, given the pneumonia outbreak in China, this may need to be postponed some at the last minute.

The Brazil team suggests a main topic of "strategic marketing" of ESCO business. This would include, for example, discussion of experiences concerning (a) identification of good customers, and how to sell them on the business, (b) the extent of reliance on major facility audits to identify project opportunities, versus identification of potential customers for pre-specified types of projects or technologies, (c) how to weigh the different types of risks involved--esp. technical vs. financial, (d) how to market various energy performance contracting options, (e) the role of financing in the packages, and how to market projects where the ESCO has different levels of assurances that it can obtain financing, and through different mechanisms, etc. How to secure repayment of energy performance contracts from clients may be a good second topic--do the India and China ESCOs wish to pursue two topics, or focus more in depth on just one?

The major Roundtable on Energy Efficiency Financing was successfully convened in Rio on April 2, with strong attendance of some five-six dozen people from the banking industry, EE industry, and government entities, including the new Director for Energy Efficiency in the Ministry of Energy and Mines. The meeting was particularly successful in publicizing our project. The project will develop within the spirit of "open architecture", whereby ideas are freely and easily exchanged, and knowledge and experience are openly shared.

The Brazil team's work in reality collapses the four components of the projects into an integrated set of activities towards one objective: to increase access to financing for EE projects involving energy performance contracting or ESCOs. Work planned during the balance of 2003 includes two streams. The first stream is the continued development, design and movement towards implementation of possible financing mechanisms for ESCOs. A loan guarantee fund, financed with government support, remains a possibility, but increasing emphasis is now being given to possibilities involving equity investment. The development of a local investment fund for ESCOs will be actively explored with potential investors. Another possibility is the development of a "super ESCO", or large equipment leasing company, which could provide equipment on lease for the projects of small ESCOs. Use of Special Purpose Companies for initial or large energy performance contracting projects, utilizing a mix of investor equity and loan financing, also will be further explored.



Finance Committee to screen the projects, and complete technical reviews and evaluations to the extent needed. The concept is to help several projects which are already fairly close to obtaining financial backing to reach closure, and thus gain both practical experience and market credibility through actual cases.

As the President of Brazil's ESCO Association (ABESCO) told the Roundtable, Brazilian ESCOs have been conducting energy performance contracting businesses using financing from electric distribution companies (which are required to make some EE investments by law) or financing from their equity or the equity of their shareholders. However, no Brazilian ESCO has succeeded in obtaining a bank loan. Our project seeks to change that. The ideas of the Brazil team on use of equity financing for EE in general, and ESCOs in particular, will be of special interest to the other groups.

;07/03/2003: Implementation of this project continues to be fully satisfactory. All three country teams are actively working on implementation, especially concerning the commercial bank financing window development. Some delays were experienced in the work of the China team, due to the SARS situation, but activity in China has resumed in late June 2003. The mini--ESCO exchange, involving visits by the Brazilian and Indian ESCOs to China, was delayed due to SARs, but is now being rescheduled for October/November 2003.

The Bank team has visited both China and Brazil for intensive supervision of this project, including participation in meetings with the banks. The Bank team will visit India, and participate in active discussions with the financial sector representatives, in mid July.

The second international cross-exchange workshop for the commercial bank EE financing component is scheduled for January or February in Brazil. This will be a major event, where each country will have major reports on their

	(A)	A Aijocraéeid (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$1,525,90	\$609,904	\$200,446	\$49,847	\$180,137	\$429,767
World Bank (BB) Non-ESMAP Trus	\$63,000 s t \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$1,588,904	\$609,904	\$200,446	\$49,847	\$180,137	\$429,767



Project Title: Development of Pro-poor National Heat Pricing and Billing Policy

Region / Country: East Asia and Pacific--China

Origin of Funds: Netherlands; Germany

Task Manager: Robert P. Taylor

Project Development Objective

Pilot and develop a national policy framework for heat pricing and billing with special attention to preserving access to quality heating services for low-income households.

Key Indicator

Key Indicators

-Stakeholder participation mobilized. -Sub-contracts for consulting work signed.

Expected Outputs

Phase I: A heat pricing and billing reform plan for Tianjin; key inputs for the development of national pricing and billing policy; and detailed outline for the Phase II study.

Phase II: Comprehensive national heat pricing and billing reform policy recommendations, including general pricing formulas, price setting principles, regulations and institutional arrangements, and recommendations to address the socio-economic

Implementation Progress

Component Activities

Approval Date: 12/19/2002

> Expected Dates for: Original Revised

Project Completion (all project activities completed): 09/01/2004 No revision

Project Closing (all financial transactions executed): 12/01/2004 No revision



07/03/2003: Implementation progress on this project, launched in January 2003, has been fully satisfactory. Study organization, and cooperative execution with Chinese counterparts have been especially strong. Despite a three-month lag in work across China and especially in the project areas of Beijing and Tianjin, due to the SARS situation, implementation is at least close to the original schedule, with plans to complete Phase I on or shortly after the end of CY2003

During a major project mission in March, the study team was fully mobilized, targets set, and methodologies agreed. International and local study analysis is now under full implementation.

Given the strong support from the central government and Tianjin Municipal Government, the impact of this first Phase in helping to set national heat price reform strategies, is likely to be major.

90% of Phase I funds are expected to be disbursed by end 2003.

	(A)	AAHowaeeld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$249,880	\$249,880	\$92,600	\$21,231	\$28,131	\$221,749
World Bank (BB) Non-ESMAP Trus	\$20,000	\$19,776 \$0	\$0 \$0	\$6,085 \$0	\$19,776 \$0	\$0 \$0
Total	\$269,880	\$269,656	\$92,600	\$27,316	\$47,907	\$221,749



Project Title: India - Environmental Policies for the State Power Sector - Rapid Assessment for

Karnataka & Rajasthan

Region / Country: South Asia--India

Origin of Funds: Netherlands; Core

Task Manager: Mudassar Imran

Project Development Objective

Progress towards developing an environmental policy for the power sector.

Key Indicator

General agreement on the key issues and options.

Open discussions with the civil society and other stake-holders

Expected Outputs

Power sector related environmental policies and options are incorporated as components in the state power restructuring programs in Karnataka and UP.

Dissemination workshops in Karnataka and UP.

Canacity huilding in Karnataka and LIP

Key Indicators

Completed RAs for Karnataka and UP.

Completed workshops and implementation strategy.

Completed canacity building in Karnataka and LIP

Implementation Progress

Component Activities

1. RA for Karnataka;2. RA for UP;3. Participatory workshop in Karnataka;4. Participatory workshop in UP;5. Capacity
Building in Karnataka;6. Capacity Building in UP

Approval Date: 10/13/2000

Expected Dates for: Original Revised

Project Completion (all project activities completed): 12/31/2001 10/31/2003

Project Closing (all financial transactions executed): 03/31/2002 03/31/2003



07/29/2003: From 04/29- 05/05, 2003, the team visited Bangalore, Jaipur and Delhi in connection with the work. The main objective was to attend the Steering Committee meeting in Rajasthan; and the Advisory Committee meeting in Karnataka. Both these committees are chaired by the Principal Energy Secretaries in each state, and include as members senior state government officials from the Energy Department, and Environment Departments and/or the state pollution control Board; and representatives of the power utilities. The objective of these meetings was to present the methodology and preliminary results of the case studies of Karnataka and Rajasthan, and to get the feedback on the work from the Committee members. The results of these meetings are recorded in the back-to-office report circulated on May 9, 2003.

These meetings were useful in providing further guidance to consultants on the work, particularly in strengthening the analysis of options of interest to the state authorities. Based on the feedback from the Committees, the consultants have revised the reports, and the summary of the findings in these reports are expected to be presented in dissemination workshops in Bangalore and Jaipur in early July 2003. The dissemination plan also includes a short capacity building plan that focuses on introducing the basic concepts involved in carrying out the economic analysis of power development; and the fundamentals of the analytical tools and process to conduct the analysis. The state Energy Secretaries have designated appropriate staff for this capacity building program. Consultants are following-up with respective nodal officers to make appropriate arrangements for the dissemination program.

The work is well on track, and following the completion of the dissemination program the reports will be finalized.

At a minimum, this activity is expected to raise awareness about the environmental impacts of the power sector development, and about options to mitigate these impacts. A variety of state level stake-holders (Government officials, representatives of the unbundled power utilities, pollution control boards, NGOs etc.) are expected to attend

	(A)	AAHowateld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$222,750	\$222,750	\$63,964	\$77,388	\$144,020	\$78,730
World Bank (BB) Non-ESMAP Trus	\$50,000	\$78,151 \$0	\$0 \$0	\$19,698 \$0	\$78,151 \$0	\$0 \$0
Total	\$272,750	\$300,901	\$63,964	\$97,085	\$222,171	\$78,730



Project Title: Design and Pilot Testing of Capacity Building Product line for SME Utility Service

Providers in West Africa

Region / Country: Africa Region

Origin of Funds: Core

Task Manager: Amarquaye Armar

Project Development Objective

Key Indicator

To design and pilot test a new "product line" for the Africa Project Development Facility (APDF) The Africa Project Development Facility (APDF) is a multilateral, donor-funded agency, managed by the SME Department of the World Bank Group.

Expected Outputs

Key Indicators

The immediate focus for the "product line" is on those prospective business opportunities of SMEs that range from the vending of prepayment metering services to outsourcing of a complete retail services in conjunction with the delivery of modern utility services – electrification, water supply and sanitation and posts and telecommunications – to those peri-urban

Implementation Progress

Component Activities

1. Comprehensive field surveys (in Ghana, Nigeria, The Gambia) to determine local practices and experiences of SMEs invo;2. On-site interviews of utility staff, SMEs and regulators in South Africa and Namibia;3. Consultations with existing centers of expertise;4. Integration of the relevant findings of the above preparatory tasks into a comprehensive and well-justified plan of a;5. Implementation of a "Pilot Test" of the proposed APDF "Product Line"

Approval Date: 11/22/2002

Expected Dates for: Original Revised

Project Completion (all project activities completed): 06/30/2003 No revision

Project Closing (all financial transactions executed): 07/30/2003 No revision



08/06/2003: The initial phase of the activity (Business Model Diagnostic) was completed at the end of June 2003; the disgnostic covered ex-post assessment of the legal, regulatory, contractual and commercial/financial environment for 4 Ghanaian SMEs that are pursuing utility service delivery opportunities (based on pilot demonstration of pre-payment metering systems for water and electricity supply) that have been outsourced by the incumbent public utilities (Electricity Company of Ghana Ltd. and the Ghana Water Company Ltd.). The diagnostic also included "Consumer Validation Surveys" in peri-urban areas that are targeted by the ongoing pilot projects.

The next phase (pre-testing of the capacity building tools) will proceed along a two-pronged approach: (i) 5 SME Utility Service Providers (USPs) will take part in the pre-testing phase. They are: (i) Aquamet (supplying pipe-borne water to 5000 consumers in Ashiaman, a low-income/high density suburb of Tema); (ii) Bhekans (management contractor/operator for water supply system in Wassa Akropong, a town with 18,000 population); (iii) Ad Resources (management contractor/operator for water supply system in Enchi, a town with 13,000 population); (iv) Armco (management contractor/operator for water supply system in Atebubu, a town with 18,000 population); (v) Vicco (management contractor/operator for water supply system in Bekwai, a town with 28,000 population); and (vi) Darkata Engineering (concessionaire for water supply system in Dzemini, a town with 10,000 population). Pending clarification by Government on corporate reforms that impact prospective outsourcing opportunities with the Electricity Company of Ghana Ltd., any further support to Ghanaian SMEs for electricity service delivery is being put on hold.

During August, 2003, reconnaissance mission will take place to Sierra Leone and The Gambia, at the request of incumbent public utilities. In Sierra Leone, the National Power Authority will cooperate to develop outsourcing opportunities for SMEs, focusing on the use of pre-payment metering systems for electricity. In The Gambia, collaboration with the National Water and Electricity Corporation (NAWEC) will also aim to promote SME involvement

	(A)	Apporated (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$150,000	\$150,000	\$0	\$10,630	\$15,918	\$134,082
World Bank (BB) Non-ESMAP Trus	\$60,000 1 \$40,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$250,000	\$150,000	\$0	\$10,630	\$15,918	\$134,082



Project Title: Infrastructure Services to the Rural Poor

Region / Country: East Asia and Pacific--Mongolia

Origin of Funds: Netherlands

Task Manager: Salvador Rivera

Project Development Objective Key Indicator

Expected Outputs Key Indicators

Implementation Progress

Component Activities

Approval Date: 7/14/2003

Expected Dates for: Original Revised

Project Completion (all project activities completed):

Project Closing (all financial transactions executed):

Summary of Current Project Status, Issues and Actions:

	(A)	Apported (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$260,000	\$260,000	\$0	\$0	\$0	\$260,000
World Bank (BB) Non-ESMAP Trus	\$100,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$360,000	\$260,000	\$0	\$0	\$0	\$260,000



Project Title: LCR - Low income energy assistance

Region / Country: Latin America and Caribbean Region

Origin of Funds: Netherlands

Task Manager: Quentin T. Wodon

Project Development Objective

To provide a best practice guide on how to implement low income energy assistance, and to enter in dialogue with selected Governments and utilities on the issue

Key Indicator

For ESW: quality of analytical framework, policy review, and estimates of benefits

For policy dialogue: country-specific progress, and LAC response rate from utilities/Governments to survey of programs: participation in workshop

Expected Outputs

ESW best practice report and workshop + country-specific dialogue (e.g., Bolivia, Honduras, Guatemala). In-country capacity building through close collaboration with Governments/utilities.

Key Indicators

· For ESW: quality of analytical framework, policy review, and estimates of benefits
For policy dialogue: country-specific progress, and LAC response rate from utilities/Governments to survey of programs: participation in workshop

Implementation Progress

Component Activities

1. Analysis of value of access for the poor using various methods (hedonic, etc.);2. Criteria for affordability, discussion of alternative subsidies/targeting;3. Inventory of programs, and attitudes towards them through utility survey;4. Write-up and workshop

Approval Date: 3/30/2001

Expected Dates for: Original Revised

Project Completion (all project activities completed): 06/30/2002 06/30/2003

Project Closing (all financial transactions executed): 09/30/2002 08/31/2003



09/30/2003: 1. PROGRESS

- 1. Latin America. We had to adapt part of the translation in Spanish of the book "Accounting for Poverty in Infrastructure Reform: Learning from Latin America's Experience", which was sponsored jointly with the LAC regional studies program, but this will now hopefully be published soon for better dissemination. The work on the booklet with case studies from Latin America (Guatemala, Bolivia, Honduras) is still proceeding.
- 2. Africa. As was done in Latin America, we are trying to incorporate more material on energy in poverty assessments and PSIAs, for Ghana, Senegal, and Rwanda, and we may add Cameroon, Mauritania, Ivory Coast. Since the Poverty Assessments are used for PRSPs and PRSP Progress Report, this is a key tool for disseminating techniques and results. We are preparing an adaptation of the synthesis on infrastructure reform and the poor that we did for Latin America to the Africa case.
- 3. Tariffs and subsidies: a) SimSIP (simulation tools): we have programmed a new feature for the user of SimSIP to be able to simulate the impact on poverty of changes in tariff structure; b) We are also doing additional work to explore how to change fundamental tariff rules (Ramsey and Feldstein pricing) to takle into account objectives of poverty reduction. This is more research-oriented, but nevertheless fundamental work.

2. IMPACT

The task has been instrumental in enlarging focus on energy in PAs, and the synthesis pieces have been widely disseminated in several languages. We still need to provide an overall synthesis for the project as a whole, and this should be done by December 2003.

3. DISBURSEMENT

We have \$28,577.71 left, which will be disbursed by December 2003 (we are requesting 3 months extensions to finish the work).

4. CHANGES in project design/expected date of completion.

We are requesting 3 months extension to finish the work - this would change completion date to December 2003.

5. Consultants hired.

	(A)	A Aijocraéei d (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$150,000	\$150,000	\$6,210	\$25,545	\$112,712	\$37,288
World Bank (BB) Non-ESMAP Trus	\$20,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$170,000	\$150,000	\$6,210	\$25,545	\$112,712	\$37,288



Project Title: Capacity building for national and provincial socially and environmentally

sustainable management of coal resources in China

Region / Country: East Asia and Pacific--China

Netherlands Origin of Funds:

Task Manager: Charles A. Husband

Project Development Objective

· Capacity building within Federal and Provincial Governments to improve and enforce a legal and regulatory framework promoting the transparent access to coal resources, namely for foreign investors, and socially and environmentally sustainable energy practices.

Assisting the Central/Regional government to adjust the coal sector's production to the desirable change in demand for better quality coals that is of higher calorific value and lower in ash and sulfur, and also to address the inevitable closure of a large number of small, unsafe and inefficient mining operations in a socially and environmentally responsible manner

In the context of four selected coal mining projects, create a common understanding among local, provincial and national government agencies, mining and energy companies, as well as civil society on how key coal

Key Indicator

- Capacity building within Federal and Provincial Governments to improve and enforce a legal and regulatory framework promoting the transparent access to coal resources, namely for foreign investors, and socially and environmentally sustainable energy
- Assisting the Central/Regional government to adjust the coal sector's production to the desirable change in demand for better quality coals that is of higher calorific value and lower in ash and sulfur, and also to address the inevitable closure of a large number of small, unsafe and inefficient mining operations in a socially and environmentally responsible manner

In the context of four selected coal mining projects, create a common understanding among local, provincial and national government agencies, mining and energy companies, as well as civil society on how key coal

Expected Outputs

Key Indicators



The main deliverables of the project will be :

- 1: Sector assessment, including: (i) current institutional framework; (ii) production and demand trends; (iii) social and environmental issues; and (iv) reform of SOEs.
- 2: Review and analysis of existing legal and institutional arrangements, proposals for improvement.
 - Review of current regulatory practice and experience and proposals for improvement.
 - 4: In the context of two public/privately funded mining projects and based on international best practices, preparation of reports for social and environmental impacts of projects, framework for private sector investment.
- 5: in the context of two public/privately funded mining projects, capacity building in local/regional consultation process, presenting the results achieved to a wider group of stakeholders, enabling a decision making process.
- 6: A final report on lessons learned that can be integrated into an overall summary of guidelines for the assessment of such issues by local/regional and national governments.
 - 7: International conference/consultation process,

- Reports, with specific attention to the various components listed below
- One local/regional conference (in country) per selected investment
- An international conference, held within 2 months of the last assessment undertaken, conference

Implementation Progress

Component Activities

Task 1: Sector assessment. ;Task 2: Review and analysis of existing legislation, regulation and institutional arrangements.;Task 3: Review of current regulatory practice and experience.;Task 4: In the context of four privately funded coal mining projects, and based on international best practices, four s;Task 5: One local workshop will be organized per project involving a wide set of stakeholders to stimulate a local/regio;Task 6: Conference disseminating the results achieved and lessons learned.

Approval Date: 7/23/2001

Expected Dates for:

Project Completion (all project activities completed):

Og/30/2002

No revision

Project Closing (all financial transactions executed):

12/31/2002

12/31/2003



07/01/2003: Implementation Progress December 2002 – June 2003

After earlier completion of the initial sector assessment by a Chinese consultant, a contract was signed in October 2002 with Mitsubishi Research Institute (MRI) for a study: "Review of the Institutional and Regulatory Framework governing the Licensing and Operation of Coal Sector Enterprises in China", financed under the Japan Consultant Trust Fund (JTF). The assignment covers the following tasks: review of the existing institutional and regulatory framework of China's coal sector; assessment of the existing institutional framework based on an international comparison; review of actual Chinese practice and experience in two provinces; preparation of terms-of-reference for two pilot case studies; and a workshop to discuss the results. Originally, it was foreseen that MRI's assignment be completed during the present reporting period; however, managerial difficulties and the inability to conduct required field work due to the outbreak of the SARS epidemic caused delays.

Review and Assessment of the Existing Institutional Framework

Last November, MRI submitted a first draft report covering this task. The draft had major shortcomings in substance and presentation. The Bank asked for a complete revision. Delays occurred because of disagreements between MRI's Project Manager and the Independent International Reviewer. MRI appointed a new Project Manager in January. Thereafter, further delay occurred because of the Chinese New Year. Revision work started in earnest only in the second half of February. A revised report was submitted at the end of March, comprising the results of the review of the existing institutional and regulatory framework and of the international comparison. Though of much better quality than the first report, the revised report still had some shortcomings. After additional editing in two steps, an acceptable version of the report was received in early June.

Review of Actual Practice and Experience in Shanxi and Shandong Provinces

After an initial field trip by the consultants to Shanxi and Shandong Provinces at the beginning of this year, delays occurred due to MRI's change in project management, the Chinese New Year and the outbreak of SARS. A first draft report on this task was received at the end of April. The draft acked the necessary field verification of several assumptions. It was agreed with MRI that an additional field trip to the two provinces would be undertaken by MRI and its subcontracted Chinese experts before finalization of the report. Due to the continued SARS travel restrictions, it has up to now not been possible to undertake that field trip.

Preparation of TOR for two Pilot Case Studies

The objectives of the case studies and the selection criteria for the two mines to be included have been discussed and agreed with MRI. Drafting of the TOR by the Independent International Reviewer has started and is expected to be completed before the end of June.

Outlook

Provided the SARS situation permits the consultants' field trip to Shanxi and Shandong not later than beginning of July, a draft final report (in English and Chinese) of the JTF-financed study could be prepared before the end of July and be discussed in a workshop in August, together with the TOR for the two pilot case studies. The workshop (also JTF-financed) would be held in Beijing with representatives of the new Chinese government agencies responsible for coal mining (a reorganization is presently ongoing). After this consultation and completion of the pilot case studies, a larger workshop with participation of local stakeholders, mining companies and potential international investors would be held before the end of the calendar year (the case studies and the larger workshop would be financed by ESMAP).

Extension of the JTF



exemptions. So far, a final decision on the force majeure has not been made by TFO.

Disbursements

The two case studies, which will be financed by the ESMAP component, will be launched once the TOR is received in July, and completed by October 2003 followed by a stakeholder's conference by year-end. Disbursements of the JTF and ESMAP funds should therefor be completed during the third and fourth quarter 2003 respectively, and the project closed by the end of the calendar year.;07/01/2003: June 30, 2003

Implementation Progress December 2002 – June 2003

After earlier completion of the initial sector assessment by a Chinese consultant, a contract was signed in October 2002 with Mitsubishi Research Institute (MRI) for a study: "Review of the Institutional and Regulatory Framework governing the Licensing and Operation of Coal Sector Enterprises in China", financed under the Japan Consultant Trust Fund (JTF). The assignment covers the following tasks: review of the existing institutional and regulatory framework of China's coal sector; assessment of the existing institutional framework based on an international comparison; review of actual Chinese practice and experience in two provinces; preparation of terms-of-reference for two pilot case studies; and a workshop to discuss the results. Originally, it was foreseen that MRI's assignment be completed during the present reporting period; however, managerial difficulties and the inability to conduct required field work due to the outbreak of the SARS epidemic caused delays.

Review and Assessment of the Existing Institutional Framework

Last November, MRI submitted a first draft report covering this task. The draft had major shortcomings in substance and presentation. The Bank asked for a complete revision. Delays occurred because of disagreements between MRI's Project Manager and the Independent International Reviewer. MRI appointed a new Project Manager in January. Thereafter, further delay occurred because of the Chinese New Year. Revision work started in earnest only in the second half of February. A revised report was submitted at the end of March, comprising the results of the review of the existing institutional and regulatory framework and of the international comparison. Though of much better quality than the first report, the revised report still had some shortcomings. After additional editing in two steps, an acceptable version of the report was received in early June.

Review of Actual Practice and Experience in Shanxi and Shandong Provinces

After an initial field trip by the consultants to Shanxi and Shandong Provinces at the beginning of this year, delays occurred due to MRI's change in project management, the Chinese New Year and the outbreak of SARS. A first draft report on this task was received at the end of April. The draft lacked the necessary field verification of several assumptions. It was agreed with MRI that an additional field trip to the two provinces would be undertaken by MRI and its subcontracted Chinese experts before finalization of the report. Due to the continued SARS travel restrictions, it has up to now not been possible to undertake that field trip.

Preparation of TOR for two Pilot Case Studies

The objectives of the case studies and the selection criteria for the two mines to be included have been discussed and agreed with MRI. Drafting of the TOR by the Independent International Reviewer has started and is expected to be completed before the end of June.

Outlook

Provided the SARS situation permits the consultants' field trip to Shanxi and Shandong not later than beginning of July, a draft final report (in English and Chinese) of the JTF-financed study could be prepared before the end of July and be discussed in a workshop in August, together with the TOR for the two pilot case studies. The workshop (also



be held before the end of the calendar year (the case studies and the larger workshop would be financed by ESMAP).

Extension of the JTF

With support from the Japan ED Office and in consultation with TFO and PSI, an extension of the JTF, which expires on June 30, is presently being pursued on the grounds of force majeure caused by the outbreak of SARS. The extension is difficult because it had been previously established that no further extension would be granted, without exemptions. So far, a final decision on the force majeure has not been made by TFO.

Disbursements

The two case studies, which will be financed by the ESMAP component, will be launched once the TOR is received in July, and completed by October 2003 followed by a stakeholder's conference by year-end. Disbursements of the JTF and ESMAP funds should therefor be completed during the third and fourth quarter 2003 respectively, and the project

	(A)	Apported (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$350,000	\$350,000	\$0	\$9,433	\$134,588	\$215,412
World Bank (BB) Non-ESMAP Trus	\$80,000	\$14,992 \$0	\$0 \$0	\$10,200 \$0	\$14,992 \$0	\$0 \$0
NOII-ESMAF IIUS	\$337,600	φυ	\$0	\$0	\$0	\$0
Total	\$767,800	\$364,992	\$0	\$19,633	\$149,579	\$215,412



Project Title: China: Policy Advice on Implementation of Clean Coal Technology projects. Phase

Region / Country: East Asia and Pacific--China

Origin of Funds: Netherlands

Task Manager: Masaki Takahashi

Project Development Objective

To give policy advice to the government on how to implement Clean Coal Technology demonstration and commercial projects

Key Indicator

 The government's plan for projects using CCTs using innovative financial mechanisms
 The government's plan for non-power CCT demonstration and commercial projects

Expected Outputs

1. A report of financing specific CCTs including IGCC financing;2. A report on policy advice on implementation of Clean Coal Technologies;3. A report on policy advise of non-power CCTs deployment

Key Indicators

1a. A draft report of financing specific CCT due:
September 2001

1b. A workshop on financing CCT expected in October
2001

1c. A final report and workshop proceedings due:
December 2001;2a. A draft report on policy advice on
implementation of CCT due: October 2002

2b. A workshop is expected in November 2002

non-power CCTs due: March 2002 3b. A workshop on non-power CCTs in April 2002 3c. A final report and workshop proceedings due: June

2c. A final report and workshop proceedings due: January 2003;3a. A draft report on policy advise on

Implementation Progress

Component Activities

1. Financing specific CCTs: IGCC, PFBC, CFB and supercritical technologies etc.;Policy advice on non-power CCTs demonstr;2. Policy Advice on Implementation of CCT projects: selection of consultant;3. Policy Advice on Implementation of CCT projects: Consultant's work;A workshop;Financing specific CCT's including IGCC financing with GEF

Approval Date: 5/18/2001

Expected Dates for:

Project Completion (all project activities completed):

O6/30/2002

O6/30/2002

O6/30/2003

O8/31/2003



06/17/2003: 1. During Jan-Jun 2003, Draft eports are completed to cover 1) environmental regulation, monitoring and enforcement of the laws and regulations in non-power sector, 2) coal and refinery waste gasification for power and multi-production and 3) biomass co-generation, gasification and co-firing with coal.

2. What is the IMPACT of this work to date?

Chinese government requested GEF/World Bank support for the coal gasficiation combined cycle (IGCC) project. The report provide information on the IGCC and multi-production coal gasification applications in OECD countries and help strategy development of clean coal technology development and zero emissions from coal concept.

3. DISBURSEMENT projections.

For the draft completion, around half of the disbursement will be made within FY03 (by June 2003) and remaining half will be disbursed by December 2003 upon completion of a workshop and final reports.

4. CHANGES in project design/expected date of completion.

Due to SARS, the workshop originally scheduled in May 2003 was postponed until September 2003. The final reports

	(A)	Афроваеві	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$50,000	\$50,000	\$0	-\$930	\$39,492	\$10,509
World Bank (BB) Non-ESMAP Trus	\$0 st \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$50,000	\$50,000	\$0	-\$930	\$39,492	\$10,509



Project Title: Energy From Landfill Gases for the LAC Region: Best Practice and Social Issues

Region / Country: Latin America and Caribbean Region

Origin of Funds:

Task Manager: Horacio Terraza

Project Development Objective

Promote the development of non-conventional energy sources at large city landfills in the region by means of LFG recovery and utilization systems, with corresponding methane and carbon dioxide emissions reductions, through documentation and dissemination of best practice and the identification of potential new projects and the preparation of corresponding pre-investment

Key Indicator

- * Number of landfills with operating LFG recovery and utilization systems.
- Volume of methane captured, amount of fossil fuel displaced, and amount of energy produced and sold.
 Volume of verifiable carbon credits obtained.
- * Number of countries adopting supportive energy and

Expected Outputs

Key Indicators



Phase One:

 Preparation of case studies of existing LAC experiences, emerging Bank experiences, and North American experiences

Identification of potential new LFG project sites in LAC.

 Handbook of best practice for LFG projects, including technologies and emissions reductions, business models, financial engineering, institutional arrangements, and other issues.

A workshop at an existing LFG site to review case studies, discuss best practice, and examine regional opportunities.

Workshop proceedings presenting case studies and summarizing workshop discussions and recommendations.

 A knowledge network on LFG capture and use. Lessons from experience and recommendations for promoting LFG projects in LAC, including a dissemination program and the identification of potential new sites.

Phase Two:

Two local launch workshops culminating with establishment of local steering committees and agreement on TORs for pre-investment studies.

Two pre-investment studies completed.

 Two local workshops to disseminate pre-investment study results and initiate high-level dialogue with government and donors on project financing.

Two regional dissemination workshops to present lessons learned from Phase One and local pre-investment studies.

Workshop proceedings summarizing findings of

· Final report with main findings and recommendations.

Handbook of best practice for LFG projects.

Completed workshop and proceedings.

Functioning knowledge network.
 Potential new sites visited and evaluated.

Interim drafts of handbook and case study reports.

Pre-investment work carried out at two sites.

Completed regional dissemination workshop and

nrocoodinas

Implementation Progress
Component Activities

Phase One:

Component 1: case studies

Component 2: field visits & target identification

Component 3: handbook

Approval Date: 3/5/2002

Expected Dates for: Original Revised

Project Completion (all project activities completed):

Project Closing (all financial transactions executed):



06/12/2003: The funds for this project became available for use in November 2002, following the signature of the IBTF in October 2003. Since then we initiated the process of identifying a firm to carry out the Handbook (the EOI notice appeared in Development Business in December 2002, and RFPs were issued to a shortlist of firms in Januray 2003). Following receipt of more than 25 EOIs from firms around the world, and evaluation of the proposals in response to the RFP from a short list of 5 firms, we selected Conestoga-Rovers and Associates to carry out the handbook. The contract for USD 80,000 was signed with Conestoga-Rovers on April 11, 2003. We expect to have a first draft of the handbook ready by late September and a workshop to discuss the draft in late October 2003. In addition, we have contracted 8 case studies of LFG Plants (Nova Gerar in Brazil; Toronto, Canada; Durban, South Africa; Santiago, Chile; Latvia and Poland; Monterrey, Mexico; Istanbul, Turkey; Maldonado, Uruguay) with consultants around the world, which are expected to be completed by late July - August 2003, and that would feed into the handbook.

	(A)	AAHowaeeld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$694,664	\$533,092	\$0	\$0	\$0	\$533,092
World Bank (BB) Non-ESMAP Trus	\$20,000 it \$0	\$13,100 \$0	\$0 \$0	\$0 \$0	\$13,100 \$0	\$0 \$0
Total	\$714,664	\$546,192	\$0	\$0	\$13,100	\$533,092



Project Title: Good Practice Case Study in Integrating Environment into Gas and Oil Pipeline

Projects: Experiences Based on the Bolivia-Brazil Gas Pipeline

Region / Country: Latin America and Caribbean--Bolivia; Brazil

Origin of Funds: Netherlands

Task Manager: Juan D. Quintero

Project Development Objective

Adoption of the documented good practices by other similar projects

Key Indicator

Review of project proposals within Bank
 Tracking of projects in private sector.

Expected Outputs

Good practice documentation satisfactory to the
 Bank produced
 Workshop held

Key Indicators

 Case study and lessons learned reviewed, cleared and published
 Workshop held, participation satisfactory

Implementation Progress

Component Activities

1. Production of good practice case study illustrating lessons learned in integrating environmental and social issues ;2.

Workshop

Approval Date: 12/11/2001

Expected Dates for: Original Revised

Project Completion (all project activities completed): 01/15/2003 10/31/2003

Project Closing (all financial transactions executed): 03/03/2003 12/31/2003



07/25/2003: The main activities done during the months of January - June 2003 are as follows:

- 1. field visits to key sites along the ROW of the pipeline were carried out including sensitive ecosystems (Pantanal, Aparados da Serra tunnel crossing), compression stations, valves, and city gates. Field visits also included overflights of major segments and visits to natural parks strengthened by the project. Communities which benefitted from social compensation programs were also visited.
- 2. interviews with principal stakeholders were carried out: project sponsors, supervision teams, auditor, ombudswoman, academia, NGOs, indigenous peoples organizations, social supervision teams, majors of municipalities, environmental agencies and other governmental organizations, park administrators and directors.
- 3. final draft reports for the case study and the environmental manual were prepared
- 4. two workshops, one in each country, to discuss the draft reports were held in Campo Grande, Brazil, and Santa Cruz, Bolivia, with the participation of all stakeholders.
- 5. the next and final step will be to finish the case study and the manual and to carry out a closing workshop in Washington to disseminate them.
- 2. What is the IMPACT of this work to date? The preparation of the case study has raised awareness of the good environmental and social practices of the Bolivia-Brazil gas pipeline among all actors all of which have fully supported this task. Environmental agencies in Brazil and Boliva have manifested their interest in following GASBOL pratices and adopting the proposed environmental manuals.
- 3. DISBURSEMENT projections. Around 98% of the budget will be disbursed by June 30, 2003. Projected expenses will be disbursed during the following month to pay for tasks completed before the closing date.
- 4. CHANGES in project design/expected date of completion. There have been no major changes in programa design. During the field visits, it was decided to include in the paper the environmental and social best practices that

	(A)	A Aijocraéeid (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$117,000	\$117,000	\$3,962	\$35,934	\$112,727	\$4,273
World Bank (BB) Non-ESMAP Trus	\$29,000 t \$0	\$5,397 \$0	\$0 \$0	\$2,399 \$0	\$5,397 \$0	\$0 \$0
Total	\$146,000	\$122,397	\$3,962	\$38,333	\$118,124	\$4,273



Project Title: Women's Energy Enterprise:Developing a Model for Mainstreaming Gender into

Modern Energy Service Delivery

Region / Country: Africa--Ghana
Origin of Funds: ; Core; Netherlands

Task Manager: Kofi-Boateng Agyen

Project Development Objective

To test a business model for empowering women through income generation in energy service delivery

Key Indicator

Willingness of task managers (of World Bank, and bi-lateral donors) and policy makers (of client countries) to incorporate the model in their projects

Expected Outputs

1. Project design

- 2. Establishment of a successful women's enterprise
- 3. Report summarizing the performance of the model with possible scale-up strategies

Key Indicators

- Project design secures support of task team members
- Ability of participating women to run their enterprise
 Financial sustainability of enterprise
 Ouality of summary report

Implementation Progress

Component Activities

Project design for implementation;2. Project Execution;2.1 Selection of communities;2.2 Survey of target community
to identify demand characteristics;2.3 Preparation of operational business plan;2.4 Organizational capacity building and
technical training;2.5 Business and marketing training;2.6 Implementation of business plan;2.7 Evaluation survey of
target community and performance of micro-enterprise;3. Report on performance of model replication and possible
scale-up strategies

Approval Date: 3/15/2002

Expected Dates for: Original Revised

Project Completion (all project activities completed): 04/30/2004 No revision

Project Closing (all financial transactions executed): 06/30/2004 No revision



09/17/2003: A survey of five possible sites was conducted. Of these five sites, two will be selected and five-year business plans for them are to be developed for testing this model. The business plans will be based upon the feasibility study and local demand assessment, the financial viability and sustainability of the project.

The five communities surveyed were:

Fishing communities visited were:

- Gomoa Nyanyano in the Gomoa District,
- · Abandze and Biriwa both in the Mfantseman District

Farming communities covered were:

 Nyanfueku Ekroful in the Abura District and Awutu Pomadze in the Awutu Senya district.

Methodology

Two separate visits were paid to each community; the first was to familiarize the Project team with the population, request for permission to meet with them in group/individually and meet with the chiefs and opinion leaders. The second visits were working visits. The methodology employed was a combination of participatory approach in a workshop/group discussion setting, informants and one-on-one questionnaire interaction with dwellers of these communities.

Team

The field trip team was made up of Dr Rudith King, Gender and Rural Development expert, and Kofi Nketsia-Tabiri, a project officer with KITE (the consulting firm engaged for this project).

Type of Enterprises Explored

In all five different enterprises were explored and discussed with the various communities. These were:

- DC Lamp assembly plant
- · Multipurpose diesel platform

Other businesses discussed were the ff, since they were of interest to some of the communities:

- · Aluminium Tray and bucket manufacturing plant and
- · A plant for the manufacturing of plastic bags.

Findings

The survey revealed that the ladies in all these communities were already involved in various economic activities of some kind. They therefore would prefer support in such engagements to enable them expand and improve upon their knowledge of these activities.

The fact that none of the villages visited had a functional women's group presents a challenge to this project which could be surmounted by the formation of one in these villages or other villages with existing and functional women's group or association may have to be explored.

Business Plan Preparation and Reports

Most of the information required for both feasibility and business plan has been gathered. The compilation of the



	(A)	AAIIIOOziteii	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$70,000	\$35,287	\$0	\$0	\$20,287	\$15,000
World Bank (BB) Non-ESMAP Trus	\$0 t \$0	\$415 \$0	\$0 \$0	\$0 \$0	\$415 \$0	\$0 \$0
Total	\$70,000	\$35,702	\$0	\$0	\$20,702	\$15,000



Project Title: Mainstreaming Gender into Energy Projects

Region / Country: Global

Origin of Funds: Core

Task Manager: Waafas Ofosu-Amaah

Project Development Objective

Key Indicator



Project rationale and objectives: While energy-related issues are often assumed to be gender neutral, energy scarcity, in rural areas in particular, has disproportionately negative effects on women. Because women and men face different needs and constraints as producers and users of energy services, taking their experiences into consideration when designing and implementing energy programs can significantly enhance the sustainability and effectiveness of these projects.

The participation of women in the modern energy sector is minimal in contrast to the significant time and energy they spend on traditional energy in collecting biomass for cooking. In addition:

- rural electrification has had minimal impact on the status of the women;
- women are unable to productively utilize benefits emerging from energy access;
- women seek the opportunity to generate income using the available energy.

The Gender and Development Group of the World Bank's Poverty Reduction and Economic Management Network (PRMGE) is keen on integrating gender issues into the Bank's energy operations, while integrating gender concerns into energy sector activities continues to be an area of significant focus for ESMAP (ESMAP Business Plan for 2002-2004). PRMGE and ESMAP have therefore decided to cooperate on this endeavor. Since this work is at its inception stage, there is a need to document progress made to date, develop a structured approach to this initiative, and provide guidance for the way forward. The proposed activity, which responds to this need, will be undertaken in collaboration with the Applied Workshop in International Development at Columbia University's School of International and Public Affairs, a center of academic excellence. The objectives are:

- To take stock of Bank-financed energy operations that have integrated gender issues in order to draw out lessons;
- To document promising approaches to integrating gender issues into energy operations for development effectiveness and for environmentally and socially sustainable development;
- To recognize priority areas of intervention in gender and energy (renewable energy services micro-enterprises for women, micro-utility management, indoor air pollution control, etc.);
- To review the options, potentials and challenges for designing pilots in recognized categories of work and for scaling up promising approaches; and



Expected Outputs

Key Indicators

- Expected outcomes:
- § A report that provides a better understanding of and analytical information on the relevant gender issues in the energy sector (the report will be made available on both the ESMAP and PRMGE websites);
- § A synthesis of the findings, promising approaches and challenges to integrating gender into energy sector interventions; and

The initiation of a list of technical resources and guidelines for integrating gender into energy programs that can form the foundations for a future toolkit on gender and energy and that can also be presented

Implementation Progress Component Activities

Approval Date: 12/18/2002

Expected Dates for: Original Revised

Project Completion (all project activities completed): 12/30/2003 No revision

Project Closing (all financial transactions executed): 03/30/2003 06/30/2003



08/18/2003: During Jan-Jun 2003 the activity completed a desk review and field visit (March, 2003 in Bangladesh), in which the project team collected and analyzed evidence for integrating gender into the energy sector; (2) examined energy projects in Bangladesh to learn lessons about best gender practices in this sector and how they might be scaled up, especially in the World Bank-financed Rural Electrification and Renewable Energy Development project (RERED); (3) completed a literature review and case study and (4) identified tools that could assist with creating a gender framework for the energy sector.

What is the IMPACT of this work to date? These activities have resulted in the compilation of a set of findings on the importance of gender and energy in poverty reduction, namely, that: the Millennium Development Goals cannot be attained without strong emphasis on energy issues; improved energy services have gender-differentiated consequences; and direct and indirect benefits accrue to women and society from integrating a gender dimension into energy related development interventions.

DISBURSEMENT projections. July -December, 2003 - \$5,422.00 (report editing, formatting, publication, design and construction of web-based resource center for dissemination).

CHANGES in project design/expected date of completion. There have been no changes in project design. The expected date of completion was June 30, 2003, and the Columbia team submitted their final draft report on June 23, 2003. To allow for the draft report to be edited and prepared for publication, and for the accompanying resource material to be developed into a web-based resource center on gender and energy, the anticipated completion date is now Q2 of FY04.

CONSULTANTS HIRED.

Prokaushali Sangsad Limited (PSL), Bangladesh (ESMAP funds)

BRAC . Bandladesh (ESMAP funds)

	(A)	AAHowateld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$7,000	\$7,000	\$23,089	\$1,054	\$1,054	\$5,946
World Bank (BB) Non-ESMAP Trus	\$0 t \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$7,000	\$7,000	\$23,089	\$1,054	\$1,054	\$5,946



Project Title: Central America Gender in Sustainable Energy

Region / Country: Latin America and Caribbean Region

Origin of Funds: Core

Task Manager: Jean-Claude Balcet

Project Development Objective

Increased gender equity and efficiency of energy use and management, to meet the needs of poor women and men in Central America.

Key Indicator

- Increased awareness of energy & gender linkages (through meetings, workshops) among project and program implementers and energy planners (est >8 meetings).
- Increased commitment (planning and resources) to incorporating gender considerations in meeting energy-related needs (project objectives, personnel dedicated to issues).
- Gender approach being applied to energy projects in the region (est 2-4 projects involving women's

Expected Outputs

Intra- and inter-regional information exchange takes place on gender & energy.; Women and men of GENES members apply gender approaches to their work.

Key Indicators

Degree of interest in and commitment of member organizations to GENES network:

- No. of GENES organizations requesting receipt of bulletin, disaggregated by type-- NGO, association, cooperative, gov't agency, academic institution(est >50 orgs.).
 - No. of GENES organizations, including both Coordinators and others, contributing to quarterly bulletin(est >10 orgs.).
 - Commitment of Country Coordinators to maintain ongoing contact with sub-network members (est > 3 Coordinators).
 - No. of meetings held at local/country level (est >5 meetings);Institutional support for gender and demand-responsive approaches:
- GENES organizations initiating process of internal capacity-building in gender and energy (est. >10 orgs.).
 - No. of workshops on gender and/or energy for technical and administration staff, field personnel, boards (est.15 workshops).
- No. of women and No. of men within GENES organizations sensitized to gender perspective (est. >50 w/50 m)
 - No. and depth of manuals or guides on internal procedures for incorporating gender perspective, reviewed and applied in GENES organizations (est 2 guides).
- No. of internal meetings addressing incorporation of gender approaches to field projects (est. > 5 meetings).
 Development of policies that indicate institutional



Implementation Progress

Component Activities

Develop policy agenda in 2 key countries; Mobilize constituency to support policy change;;Develop prototype of training and field manual; facilitate exchange of gender training materials;;Establish effective vehicles for fluid information exchange and beyond. Determine most effective means of communication;Facilitate capacity-building of GENES members in energy options:;Facilitate capacity-building of GENES members in gender approaches: Identify member needs for capacity-building;;Facilitate exchange of gender-sensitive energy training materials; Provide T.A. and support for national and regional ;facilitate identification & design of strategic gender-sensitive RE projects.;identify expertise in gender training; assessment and training tools;;Identify member needs and capacities in energy; Identify expertise in gender options;;Identify priority community development needs with energy component; Facilitate identification and design of strategic, ;Implement strategic pilot projects, initially in Nicaragua and Guatemala; and document pilot projects.;including and especially ENERGIA; and procure hardware for network management.;Meetings with decision-makers; presentations to policy-makers, program developers and implementers.;prepare/disseminate bulletin among GENES members; Identify, translate and disseminate key documents among GENES members;;Promoting policy awareness and formulation of agendas for change in two key countries:;Provide T.A. and financial support in development of pilot projects:;Provide T.A. and support for national and Regional workshops and exchanges.;verify effectiveness of communications and information dissemination; identify and pursue linkages with affinity

Approval Date: 3/24/2000

Expected Dates for: Original Revised

Project Completion (all project activities completed): 07/15/2002 06/30/2003

Project Closing (all financial transactions executed): 07/31/2002 12/31/2002



07/25/2003: 1. During Jan-Jun 2003, how did the activity advance towards the ACHIEVEMENT OF its OBJECTIVES (as set out in the proposal approved by ESMAP). After a first phase consisting of a series of workshops and exchanges of experiences on gender and rural energy, the second phase of the ESMAP Central America Gender and Sustainable Energy Project is currently under implementation. Up to the end of the project, in December 03, a series of pilot projects integrating the gender perspective into the energy sector will be implemented. The projects selected, in operation since May 03, consist of: (i) the construction of energy efficient stoves in a rural community in Panama; (ii) the commercialization of energy efficient stoves in several communities in Nicaragua; (iii) and, the construction of energy efficient stoves and a bio-digestor in a rural community in Panama. The three projects have been designed taking into account men and women's different energy needs and gender differentiated uses of energy. Women play a key role as direct participants and beneficiaries in the three projects.

Overall, the first phase contributed significantly to the project objective of increasing the awareness of energy and gender linkages among project and program implementers and energy planners. The design of the pilots under implementation during the second phase has built on the lessons generated during the workshops and exchanges of experiences. The implementation of the projects is directly contributing to the objective of effectively integrating gender into energy projects in the region. The dissemination of the lessons learned from the pilot experiences is expected to encourage similar projects in Central America in the future.

- 2. What is the IMPACT of this work to date? The impact of the project to date includes:
- § Energy practitioners and policy planners in Central America are aware of the linkages between gender and energy and are trained to integrate gender considerations in energy projects and policy as a result of their participation in workshops and exchanges of experiences.
- § Increased capacity of a regional network of NGOs in Central America to integrate gender into their projects and activities through the participation of their members in the workshops and exchanges of experiences and through the technical support provided by the project to the network during the first phase.
- § Increased capacity of three NGOs in Central America to design and plan projects integrating gender in the area of rural energy as a result of the technical assistance provided to the NGOs selected to carry out the pilot projects.

In the next months, after the implementation of the pilot projects, the impacts of the project over concrete rural men and women beneficiaries are expected to increase noticeably.

3. DISBURSEMENT projections.

The totality of funds available in the trust fund (\$72854.75) will be disbursed during the next six months.

4. CHANGES in project design/expected date of completion.

The project has been extended until December 03 to accommodate delays during the first phase (see previous progress reports for details). The new implementation arrangements, with the Regional Unit for Technical Assistance (RUTA) as implementing agency, are proving very useful to effectively monitor and provide technical assistance to the pilot projects under implementation. Between January 03 and May 03, RUTA provided technical assistance to the NGOs selected to implement the projects in order to strengthen their projects' work plans and M&E systems. Although this caused a slightly delay in project operations, it was considered crucial for the ability of the projects to



	'					
	(A)	AAHoavateki (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$225,000	\$225,000	\$8,250	\$6,542	\$143,895	\$81,105
World Bank (BB) Non-ESMAP Trus	\$0 \$1 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$225,000	\$225,000	\$8,250	\$6,542	\$143,895	\$81,105



Project Title: Energy and Poverty Workshop (Francophone)

Region / Country: Africa Region

Origin of Funds: France

Task Manager: Dominique M. Lallement

Project Development Objective

The Francophone workshop will benefit from the feedback of the Anglophone workshop already held on this issue in Addis Ababa, Ethiopia in October 2002 (cf agenda on Esmap website).

The objective of the Workshop will be to ensure that the fundamental and beneficial effects of modern energy development are shared, understood by local energy stakeholders (energy ministries, civil society organizations, utilities, and small or large private companies) and included in the PRSP process and final papers. The conference will promote this goal in several ways:

- By facilitating the exchange of information among energy stakeholders, and exploiting the knowledge of each stakeholder about the energy-poverty link for use by all others;
- By ensuring that this knowledge is captured in usable tools such as methodologies, case studies, and best practices;
 - By sharing with energy stakeholders how to successfully contribute to the PRSP process;
 - By raising the awareness of non-energy stakeholders, for example in health, education and environment, about the contribution modern energy services can provide to their development goals,

Ry creating outlines for country specific Energy action

Key Indicator

Expected Outputs

Key Indicators



Sustainability will be achieved during the course of the workshop by establishing links between similar initiatives and by the creation of network of energy stakeholders likely to provide each other with technical, practical, financial and conceptual support while involved in PRSP process. After the second workshop, implement a network to support stakeholders' initiatives to participate in their country's PRSP process, assess relevance of workshop replication, and prepare feedback on further research needed.

The integration of the outcome of the workshop with existing initiatives will also be sought such as with Village Power, KNSEA (Knowledge Network for Sustainable Energy in Africa), AFREC (Africa Energy Commission) and AEIS (Africa Energy Information System) once they are operational. The final event will provide the occasion for participating countries to seek support for policy-proposals based on PRSPs to

Implementation Progress Component Activities

Approval Date: 12/18/2002

Expected Dates for: Original Revised

Project Completion (all project activities completed):06/30/2003No revisionProject Closing (all financial transactions executed):07/30/2003No revision

Summary of Current Project Status, Issues and Actions:

07/01/2003: Workshop was delivered Febreuary 2-6, 2003. It was attended by delegations from seven invited countries (Benin, Burkina Faso, Guinea, Mali, Mauritania, Togo and Senegal) with a total of 125 participants. Each delegation took home frameworks for the preparations of Energy Poverty Reduction Actions Plans, based on multi-sector demand. with the commitment to develop them further as part of their PRSP preparation/update process.



	(A)	AAHowateld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$250,000	\$250,000	\$18,608	\$50,051	\$182,967	\$67,033
World Bank (BB) Non-ESMAP Trus	\$0 st \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$250,000	\$250,000	\$18,608	\$50,051	\$182,967	\$67,033



Project Title: Rural Electrification Policy Development and Conceptual Design of Energy

Services Delivery Projects to Improve Rural Health and Education Service Delivery

Region / Country: East Asia and Pacific--Papua New Guinea

Origin of Funds: Netherlands

Task Manager: Anh Nguyet Pham

Project Development Objective

Develop rural energy and electrification policy framework and strategy for PNG

Develop sustainable approaches for supplying electricity for critical education and health service delivery to rural populations.

Key Indicator

Coverage & completeness as evidenced by PNG and Bank review, Bank peer review, other donor review, GOPNG Ministerial review

Expected Outputs

Key Indicators



Task Activities

Task Deliverables

T 1.1 - Rural Energy Issues and Needs Awareness Creation:

Assess needs, priorities, gaps of current GOPNG rural energy policy & planning capacity

Develop TA-type program of organizational development, staff development & facilities improvement

Form Rural Energy Working Group (REWG) of key interested GOPNG departments

 Assess current methods of coordinating rural energy policy, including impacts of devolving responsibility for rural energy supply to provincial & local governments

 Review & consider rural energy policy examples from other EAP countries

 REWG to conduct initial workshop to consider status of rural energy in PNG with public, private and NGO participation

T 1.2 - Assess Needs, Priorities and Alternative Strategies for rural energy development in PNG
Develop & implement a broad-based participatory consultative process as regards rural energy needs that involves key stakeholders (landowner groups, local government, private sector) at the provincial and local levels

Conduct one or more rural energy surveys at the household and village level. Include indicative fixed facilities operated by local gov't that deliver health, education, communications, and other critical services. Include at least one case study assessing the impacts of rural energy development on poverty alleviation and gender equity using methods developed in the EnPoGen Project. See for example the articles on China and Indonesia case studies, both contained in a special issue of ENERGIA News, v.5 # 3, Novemberf2002.

Conduct focused rural energy strategy development workshops involving rural development specialists in the government, private sector, & NGOs. Focus on institutional models and requirements and use Objective Oriented Program Planning (OOPP) & other techniques that support consensus building. Object Oriented Project/Program Planning has been used in ESMAP- and ASTAE-funded rural energy planning in Vietnam, China, and Sri Lanka. Task Activities

T 1.3: Evaluate policy options and prepare recommended overall policy framework &

 One or more "White Papers" on current rural energy policies in PNG, including assessment of current devolution practices and applicability of rural energy policies and programs in Vietnam, Thailand, and the Philippines to PNG

 TA Program Plan and Schedule for strengthening capability of DPE's Energy Div.

Proceedings of Workshop on PNG's Rural Energy Issues & Needs, including Recommendations for Improving Quality of Rural Energy Supply in PNG

0 1.2:

0 1.1:

 Rural household/village/service delivery facility energy use surveys

Results of case studies on poverty alleviation, rural energy development, and gender equity

 Participatory consultation Report on rural energy needs, priorities and strategies.

 Workshop Report on rural energy strategy option development Task Deliverables

0 1.3:

Report on technical, economic, and financial analysis and market assessment of rural energy options
Report on additional work and development required to support recommended rural energy policy and strategy, including indicative TORs for institutional development, financing needs including tariffs and pricing, and safeguards including risk management
Policy framework document suitable for promulgation and consideration by GOPNG Ministers and legislators

O 2.1: Database and published inventory of facilities and Report on current applications of renewables for PNG rural energy supply.

O 2.2: Report containing descriptions of typical rural service delivery facilities and indicative project design(s) using a range of renewable power supplies – hydro, wind, PV, biomass

implemented demonstration, performance M&V. O 2.3: Final Task report containing: recommended program concept and scope at the provincial level, including most-promising designs and applications, timetable and financing requirements for



identified in T 1.2.

- Develop market assessment and projections for uptake of rural energy, especially on- and off-grid electrification, and relative to broader rural infrastructure development
- Identify and scope work required on key institutional development and financing needs, especially regulatory regimes, tariffs and pricing, risk management and sustainability
 - Formulate and promulgate recommended policy framework and strategy/"roadmap" for rural energy development in PNG using workshops and policy papers
- T 2.1: Conduct Inventory of fixed rural service delivery facilities w/ energy supply needs. Conduct Review & evaluate existing renewable energy supply schemes in PNG

T 2.2: Develop conceptual design(s) for meeting critical energy needs of typical fixed rural service delivery facilities delivering health, education, communications, law & order & other services and using different available renewable energy sources T 2.3: Conduct assessment of resources needed and timetable for accelerated application of renewables. Develop overall recommended plan for sustainable energy supply for rural service delivery facilities, including project concept, technology approach, institutional model, financial model, and "next steps" in terms of policy and planning and field demonstrations and scale-up. Disseminate via a workshop of interested

Implementation Progress Component Activities

Approval Date: 1/13/2003

Expected Dates for: Original Revised

Project Completion (all project activities completed): 12/31/2004 No revision

Project Closing (all financial transactions executed): 03/30/2005 No revision



07/25/2003: 1. Project Description: This project has two objectives: (1) Develop a national rural electrification policy framework that could become the basis for a national program to accelerate the provision of electricity access to the rural poor in a sustainable and economical fashion; and (2) Identify, define and document indicative approaches to the supply of electricity for critical and essential rural needs, including education and health service needs, communications, water supply and sanitation, community and government staff lighting, and others. Accomplishing these two objectives will require several project activities, including participatory consultation with key rural electrification stakeholders; capacity building at key GOPNG ministries; field work including rural energy survey research and assessment of power supply needs for stand-alone rural education, health, communications, and other service delivery facilities; policy and regulatory development in support of rural electrification, including innovative institutional mechanisms and models for rural electricity services provision; and financial analysis including pricing, cost recovery, tariff development, and subsidy policy. Project deliverables will include an energy sector note for PNG, rural electrification stakeholder consultation workshop reports, a report on innovative institutional and technical mechanisms for provision of rural electricity access, a review of policy options and framework alternatives for rural electrification in PNG, and an overall recommended plan for rural electrification in the country.

2. Project Funding and Status: The original project budget called for a total expenditure of \$450,000 over two years, with \$300,000 allocated for the first year and the remaining \$150,000 allocated for the second year. Funding sources arewere to be as shown in Table 1(a) below; \$300,000 in funding is from ESMAP and the balance from ASTAE, CMU and non-Bank TA managed by ASTAE.

The only A key financial issue to report is an over-run in the cost of Task 1, which comprises basic data collection about the PNG energy sector, including participatory consultation activities such as the Object Oriented Project Planning (OOPP) workshopthe shortfall in non-World Bank or counterpart contributions. We have found the costs of traveling to and around PNG more expensive than first thought (it is difficult to combine travel to PNG to other trips within EAP region), as well as the cost of arranging workshops and attracting local stakeholder participants to them. For example, it was necessary to pay the travel and subsistence costs of several NGO and local government participants in the April 22-23 OOPP workshop. The cost of even basic sectoral data collection has been considerably higher than expected, as it has required travel at the provincial level. In addition, we believe there is a need to collect additional data about the existing Government-owned distributed generation facilities operated by provincial and local government entities in order to properly assess the viability of this possible entry point to accelerated rural electrification. This is not the counterpart funding we requested, but the UNDP RAS funding. No funding was available from this source in FY03. Given the financial difficulties of GOPNG, it is now seen as extremely unlikely that anywhere near the \$50,000 in funding will be mobilized from this source over the project's duration. Moreover, additional funds are likely to be needed to complete this work, because more time and expenses were needed for field work, plus travel costs were much higher than anticipated because of inability to combine trips, and unexpectedly high costs of travel to PNG. Estimated over-run to date is about \$20,000 and we expect additional costs of another \$205,000 will be necessary to complete the Energy Sector Note and collected needed data on Government GCenter generation facilitiesapproximately. Fortunately, there is sufficient BB in FY04 to cover this additional energy sector note preparation and PNG Power data collection effort. Accordingly, the project team will be requesting the approval of the ASTAE Trust Fund manager to substitute additional \$45,000 in ASTAE trust funds to both make up for the high-than-expected Task 1 costs potential funding shortfall in FY04. Should the additional funds not be forthcoming from ASTAE, BB would have to be used instead, and it is likely that collection of data from Government GCenters would have to be eliminated. Table 4 shows the revised budget and the proposed sources of funding to complete the project.

We have also created two new budget categories, one for a Final Report and one to capture the ongoing costs of management of the project. As we did not separately budget for these categories in the ESMAP proposal, there is an apparent over-run suggested by Table 3. However, this is not a true over-expenditure as both BB and UNDP RAS funding have been designated for these two purposes.

3. Implementation Progress



consultant to perform Task 2 – Case Studies of Innovative Approaches for Provision of Rural Electricity Services in PNG. Task 2 is the central element in the ESMAP project, encompassing all majority of the field work and expected source of the policy and strategy ideas and program recommendations to be developed in Tasks 3 and 4.

Key Task 1 efforts include data collection on the energy sector and the status of rural development in PNG and a Consultative Mission. During February and March the TORs for energy sector data collection and energy sector note preparation were put in place and detailed planning for the first Rural Electrification Stakeholder Workshop went forward. During this period a local consultant begin detailed data collection on the energy sector and provided important "advance work" in support of the Consultative Mission. The local consultant was joined by the international energy sector consultant in late March and their combined data collection mission extended through all of April. Their work product, an Energy Sector Note for PNG, is due in July and will be an ESMAP project deliverable.

The Bank TTL and Senior Staff Consultant undertook a Consultative Mission in April 2004 during which several key objectives identified in the project Work Plan were accomplished, notably:

- · A Rural Electrification Working Group was established, chaired by the lead counterpart ministry (the Departments of National Planning and Rural Development) and including the Department of Petroleum and Energy (DPE), and PNG Power, among others.
- · Individual consultations were held with key institutional stakeholders in rural electrification, notably the Independent Consumer and Competition Committee and the Independent Public Business Corporation; the PNG Sustainable Development Program Company Ltd. and the PNG Community Development Scheme; AusAID; energy goods and services providers, mining companies with community development efforts; and foundations and NGOs providing rural services of all types.
- Discussions with counterparts on the overall ESMAP project work plan were held and a consensus reached with the government as regards the detailed priorities, study scope, key counterpart(s), outputs and schedule of the study;
- An ongoing participatory consultative process was initiated with respect to rural electricity in PNG by way of a facilitated two-day workshop with a diverse group of stakeholders including missionaries, the private sector, NGOs, and landowner groups. The result of this workshop, in addition to better awareness of PNG rural development issues and a broadened circle of consultation partners, is the first project deliverable, entitled PNG Rural Electrification OOPP Workshop Report # 1. Rural Electrification Workshop Report, Pt. Moresby, Papua New Guinea, April 22-23, 2003. Rural Electrification Policy and Strategy Development Project.

We are in the process of the procurement of a consultant to perform Task 2, "Case Studies of Innovative Approaches for Provision of Rural Electricity Services in PNG". Milestones in this process included:

- Advertisements to interested consultants and individuals to submit Expressions of Interest as regards this project appeared in UNDB Online on 12 March 2003 and in the local PNG newspaper, the PNG Post-Courier, on May 2, 2003
- Expressions of Interest were evaluated and a short list of qualified consultants was developed.
- A TOR and RFP for the Task 2 work was developed and sent to the short-listed firms on May 14.
- Proposals were received from four consultants on June 20, 2003.
- · An evaluation committee was convened and a technical evaluation was underway as of the close of FY03. A Fixed Budget Selection process is being used and negotiations with the selected consultant should start before the end of July, with the work set to start by September 1 if not before.

As regards Lessons Learned, the inception Workshop on rural electrification provided an opportunity for direct feedback from knowledgeable local stakeholders. The feedback led to some changes in the TOR for Task 2, including confirmation that the likely early entry points for an accelerated rural electrification program will be the power needs of essential rural community services, productive uses and income generating activities in district towns and villages. Financial Aspects. Adherence to the principle of full recovery of operational costs and recommendation of pricing and financing approaches, including the use of output-based subsidies that are capable of financing the investment cost of rural electricity services.



	(A)	Appoweed (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$300,000	\$300,000	\$0	\$2,364	\$2,364	\$297,636
World Bank (BB) Non-ESMAP Trus	\$50,000 st \$50,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$400,000	\$300,000	\$0	\$2,364	\$2,364	\$297,636



Project Title: Global Village Energy Partnership (GVEP)

Region / Country: Global

Origin of Funds: ; Sweden; United Kingdom; Core

Task Manager: Dominique M. Lallement

Project Development Objective

To establish the Global Village Energy Partnership

Key Indicator

a. A minimum of 10 founding partners b. At least 5 developing countries committed to GVEP initiatives

Expected Outputs

1. Outreach and consultation with prospective partners;2. Preparation of business organization

Key Indicators

1.1 General awareness of GVEP
1.2 Commitment and financing
1.3 Consensus-building on partnership particulars;2.1
Resource planning, including financial sourcing,
secretariat cost, etc.
2 2 Management plan

Implementation Progress

Component Activities

1. Outreach and consultation;2. Contract for business plan including: governance structure paper, work plan and activity timetable, budget, call for

Approval Date: 5/8/2001

Expected Dates for: Original Revised

Project Completion (all project activities completed): 06/30/2002 06/30/2004

Project Closing (all financial transactions executed): 09/30/2002 08/31/2004



07/10/2003: Highlights: Since January 2002, GVEP has cosponsored three primary events to increase awareness and activity related to energy access for those under and un-served; events were as follows: an Energy-Poverty workshop in Dakar with delegations from seven West African countries (modeled after a similar workshop held for East African countries in October 2002); a Pre-Investment workshop in Berlin to evaluate existing pre-investment instruments; and a Practitioners workshop in Colombo for those involved in supplying rural energy services throughout South Asia. Follow-up from each of these events, corresponding to the Partnership's five main service lines, is ongoing. Two additional events are scheduled for July 2003 focusing on energy-poverty in the regions of Central Africa and Latin America and the Caribbean.

Follow-up: The Partner base has doubled from approximately 100 to 200 member organizations since January 2003. In June, India-based Partners held a meeting, facilitated by the Technical Secretariat to strategize how they could work with GVEP. A Partnership Board was elected by GVEP Partners in February and the 11-member Board met in May to review the Partnership's activity and recommend follow-up actions. Progress continues on development and implementation of all five service lines. As of June 2003, the GVEP web site has been re-launched to facilitate knowledge sharing; production of the biweekly newsletter continues with a circulation of over 3,500 people.

Decisions: A review of the location of the GVEP Technical Secretariat is currently underway; a decision on the future location of the Secretariat is expected by year-end 2003. Two additional positions will be added to the Partnership Board: one representing the host institution of the Technical Secretariat, a second representing a developing country

	(A)	AAHowweld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$686,441	\$686,441	\$88,424	\$168,208	\$489,836	\$196,604
World Bank (BB) Non-ESMAP Trus	\$0 • 1 \$0	\$48,808 \$0	\$0 \$0	\$2,187 \$0	\$48,808 \$0	\$0 \$0
Total	\$686,441	\$735,249	\$88,424	\$170,395	\$538,645	\$196,604



Project Title: Village Power Partnership for Latin America and the Caribbean (VPP-LAC)

Region / Country: Latin America and Caribbean Region

Origin of Funds: Core

Task Manager: Dana Rysankova

Project Development Objective

Expanded access to modern rural energy systems throughout Latin American and the Caribbean

Key Indicator

Key project indicators are:

1) Capacity building opportunities in the provision of modern rural energy services. Increased governmental participation and commitment to expanding modern rural energy services.

Expected Outputs

 Increased capacity in the provision of modern rural electricity systems throughout the hemisphere.;2.
 National commitments in at least three countries to increased rural electrification.

Key Indicators

1.1) Number and national distribution of participants in VPP-LAC-sponsored training.

1.2) Topics covered at VPP-LAC-sponsored training. Evaluations of VPP-LAC-sponsored training.;2.1) Memorandums and agreements between governments and the institutions comprising the VPP-LAC Team.

2.2) Memorandums and agreements between governments and the other institutions, e.g. NGOs, private sector partners.

2.3) National Rural Energy Action Plans.

2.4) Related changes to energy sector legislation and/or

Implementation Progress

Component Activities

1. Latin America and the Caribbean Village Power Workshop; 2. National Rural Energy Action Plans

Approval Date: 3/8/2002

Expected Dates for: Original Revised

Project Completion (all project activities completed): 05/01/2003 08/31/2003

Project Closing (all financial transactions executed): 06/30/2003 10/31/2003



07/17/2003: 1. Progress towards achieving of objectives (period January - June, 2003)

- 1.1.Action Plans to improve delivery of energy services in rural areas:
- a) Commitments to GVEP and the Action Plan preparation process were obtained from 8 LAC countries: Bolivia, Brazil, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Peru.
- b) With a help of facilitators, financed through ESMAP, stakeholders consultation process has started in these 8 countries, with the objective to prepare draft Action Plan, which include inputs from key partners, as well as beneficiaries of energy services in rural areas (health, education, agriculture, MSMEs, private sector providers, NGOs, micro-finance institutions etc.). All countries have prepared draft plans or at least outlines to be presented and discussed at GVEP rural energy conference in Santa Cruz, Bolivia, July 23-25, 2003 (see below).

Full national stakeholder consultation workshops were held in Brazil and Bolivia. In the remaining countries, bilateral consultations started and full national consultation workshops are expected to be held after the conference.

- 1.2. Regional conference and workshop to discuss Action Plans
- a) Logistics of the conference were finalized. The conference takes place in Santa Cruz, Bolivia on July 23-25, 2003. Invitations were sent out and over 200 participants (mainly governments, private sector, donors and NGOs) registered.
- b) Conference agenda was finalized and speakers confirmed. The event is divided in two parts. First two days comprise the regional conference, open to all participants, where key areas related to planning and delivery of energy services for rural aras are discussed. 5 plenary sessions concentrate on the following area: (i) multi-sectoral demand for energy services, (ii) policy, regulatory and institutional framework, (iii) delivery mechanisms and public-private partnerships, (iv) multi-sector approach in delivery of energy services, and (v) financing challenges.
- c) The last day of the conference will be open only to the 8 country delegations and to discuss their action plans and exchange experiences among the delegations.
- d) Country delegations from 8 GVEP partner countries have been formed and to the extent possible include representatives from other sectors (health, education, agriculture etc.), as well as private sector and NGOs. Non-partner countries will send smaller delegations. Some of these countries (such as Nicaragua) are expected to join GVEP activity and lead the next round of the Action Plan preparation process.
- 2. IMPACT of the work to date:

The partner countries have draft or outlines of Action Plans which should improve the planning and delivery of energy services in rural areas. Most importantly, in the process of the preparation of these Action Plans, other key players were involved that typically do not participate in this process (health, education, agriculture sectors, private sector, NGOs etc.). This increases quality and expected effectiveness of these new Action Plans. Local capacity was increased through the local facilitation process.

3. Disbursement projections:

All remaining funds are expected to be disburse during the next 6 months (by December 2003).

4. Changes in project design/expected date of completion

The following changes in the acitivity design were made: Number of GVEP countries was increased from 3-5 to 8 due to high interest among LAC Governments



players.

Due to high interest, the expected number of conference participants was increased from 100-150 to 200-250.

The activity is expected to be completed by December 31, 2003.

	(A)	AAHowaeeld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$210,740	\$210,740	\$20,000	\$74,704	\$202,018	\$8,723
World Bank (BB) Non-ESMAP Trus	\$0 1 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$210,740	\$210,740	\$20,000	\$74,704	\$202,018	\$8,723



Project Title: Renewable Energy Practitioner Workshop in South Asia

Region / Country: South Asia Region

Origin of Funds: Netherlands

Task Manager: R. Anil Cabraal

Project Development Objective

Key Indicator

Goal 1:

Facilitate exchange of experiences among practitioners in addressing demand and scale-up issues

Goal 2

Develop 'knowledge management' tools for wide dissemination

Goal 3:

Easter a naturally of prostitioners to continue the

Feedback from participants

Replication of the workshop process in other regions Coverage of KM dissemination

Feedback from users

Expected Outputs

Key Indicators

Output 1a: Summary of online dialogue

Output 1b:

Workshop kit (background material)

Output 2a:

Workshop proceedings (incl. process documentation)

Output 2b:

A compilation of brief case studies

Output 2c:

Practitioner's Compendium

Online discussion forum

Placement of workshop outputs on website(s)

Implementation Progress

Component Activities

Activities
Task 1a:
Online discussion on workshop themes
Task 1h: Organize and Conduct workshop



Approval Date: 3/3/2003

Expected Dates for: Original Revised

Project Completion (all project activities completed): 08/01/2003 No revision

Project Closing (all financial transactions executed): 11/01/2003 No revision

Summary of Current Project Status, Issues and Actions:

07/10/2003:

The South Asia Practitioners Workshop was conducted from June 24 in Colombo, Sri Lanka with participation of over 50 practitioners from the South Asia region. Prior to the Workshop, the organizers conducted a month-long consultation with workshop participants and all GVEP-partners to solicit critical inputs on issues of scaling up modern energy services; the consultation served to craft the agenda for the workshop and encouraged interaction among the community of practitioners. Since the completion of the workshop, organizers have conducted a follow-up consulation to address implementation and facilitate interaction among practitioners. The Workshop proceedings are currently being prepared. Furthermore, work is underway on the Practitioners Compendium.

- 2. To date, no event focusing on the practitioners from the region had taken place; therefore the workshop served as a platform for sharing lessons and building a network among the practitioners. It is expected that this interaction will lead to a scaling up of energy-access programs and projects in the South Asia region and beyond. To this end, GVEP is also taking the lead in addressing the recommendations for scale-up that the practitioners outlined.
- 3. DISBURSEMENT projections.

Approximately, \$78,000 has been disbursed to date. The remaining \$22,000 will be disbursed in the first half of fiscal year 2004.

4. CHANGES in project design/expected date of completion.

The proceedings and the Practitioners Compendium will be issued one month later than expected--July 2003 for the proceedings and September 2003 for the Practitioners Compendium.

5.CONSULTANTS HIRED

The following consultants were hired:

- 1) LGA Consultants, to conduct the logal logistics
- 2) Elisa Knebel, Communications Specialist, to prepare the Practitioners Compendium
- 2) Six moderators to conduct each of the workshop's air broaken't according and propers moderators reported



	(A)	AAHowateld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$100,000	\$100,000	\$10,500	\$67,470	\$67,582	\$32,418
World Bank (BB) Non-ESMAP Trus	\$0 st \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$100,000	\$100,000	\$10,500	\$67,470	\$67,582	\$32,418



Project Title: Power Sector Reform in Africa: Assessing the Impact on the Poor and Influencing

Policy Decisions

Region / Country: Africa Region

Origin of Funds: Core

Task Manager: Robert W. Bacon

Project Development Objective

The overall objective of this project is to assess the impacts of power sector reforms on the poor and design strategies to ensure integration of pro-poor measures in the reform process.

Key Indicator

- Access programmes are designed and implemented

Expected Outputs

- Methodology to assess impact of power sector reforms on the poor
 Research framework
- 3. Case studies expressing experience in up to 8
 African countries.
- 4. Recommendations to policymakers on how to design reforms so as to achieve access and efficiency improvements
 - 5 Outroach and advocacy activities

Key Indicators

1. Methodology document
 2. Research framework document
 3. Case study reports
 4. Policy briefs (with recommendations)
 5. Public workshops, contact or online regulatory training, targeted stakeholder and decision maker

Implementation Progress

Component Activities

1. Developing a methodology to evaluate impact of power sector reforms on the poor;2. Developing the research framework for research partners to follow;4. Analysing case studies, and delivering strategy recommendations ;5. Initiating and undertaking a series of outreach activities;6. Task Manager Supervision/Travel/Continencies;Implementing methodology in the form of research for case study analysis

Approval Date: 8/6/2002

Expected Dates for: Original Revised

Project Completion (all project activities completed): 04/01/2004 No revision

Project Closing (all financial transactions executed): 06/01/2004 No revision



07/29/2003: Achievement of Objectives.

The project has now completed: Activity 0 (scoping, meeting with TM to discuss details and strategy); Activity 1 (methodology of study); and activity 2 (research framework). Partner countries have all been contacted and are in process of agreeing work plans with the Graduate School of Business in Capetown (with the exception of Cote d'Ivoire where the domestic situation has made progress difficult). The case studies, which will constitute the core of the study, and which will be based around the research framework and methodology already established, will start in July.

Impact.

The impact of the study to date is in devising a framework in which to systematically evaluate the impacts of power sector reform on the poor in an operationally feasible way.

Disbursement Projections.

To date \$31,996 has been disbursed. In the first 6 months of FY04 I expect \$96,842 to be disbursed, with the remaining \$57,162 to be disbursed in the second 6 months of FY04.

Changes.

To date the only change expected is the dropping of Cote d'Ivoire from the group of responding countries ás

	(A)	A Aijocraéei d	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$186,000	\$186,000	\$133,263	\$23,121	\$31,956	\$154,044
World Bank (BB) Non-ESMAP Trus	\$0 1 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$186,000	\$186,000	\$133,263	\$23,121	\$31,956	\$154,044



Project Title: Assessing the Impacts of Energy Sector Reform on the Poor

Region / Country: Global

Origin of Funds: Core

Task Manager: Robert W. Bacon

Project Development Objective

Identification and measurement of impacts of energy sector reform on poverty in selected countries, corresponding to a reform impact template designed as part of the study.

Key Indicator

The construction and use of a template, for measuring the impact of energy sector reform on poverty, which is then applied to countries only now starting the reform process.

Expected Outputs

- 1. Design of a strategy for identifying links between energy sector reform and poverty. Selection of countries in which these links are to be quantified.
- Selection of local consultants to work on detailed impact analysis: collection of data to measure impact of sector reform. Assessment of overall impact of sector reform on poverty in three selected countries.
- Selection of local consultants to work on broad analysis of possible links from sector reform to poverty. Collection of data and field material. Preparation of write-ups in different countries of factors identified.
- 4. Design of overall template to be used in future studies drawing on the three detailed case studies plus the additional scoping surveys.
- 5. Write up of lessons learned for the design of sector

Key Indicators

- 1. Review of work already carried out, and identification of potential sources of information needed. Identification of countries to be studied in detail and as scoping studies. 6 months.
- 2. Detailed terms of reference for local consultants; data collection, analysis and write up. 13 months
- 3. Terms of reference for scoping studies. Write up of findings in countries selected of the factors identified which link sector reform to potential impacts on poverty.

 6 months simultaneous with item 2 above.
 - 4. Production of template based on analysis both of deep studies and of breadth studies. 3 months subsequent to completion of 2 and 3 above.
 - 5. Final write up of report and of policy implications of findings for future design of energy sector reform

Implementation Progress

Component Activities

1. Choice of main consultant Detailed project design Identification of potential factors linking poverty to sector refor;2. Selection of subsidiary consultants for deep studies and for scoping studies. Detailed survey work on impacts of sec;3. Write up for production of template for measuring impact of sector reform on poverty;4. Write up of policy recommendations for how sector reform can be designed so as to maximize its potential impact on po

Approval Date: 1/2/2001

Expected Dates for:

Original Revised

Project Completion (all project activities completed):

09/30/2002 12/31/2002

Project Closing (all financial transactions executed): 12/31/2002 02/28/2003



07/29/2003: Achievement of Objectives.

The master survey and sector analysis template have been finalized after a series of meetings and iterations. Research methodology and survey design have also been completed. This in itself constitutes a valuable research tool, particularly as it will be utilized by local sub-consultants working in countries where such surveys have not been carried before. The sub-consultants have all been identified, and contracts now issued. The interaction with the principal consultant has just begun, which will constitute valuable capacity building.

Impact of the Work

The impact of the work is still on the research teams. further impacts will evolve once the surveys are undertaken.

Disbursements.

To date \$106,318 has been disbursed. In the first six months of FY04 \$73,000 is expected to be disbursed, and in the second 6 months of FY04 the remaining \$144,000 is expected to be disbursed. (this pattern reflects the heavy end loading of payments as an incentive to finish the project to a good standard).

Changes

The project has been somewhat delayed from its original timeline. Firstly, there was a delay of several months while the final availability of funds was clarified. Secondly, the principal consultants have found it difficult to respond in a

	(A)	A Aijocraée id	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$430,000	\$285,915	\$167,907	\$14,945	\$112,592	\$173,323
World Bank (BB) Non-ESMAP Trus	\$0 1 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$430,000	\$285,915	\$167,907	\$14,945	\$112,592	\$173,323



Project Title: Improved heating stoves & health impact on low income consumers

Region / Country: Global

Origin of Funds: Core

Task Manager: Rachel Kaufmann

Project Development Objective

Key Indicator

To evaluate whether the improved stoves being manufactured and marketed under the existing GEF project are capable of decreasing indoor air pollution

Expected Outputs

Key Indicators

information on indoor particulate and carbon monoxide levels resulting from typical winter use of traditional and improved stoves in gers; and
 an ESMAP proposal for an evaluation of health benefits related to use of improved stoves in Ulaanbaatar (if the assessment in [1] shows a significant difference in indoor air pollution levels)

Implementation Progress

Component Activities

The activity will involve laboratory-based and field-based measurements of particulates (PM2.5 and PM10) and

Approval Date: 3/15/2003

Expected Dates for: Original Revised

Project Completion (all project activities completed): 05/30/2003 01/30/2004

Project Closing (all financial transactions executed): 07/30/2003 02/27/2004

Summary of Current Project Status, Issues and Actions:

08/18/2003: The project team undertook an evaluation of relevant laboratory capacity in Ulanbaatar and investigated options for purchase of new equipment. The team concluded that existing labs do not have the necessary facilities for particulate or CO monitoring. The team has tentatively identified equipment for purchase, and has engaged in dialogue with the local WHO office which is also purchasing equipment so that complementary instruments will be chosen for future cooperative work. Second, the team investigated potential sites for a "laboratory"-based assessment of indoor air pollution levels under cold conditions, as funding was received too late in the year for the assessment to be done during the 2002-2003 winter. However, a suitable site was not found. Therefore, the initial measurements of indoor air pollution levels will be delayed until cold weather resumes in the fall of 2003.



Budget Summary as of June 30, 2003

Disbursed Outstanding Commitments Remaining Balance Disbursed Jan 1 -Jun 30, 2003 A**A floc vaée**kt to Date (G=B-(B) (A) (*C*) (*E*) (D) **ESMAP Trust Funds** \$30,000 \$0 \$30,000 \$8,099 \$8,099 \$21,901 World Bank (BB) \$20,000 \$0 \$0 \$0 \$0 \$0 Non-ESMAP Trust \$0 \$0 \$0 \$0 \$0 \$0 \$8,099 Total \$50,000 \$30,000 \$0 \$8,099 \$21,901



Project Title: Sustainable and Efficient Energy Use to Alleviate Indoor Air Pollution in Poor

Rural China

Region / Country: East Asia and Pacific-China
Origin of Funds: United Kingdom; Core

Task Manager: Enis Baris

Project Development Objective

To reduce indoor air pollution and prevent its health hazards through the development of cost-effective and affordable household energy interventions (improved stoves, better ventilation, cleaner fuels) and through changes in household behaviour and practices in rural communities in China

Key Indicator

- Reduction in acute respiratory infection (ARI) morbidity and mortality in children under 5
- Reduction in chronic obstructive lung disease (COLD) in women
 - Reduction in burns

Reduction in particulate concentration and other

Expected Outputs

- One or several new stove designs that meet the fuel efficiency and pollution standards.
- Convincing evidence that new technologies can be technically feasible to install and use in rural settings.
- Convincing evidence that the new stoves and /or ventilation devices are acceptable to local communities and affordable for long-term use.
 - Strengthened research capacity for inter-sectoral research on locally relevant health, energy and environment issues.
 - A new or revised set of standards for indoor air pollution and technical specifications for cooking and heating devices.
 - Improved knowledge and on health effects of indoor air pollution.

Behavioral change with regard to heating and cooking

Key Indicators

- Existence of new stoves and ventilation devices that meet the pre-set criteria for fuel efficiency and safety.
 - Number of households with new stoves and/or ventilation devices.
- Number of research proposals and scientific reports and papers in the related area.
- Number of researchers and research teams working on energy, health and environment issues at the central and provincial levels.
 - Changes in central and/or provincial technical standards and specifications for IAP and heating and cooking devices.

Statistically significant increase between base line and ex-post survey findings on knowledge, attitude and behavior pertaining to indoor air pollution, how to alleviate it, its health consequences and the right course

Implementation Progress

Component Activities

1. Feasibility study, including market study and development of stove and ventilation designs based on existing knowledg;2. Review of existing standards and building codes;3. Development of new IAP policy;4. Large scale IAP intervention study;5. Training of micro-enterprises;6. Training of IAP local specialists

Approval Date: 5/6/2002

Expected Dates for: Original Revised

Project Completion (all project activities completed): 09/30/2004 04/30/2005

Project Closing (all financial transactions executed): 11/30/2004 06/30/2005



06/13/2003: 1.

The goal of the project is to design and carry out a community-based trial to develop and demonstrate the effectiveness and affordability of behavioral and technological interventions aimed at reducing the health impact of indoor air pollution in poor rural communities in four provinces of China. Accordingly, the specific objectives were:

- 1. Determine the scope and severity of the IAP in selected sites in the provinces of Shaanxi, Guizhou, Gansu and Inner Mongolia;
- 2. Propose and test the technical feasibility of a combination of solutions from a multi-sectoral standpoint of health, energy, environment, education and poverty reduction; and
- 3. Evaluate their cultural, social, organizational and economic feasibility.

During the last six months, most of project activities focused on the first objective. Hence, project teams at the central and provincial levels have been set up; project sites have been determined and study populations identified in all four provinces. Subsequently, a pilot study was conducted in two provinces to test and validate indoor measurement and survey instruments and devices. Thereafter, baseline surveys of indoor air pollutant emissions have been carried out in Guizhou, Shaanxi, and Gansu. The baseline data include information on household structure, ventilation, fuel and stove use. Samples of food, drinking water and soil were also included in the baseline survey to better understand the human ecology and the interplay between energy, environment and health, together with their socio-economic implications.

The second objective which intends to propose and test the technical feasibility of a combination of multi-sectoral solutions is being primarily addressed through a number of additional surveys and focus group discussions to better understand villagers' demands and preferences. The interventions are aimed at finding the levers for behavioral modification to in relation to household use of energy and stoves, and at improving the stove technology in a way acceptable locally. The ground work for these two interventions has also been completed through surveys of communities' Knowledge, Attitude and Practice which will serve to inform intervention designs and suitability. This information also serves to inform the intervention's cultural, social, organizational and economic feasibility, as identified in the third objective.

Project is well underway, along with several national and international activities through workshops, meetings and participation in international conferences and within the Bank. The background and baseline research and data collection has been completed and is being analyzed to set the stage for the field trials which are scheduled to begin in late Fall 2003 and early in 2004.

2. IMPACT

It is too early to talk about project impact, especially in terms of improvement in health. However, significant progress has been made in terms of building local capacity in indoor air pollution measurement methodology and use of technology as well as increased community awareness with the consequent increase in demand for improved stoves.

- 3. DISBURSEMENT projections.
- 4. CHANGES in project design/expected date of completion.

There has not been any change in the project design. The only change relates to postponing the baseline and KAP surveys in one project province, Inner Mongolia, to be carried out early during the next winter – measurements need to be conducted after household space heating begins - due to delays in equipment acquisition, restructuring of partner organizations, and delays in disbursement resulted in the rearrangement of some aspects of the project.



We expect to complete all aspects of the project at the end of FY05.

	(A)	AAHowaeeld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$1,110,00	\$447,168	\$0	\$195,076	\$293,378	\$153,790
World Bank (BB) Non-ESMAP Trus	\$30,000 si \$0	\$9,397 \$0	\$0 \$0	\$1,558 \$0	\$9,397 \$0	\$0 \$0
Total	\$1,140,000	\$456,565	\$0	\$196,634	\$302,775	\$153,790



Project Title: Health impacts of traditional fuel use

Region / Country: Latin America and Caribbean--Guatemala

Origin of Funds: Netherlands; Core

Task Manager: Kulsum Ahmed

Project Development Objective

To facilitate the adoption of efficient strategies and policies for mitigating environmental damages from household energy, through quantification of related health impacts and review of policy options

Key Indicator

- Policy distortions that impede access to commercial energy reduced or eliminated
 - Programs to promote cleaner fuels and improved stoves initiated or enhanced
 - Awareness increased within government of health impacts of pollution from household energy

Expected Outputs

- Enhanced dialog with the government on household energy, environment and health - Improved knowledge of the health damages, their causes and control interventions at the country level - Lessons from experience and policy recommendations regarding possible household energy and other policies to alleviate health problems of indoor

Key Indicators

- Final report with main findings and recommendations
 Completed workshops
- Estimating levels of exposure and health impacts from household energy
 - Interim reports on data inventory, exposure assessment, and lessons from improved stove

Implementation Progress

Component Activities

1. Initiation workshop with country stakeholders to announce project (Nov 13, 2001);2. Review of the WHO-funded Guatemala study on indoor air pollution;3. Analysis of the results of the recently-completed HIES and the LSMS with respect to household energy and health;4. Measurement of indoor and local outdoor pollution exposure levels in a sample of households;5. Review of implementation experience of improved stoves;6. Review of inter-fuel substitution options;7. Preparation of report which quantifies health impacts and presents policy options;8. Dissemination of findings

Approval Date: 2/14/2001

Expected Dates for: Original Revised

Project Completion (all project activities completed): 10/01/2002 05/01/2003

Project Closing (all financial transactions executed): 12/31/2002 06/01/2003



05/19/2003:

Based on the comments received at the workshop which took place from March 31, 2003 to April 3, 2003, we will finalize the individual studies and prepare an integrated draft ESMAP report in the coming month, with the intention of finalizing the report this fiscal year, as per the original timetable.

Follow-up on the study's findings, is planned through: (i) the inclusion of a component on indoor air pollution in the health project under preparation, as noted above; (ii) continued dialogue with the FIS, the principal supplier of improved stoves, through the LCSHD FIS project task team, on improvements to their stove program to ensure cost-effectiveness, as well as greater efficiency in terms of health impact and fuel use; and (iii) the preparation of a short policy note for the new administration, as requested by the Guatemala Country Manager, next fiscal year to

	(A)	AAHowaeeld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$197,475	\$197,475	\$0	\$41,880	\$188,810	\$8,665
World Bank (BB) Non-ESMAP Trus	\$40,000 t \$25,000	\$45,224 \$22,055	\$0 \$0	\$0 \$0	\$45,224 \$22,055	\$0 \$0
Total	\$262,475	\$264,754	\$0	\$41,880	\$256,090	\$8,665



Project Title: Nicaragua - Pilot commercialization of improved cookstoves

Region / Country: Latin America and Caribbean--Nicaragua

Origin of Funds: Core; Netherlands

Task Manager: Clemencia Torres

Project Development Objective

To improve kitchen and household environment, reduce indoor pollution, lower cooking costs by achieving a shift to cookstoves of higher efficiency and reduced smoke

Key Indicator

Wood fuel consumption per household reduced by 45%

Cooking costs per household reduced by 40%

Expected Outputs

Phase 1:

Suitable ICS (Improved CookStoves) models and private sector collaborators identified; Detailed plan for factory conversions, marketing and promotions drawn

л СС 2.

ICS factories start production; Promotional campaign

Key Indicators

- 1-2 ICS of at least 25% efficiency tested and chosen for pilot
- 2-3 private manufacturers actively engaged in commercial manufacture.
- At least 1000 ICS produced annually and at least

Implementation Progress

Component Activities

Phase 1.1 Tests and selection of ICS models; Phase 1.2 Market assessment, stove testing and production demonstration, and dissemination strategy completed. ; Phase 2.1 Actual factory conversions and production of initial batch of ICS; Phase 2.2 Execution of marketing plan and promotional campaign in pilot areas; Phase 2.3 Monitoring and evaluation of cookstoves performance, consumer satisfaction and woodfuel savings

Approval Date: 10/23/2000

Expected Dates for:

Original Revised

Project Completion (all project activities completed):

06/14/2002

04/30/2004

Project Closing (all financial transactions executed):

07/15/2002

06/30/2004



07/30/2003: The purpose of this ESMAP-financed technical assistance activity is to catalyze the commercialization of improved household stoves in Nicaragua by improving the understanding of consumer preferences, developing an effective dissemination strategy, selecting financially viable high-efficiency models which satisfy consumer preferences, training and supporting private entrepreneurs to manufacture and sell them in a financially sustainable manner, and supporting development of credit networks for stove purchase. The specific objectives are to improve the kitchen and household environment, reduce indoor pollution and lower cooking costs. The pilot activity consists of (a) the conduct of a market assessment survey and indoor air pollution measurements, and (b) the conduct of a pilot commercial dissemination activity in selected cities, involving selected private stoves manufacturers assisted in converting to higher efficiency stoves and in promoting and marketing the products. The commercialization part of the project was subcontracted to the NGO PROLEÑA.

Based on the market assessment survey results PROLEÑA has decided to focus the pilot commercial dissemination under the ESMAP project on Managua and Leon. Anticipating the existence of a commercial market, PROLEÑA has developed two new stove models for dissemination. With regard to the participation of private stoves manufacturers ESMAP and PROLEÑA have developed a detailed contract which was signed by six cement brick manufactures (4 from Managua and 2 from León) and PROLEÑA.

Further, PROLEÑA and experts from the Center for Entrepreneurship in International Health and Development (CEIHD) at the University of Berkeley in California have carried out indoor air pollution measurements. A first draft describing the results was already carefully reviewed and the final report will be submitted end of June 2003.

The project is now in its second phase which involves the knowledge transfer from PROLEÑA to the selected private stove producers. These activities include several training sessions for representatives of these companies including field visits, technical training, management issues, marketing strategies, quality control etc.. A co-financing investment from PROLEÑA and ESMAP will support the initial phase of stove commercialization. This scheme involves the transfer of two sets of molders for stove construction for each private producer and the delivery of the first 10 sets of stove material kits (metal parts) with a 40% subsidy of costs and 20 sets subsidized with 20%. Further, several marketing activities will be launched, e.g. three big signs for advertisement for each manufacturer, a 20 weeks media advertisement campaign on national TV and newspapers (from mid June to November) as well as numerous pamphlets and flyers.

In the first six months PROLEÑA will closely monitor the business activity of the participating companies and the stove quality. If the manufacturers meet the required stove quality, PROLEÑA will provide numbered seals for the stoves which will certify the quality. A mid term phase evaluation meeting will take place with all private producers, to assess collectively the progress and correct any potential problems.

By December all activities regarding this phase will be concluded and a final report will be prepared by PROLEÑA describing the achievement and lessons learned. Further, a workshop will be organized by PROLEÑA and ESMAP to discuss the results of the project with involved and interested actors.



	'					
	(A)	AAHoavateki (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$185,000	\$185,000	\$20,892	\$4,649	\$105,304	\$79,696
World Bank (BB) Non-ESMAP Trus	\$25,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$210,000	\$185,000	\$20,892	\$4,649	\$105,304	\$79,696



Project Title: Nigeria LPG Market Development and Access Expansion

Region / Country: Africa--Nigeria

Origin of Funds: Netherlands; Core

Task Manager: Mourad Belguedj

Project Development Objective

Sustained growth in access to modern energy (predicated on a secure and improved domestic supply), replacing woodfuel, charcoal, and kerosene and contributing to better health and well-being, especially in rural and peri-urban communities. Help mitigate environmental pollution from excessive gas flaring and

Key Indicator

- A numerical breakdown of new LP Gas consumers by geographical area will indicate the progress being made toward reaching specific project objectives, for example, reaching households in rural and peri-urban areas.
- Improvement in health through reduced in-house exposure to wood-smoke / kerosene is a longer term

Expected Outputs

A professional study incorporating realistic assessments of the potential LP Gas market in Nigeria and the regulatory and policy measures and institutions required to build that market in a sustainable manner.

Key Indicators

- Appropriate institutional recognition / priority for LP Gas in the domestic market.
 - Delivery and presentation of the planned study.
 Securing commitments from credible private-sector prospective investors.

Implementation Progress

Component Activities

1. Major Task include international consultant and local associate(s) for Market structure & market failure Study, mark; 2. Analysis of household & small commercial consumption patterns, willingness & ability to pay ,demand analysis for LPG; 3. Workshop; 4. HQ GPG contribution / supervision: project concept design, preparation ,travel to Nigeria, meeting with government ag; 5. Dissemination, Publication, Contingencies

Approval Date: 11/13/2001

Expected Dates for: Original Revised

Project Completion (all project activities completed): 03/31/2004 No revision

Project Closing (all financial transactions executed): 05/31/2004 No revision



07/25/2003: 1. From January 1, to June 30, 2003 the following was accomplished: The Nigeria LPG Sector Revival Study has been on track, albeit some work has been delayed because of (i) The Presidential Elections which held back many decisions until inauguration in June and (ii) the depth of the "Household Survey" and consequential findings, which required more data analysis and interpretation, to better understand market distortions due to competing subsidized fuels and the numerous reasons for LPG unavailability on the market place. This required an extension of the project to September 30, 2003, which should allow an in-time closure of the project, with the anticipated deliverables of the highest quality. As indicated in the previous report, the consultant immediately fielded several missions in the country and met a wide variety of industry players and public sector companies, representatives of Government and of Regulatory Agencies. LPG supply was immediately identified as the main reason for the market failure, additional sources of LPG supply were identified and interested potential investors scouted. Infrastructure hurdles were also reviewed from storage and transport to LPG bottles' declining standards and related safety issues, leading to a distorted perception by the public, of LPG being an eminently dangerous fuel. A novel and in-depth household survey on domestic energy consumption patterns, was conducted in six major cities and communities, interviewing 2035 households, spread over four different socioeconomic subsections, to identify price structure, consumer attitudes, knowledge of and use patterns of LPG. The survey, which revealed unsuspected market distortions and very wide price fluctuations, is still being interpreted, in-house at the Bank as well as by the consultants, to ensure proper data input in designing a remediation mechanism to the market failure in the proposed "Road Map" to turn round this sector.

- 2. A major deliverable was achieved on June 25, when the Team Leader made a Progress Report to the Government, Industry and other key stakeholders, at the invitation of the Government of Nigeria. This occasion was also used to enlist support for the study and stakeholders views, comments and suggestions on the way forward. The occasion was a two day workshop on the Nigeria Natural gas Strategy and the development of Natural Gas Policy, including a new legal and institutional framework for the Gas sector at large. The two hours presentation qualified as "impressive", was extremely well received and lead to a wide discussion on identified issues and follow-up steps. It was also clearly mentioned in the Press Release issued during the follow-up Press Conference by the Presidential Advisor for Petroleum and Energy. LPG will be part and parcel of the New Petroleum Act now under consideration for submission to parliament in spring of 2004. LPG is expected to become more accessible to the poor, once identified industry and market bottlenecks have been resolved and production redirected towards the domestic market.
- 3 Although work has been somehow delayed for reasons beyond our control, time has been put to good use and will only improve the soundness and quality of the end product. Disbursements will be completed during calendar 2003 and in-depth analysis of market and survey findings, will only make recommendations and the proposed "Road Map" more robust, credible and sustainable with improved LPG access as a major outcome of this unique work.
- 4. The project is expected to be delivered by end September 2003, with new unexpected benefits to be reaped from the June 24-26 meeting in Abuja, whereby it will become a full fledged fuel, treated on an equal footing with natural



	(A)	AAHowateid (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$345,756	\$345,756	\$104,300	\$125,497	\$214,284	\$131,473
World Bank (BB) Non-ESMAP Trus	\$50,000 it \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$395,756	\$345,756	\$104,300	\$125,497	\$214,284	\$131,473



Project Title: Vietnam - Policy dialogue seminar and new mining code

Region / Country: East Asia and Pacific-Vietnam

Origin of Funds: Core

Task Manager: Paulo De Sa

2000)

Project Development Objective

Reform of the legal and regulatory framework affecting coal mining in Vietnam (new mining code and its regulations) in order to provide transparent access to coal resources. Strengthen the environmental management systems for coal mining in Vietnam.

Key Indicator

- Number of new joint-venture agreements with foreign investors.
- Improved environmental regulations for mining
 Environmental mitigation plan for Vinacoal.
 Reduction in the number of labor accidents at the coal mines

Expected Outputs

- Policy Dialogue Seminar with major stakeholders to build consensus on sector reform (September 2000)

 New mining law and its regulations (December
 - Environmental regulations for mining, including provisions for mine closure, community consultation
 and social impacts of mining (April 2001)

Key Indicators

- Participation of high rank Central Government officials and members of the National Assembly, Provincial Authorities and foreign investors.
- Conclusions and recommendations of the workshop set the agenda and time table for sector reform and serve as base for a new policy declaration regarding coal mining in Vietnam;
 - New mining code and its regulations draft with the assistance of international lawyers;
- A second workshop in Vietnam, in March 2001, provides a forum for stakeholder consultation regarding the draft code:

Final draft Mining Code circulated for comments before

Implementation Progress

Component Activities

1. Policy Dialogue Seminar to be held in Hanoi in September 2000.;2. Preparation of a new mining Code and its regulations;3. Preparation of environmental regulations for mining, with emphasis on environmental management systems for coal.;4. Technical assistance to the preparation of an action plan to promote FDI in mining in Vietnam.

Approval Date: 10/3/2000

Expected Dates for:

Project Completion (all project activities completed):

Of/29/2001

Of/30/2003

Project Closing (all financial transactions executed):

07/31/2001

O8/31/2003



06/30/2003: 06/30/2003: No disbursements have been recorded during the current period. The essential of the activity was devoted to the third phase of the work program, the preparation of environmental regulations for mining. During the period, the mining environmental and social sector assessment (funded under a separate Trust Fund) was completed. The final report, prepared by German consultants focused on issues related to the coal producing areas, and contains recommendations in terms of community consultation in the preparation of Environmental Impact Assessments for mining. These recommendations are expected to be incorporated in the environmental regulations for mining.

TF050884 - New Mining Code was formally closed on 5/27/2003. However, although discussions continue with the Ministry of Industry, Government has not yet sent a final draft of new mining code to Parliament for approval. Because of lack of progress in the legal reform front, no progress has been registered in the assistance to coal sector restructuring and the corporatization of Vinacoal.

Summary:

- 1. Policy Dialogue Seminar was held in Hanoi in October 2000.
- 2. A new draft mining Code and its regulations were prepared with the assistance of a Canadian Trust Fund and discussed on a roundtable seminar in Hanoi in July 2001. Government is yet to send the draft to parliament for approval.
- 3. A mining sector social and environmental assessment was prepared including recommendations for the preparation of environmental regulations for mining, with emphasis on environmental management systems for coal.
- 4. No progress has been registered in the technical assistance for coal sector restructuring and preparation of an action plan to promote FDI in mining in Vietnam.

Achievements: COCPD's work in mining in Vietnam has started in 2000 and has focused on two main areas: (i) improvement of the investment environment through the update of the legal and regulatory framework for mining; and (ii) restructuring of the coal sector state-owned enterprise Vinacoal. A Mining Policy Dialogue Seminar was held in Hanoi on October 17 and 18, 2000 to agree with the major stakeholders on the road map for sector reform.

Work has been conducted under two Trust Funds:

- ESMAP for the policy dialogue, consultation on new mining code, and coal sector reform; and
- Canadian Trust Fund for new mining code (closed).

A draft new mining code was prepared and a Seminar to discuss it with Government, the private sector and the civil society was held in Hanoi on July 30-31, 2001. Although the draft is of good quality, Government is hesitating to enact it. MOI's Vice-Minister of Industry in charge of Mines (Zung), has been identified as the main responsible for the blockage.

The ESMAP TF has allowed to initiate a policy dialogue with the Government and VINACOAL on the design of institutional arrangements for the restructuring and privatization of coal state-owned mining operations. The Minister of Industry has officially requested assistance for the restructuring of the coal sector, but the World bank Country Director for Vietnam sought upfront conditionality to follow up on Government's request in the form of a Government commitment to amend the mining code, as a condition for further Bank assistance in coal. Unfortunately, this has yet to happen.

In spite of the above, restructuring of the coal sector, with a major emphasis on its environmental and social implications, remains an unresolved issue in Vietnam. Coal is the oldest energy industry in the country and employs directly over 75000 people, but it requires major restructuring. Critical issues include:

- 1. Streamlining and ensuring greater transparency in approval processes;
- 2. Updating the legal and regulatory framework;



6. Restructuring of SOEs and mine closure, in particular VINACOAL.

There are major challenges ahead in the development of energy industry in the future as the government struggles to achieve a transformation from a socialist economy to a market based one. Successful reform and restructuring will continue to require building and maintenance of close relations with key constituencies and stakeholder. In Vietnam

	(A)	Афроваеві	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$150,000	\$150,000	\$0	\$0	\$59,634	\$90,366
World Bank (BB) Non-ESMAP Trus	\$30,000 st \$0	\$70,175 \$0	\$0 \$0	\$0 \$0	\$70,175 \$0	\$0 \$0
Total	\$180,000	\$220,175	\$0	\$0	\$129,809	\$90,366



Project Title: Azerbaijan - Natural Gas Sector Restructuring and Regulatory Reform

Region / Country: Europe and Central Asia--Azerbaijan

Origin of Funds: Netherlands; Core

Task Manager: Alan F. Townsend

Project Development Objective

By the end of the ESMAP work the GOA should have made all relevant policy decisions and be actively implementing its natural gas sector reform strategy, including preparation of the all of the documentation to support privatization and regulation of natural gas operating entities, and establishment of new regulatory

Key Indicator

The key indicators are issuance of documents including:

- Primary legislation
- · Concession contracts
- Tariff and pricing codes
- Technical codes
- · Commercial contracts
- Social-environment plans Refugees gas supply plan.

Additional indicators are restructuring of institutions: Ministry of State Property, Ministry of Economy, Azerigaz

Expected Outputs

1. Restructuring – decisions by GOA as to market and Azerigaz restructuring, to include provisions for linkages with upstream operators and export/transit projects, and initial implementation steps.;2. Privatization – decisions by GOA on the privatization of distribution, transmission, gas processing and storage, and initial implementation steps.;3. Regulation – decisions by GOA on institutional approach to regulation including location, accountability, discretion, and independence of regulatory authority, and establishment of regulatory

Key Indicators

For Restructuring, a market model that specifies vertical and horizontal commercial relationships, including any ownership or trading restrictions; and a plan for Azerigaz restructuring to fit the market model. Consistency with electricity sector structure is critical, to be achieved through coordination with PPIAF consultants. This must include specific pricing approaches to ensure fuel switching from fuel oil (mazut) to natural gas, and address social protection concerns.;2. Privatization – time bound privatization plan for production and issuance of tender documents for letting of concession (or sale) of gas sector entities and assets.;3. Regulation – Draft primary legislation and supporting codes and agreements, to cover all necessary regulatory requirements; plan for regulatory

Implementation Progress Component Activities

1. Options Phase:

- Gas infrastructure assessment - Restructuring options

- Institutional Options

Environmental, socia;2. Interim Phase
 Draft Documentation

el e e e e e la manta e d'anno de la m

- Detailed Tariff Analysis, and social protection plan

- Environmental Monitorin;3. Implementation Phase



Approval Date: 10/18/2001

Expected Dates for: Original Revised

Project Completion (all project activities completed): 09/30/2002 No revision

Project Closing (all financial transactions executed): 12/31/2002 No revision

Summary of Current Project Status, Issues and Actions:

07/11/2003: The Final Report has been submitted and accepted by the client. Final payment has been made to NERA and copies of the Final Report and Financial Model have been provided to ESMAP. We have requested that ESMAP hold off on publication of the Final Report pending GOA action on the NERA recommendations. The head of the unit within the Ministry of Economic Development (MED) that is reposnsible for managing the privatization of the Baku gas distribution company has now circulated a gas policy statement in Baku to relevant agencies, including: Ministry of Finance, Ministry of Fuel and Energy, and other stakeholders. This document is a working draft of government and has not been provided to any donors (nor to any consultants). We understand that the NERA report was used as an input but we do not know, point by point, which of the NERA recommendations have been adopted. Given GOA working processes, this document is unlikely to be made available to us until there is broad consensus among the key GOA agencies on its content.

Meanwhile, Deloitte & Touche have begun work on the gas distribution privatization assignment and have been provided copies of the NERA report and financial model (this at request of GOA). They await the finalization of the GOA policy statement to guide their work, especially as this will reflect GOA decisions on trading arrangements, mode of private sector participation, and social protection. Bank efforts on social protection continue, and the NERA social protection work on gas, especially the data contained in the financial model, will be valuable inputs to this work. The Bank, through PPIAF, is also helping with institutional aspects of regulation, and the ESMAP study provides the key gas sector inputs on the sector regulatory framework. More details will emerge only when the gas policy

	(A)	AAHowateld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$230,000	\$230,000	\$0	\$0	\$230,000	\$0
World Bank (BB)	\$0	\$0	\$0	\$0	\$0	\$0
Non-ESMAP Trus	t \$0	\$0	\$0	\$0	\$0	\$0
Total	\$230,000	\$230,000	\$0	\$0	\$230,000	\$0



Project Title: Pioneering New World Bank Approaches in Support of Sustainability in the **Extractive Sector**

Region / Country: Global

Origin of Funds: Core

Task Manager: Jeffrey Davidson

Project Development Objective

To provide support to industry, government and community efforts to create country-specific frameworks and foster conditions and relationships, that will reduce conflict, promote cooperation, and enhance prospects for the implementation of new modes of coal mining and community development that are socially, economically and anvironmentally systainable

Key Indicator

- Levels of consultation and cooperation among participant governments, companies and communities during the project life increased.

- Implementation of multiyear country action plans for integrating new tools begins.

- Mining investments begin to be designed, built, operated, and regulated in ways that result in more equitable sharing of benefits, more attention to environmental and social issues, and that actively promote sustainable social and economic development

Expected Outputs

- 1. Functional, active local organizing committees and qualified consultants
- 2. Concept papers that provide an appropriate and solid basis for stakeholder review and validation, as well as for the development of practical toolkits
- 3. Concept papers and theme areas that are regarded as appropriate and valid in terms of country/community priorities and sector needs
- 4. Relevant, practical, user-friendly tool kits which are published in multiple languages
- 5. Well defined multi-year country action plans for disseminating tool kits, building further capacity for their use, and pilot testing of kits at selected project sites
- 6. Wide distribution of toolkits and knowledge to parties that are interested in their adaptation and use in other sectors and contexts
 - 7. WBG and ICMM strategic plan to support refinements and adaptations to products, as well as technical assistance for their effective application in

Key Indicators

- 1. Effective working relationships between committees and consultants
 - 2.1 Submission of draft papers by target date
- 2.2 Expert meeting is representative, participatory and positive
 - 3. Feedback from expert meetings and circulation of intermediate products positive
- 4. Draft toolkits and publication target dates achieved and products published within budget
 - 5.1 Action plans prepared 5.2 Pilot mine investments selected and approved
- 6. Number of toolkits distributed electronically and in hard copy; level and extent of participation in internal workshop
 - 7 Completion of follow-up plan and preliminary

Implementation Progress **Component Activities**



1.Project preparations: Terms of reference; initial mission; organization of local committee; selection of consu;2.Study component: Assessment of best practices and subsequent development of concept papers on guidelines, principles a;3. Validation of concepts locally and internationally experts meeting in region; international dissemination of intermedi;4.Formalization of Tool Kits / Good Practice Documents- drafting of toolkits; publication of English and local language;5.Action plans for in-country dissemination and application of tools; final stakeholder workshop in region;6.International dissemination of results; distribution of publications; final workshop for PSI and ESSD Bank staff and i;7.Planning for project follow-up and product support; ICMM, WBG and donor agency meeting to define

Approval Date: 3/25/2002

Expected Dates for: Original Revised

Project Completion (all project activities completed): 11/26/2003 06/30/2004

Project Closing (all financial transactions executed): 12/15/2003 08/31/2004



07/25/2003: Since the last report, all interim work plan objectives have been achieved:

- 1. Defining terms of reference of participation in the local steering committee (completed Dec)
- 2. Finishing draft terms of reference for concept notes (completed and circulated March)
- 3. Inviting and confirming participation on the local steering committee (completed Jan);
- 4. Identifying and listing candidates for undertaking intellectual work (completed, March)
- 5. Convening local steering committee (completed March 35 in Johannesburg) and finalization of list of potential contractors for the intellectual work (short list circulated to steering committee and ICMM taskforce in April)

In May, five of the six components were awarded to four South African based consultants. A decision was taken to defer award of the component re: government approaches due to a general dissatisfaction with the quality of the proposals received to-date. This component will be negotiated in July with a reconstituted group of consultants from across the region.

A coordination meeting was held with the selected consultants in Johannesburg on June 45 to ensure alignment with project objectives and introduce the consultants to each other. Meetings were also held with four major mining companies and with Chamber of Miners representatives to nail down company collaboration in the development of the "tools" and intellectual products. All work appears to be on track for the September review meeting to be held in the Witbank coal mining district of South Africa. At the request of the consultants, the target for the delivery of the final product was advanced from 2004 to November 2003, which also means that an effort will be made to hold the final workshop in early December. The products will be integrated and disseminated more broadly in early 2004.

The project coordinators' from the Bank and ICMM are satisfied that the project is on track to realize its principal objectives – the construction of practical learning and operational tools and guidelines for communities, industry and government, and finally the coordination of applications both within and outside of the region. The project has generated much excitement within all three principal stakeholder groups, although the consolidation of regional interest will occur mainly via the workshops.

The delivery will remain in FY 2004, with some activities moved forward. The AIS target dates for project milestones have been adjusted as follows:

 003
 Consultants' Studies
 07/25/2003

 004
 Expert Meeting, S. Africa
 09/03/2003

 006
 Final Workshop, S. Africa
 12/05/2003

 005
 Document integration/publication
 02/27/2004

 007
 International Dissemination
 04/15/2004

 008
 Final Report
 05/30/2004

 009
 Project Closing
 06/30/2004

The project budget has been realigned to reflect the decision to contract all the work in the southern African region.



	(A)	AAHowaeeld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$210,000	\$210,000	\$25,000	\$21,499	\$39,388	\$170,612
World Bank (BB) Non-ESMAP Trus	\$0 st \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$210,000	\$210,000	\$25,000	\$21,499	\$39,388	\$170,612



Project Title: Natural Gas Market Development Study

Region / Country: Latin America and Caribbean--Bolivia

Origin of Funds: Core

Task Manager: Philippe J-P. Durand

Project Development Objective

The main objectives of the NGMDS are to: (i) review prospects for development of internal and external gas markets and identify policies and reforms necessary for triggering market development; (ii) assess the economic, fiscal, social and environment impacts of expected market development and recommend policies and actions to maximize the corresponding benefits for the country and vulnerable groups.

The NGMDS reviews key issues in the gas sector. As a result of hydrocarbon sector reforms conducted in the 1990s, investments in exploration, production and transport have risen significantly in Bolivia, resulting in a quick increase in reserves of natural gas that now stand as second largest in South America. Sustained growth requires that Bolivia finds diversified, significant, sustainable markets for its gas reserves, as well as adequate private investors for related pipeline investments and projects. Increased domestic use of gas would have significant economic impacts, improve the industry's competitiveness, and increase the standard of living of beneficiaries. However, development of external markets as well as of the internal market as a corollary, face constraints and uncertainties, as well as regulatory, competition and incentives issues. In anticipation to the emergence of these markets, it is important to ensure that the tax system in the hydrocarbon sector is modern, efficient, transparent, equitable and decentralized, and adequate mechanisms are in place to properly evaluate, mitigate and companents for assist and anvironment

Key Indicator

Expected Outputs

Key Indicators



The policies and actions recommended by the study for the development of gas markets in a way to maximize the economic and fiscal benefits and minimize negative impacts will be discussed during the workshop and are expected to be implemented by the Government.

Follow-up will be ensured through the ongoing WB-financed Regulatory Reform and Privatization TA project.

The government, local governments and the industry will better understand the constraints of each other in the development of gas markets and raising of fiscal revenues.

Improved communication and information actions on the development of the gas sector will have been

Implementation Progress

Component Activities

ESMAP requested funding will finance the preparation and realization of a workshop to present and debate the preliminary

Approval Date: 12/20/2002

Expected Dates for: Original Revised

Project Completion (all project activities completed): 03/01/2003 No revision

Project Closing (all financial transactions executed): 05/01/2003 No revision

Summary of Current Project Status, Issues and Actions:

09/05/2003: The Natural Gas Market Development study was completed in June 2003 and its results and recommendations were presented to the Government on July 23, 2003. The final report and annexes were handed to the Government but it was agreed with the Bank that the report will not be published.

ESMAP funding allowed the finalization of the report and its presentation to the President of Bolivia and other government authorities, including the Minister of Hydrocarbons. A formal workshop could not be conducted as was initially planned, due to the sensitive nature and potential political impact of gas market development in Bolivia.

ESMAP financed one high-level gas sector specialist and two Bolivian specialists in fiscal projections and revenue management, and cofinanced a small share of time/travel of two WB specialists.

There will be no more disbursements, the activity should be closed.



	(A)	AAHowateld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$50,000	\$50,000	\$0	\$36,706	\$49,503	\$497
World Bank (BB) Non-ESMAP Trus	\$0 t \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$50,000	\$50,000	\$0	\$36,706	\$49,503	\$497



Project Title: Development of a Regional Power Market in West Africa

Region / Country: Africa Region

Origin of Funds: France

Task Manager: Michel E. Layec

Project Development Objective

To pave the way for the development of a regional power market and more precisely to review, analyze and propose options for solving key issues in the political, organizational, legal, structural, technical, financial and commercial domains

Key Indicator

Publication of issues report highlighting the potential bottlenecks and stressing the key issues to be investigated for the successful implementation of a regional power market.

Expected Outputs

- Project mandated in due time - A political agreement between the various countries for embarking on the development of a regional power market
- A comprehensive issues report including: technical, commercial, institutional and legal issues and recommendations
- -Set-up of an operational Working Group and a Steering Group of decision makers able to stimulate further development and implementation of the

Key Indicators

- Successful completion of each project steps within budget and time constraints.
- Joint agreement between members of the core group of countries
 - Issue report accepted by the World Bank peer reviewers and the participating countries
 - Agreed composition of the Steering and Working
 Group of regional experts

Implementation Progress

Component Activities

Launching of a workshop with the assistance of consultants to designate a Task Force and draft TOR; Organization of a Regional workshop; Preparation of proceedings of recommendations and recommended modus operandi for the implementation of a regional power; Publish and disseminate workshop findings.

Approval Date: 12/15/1998

Expected Dates for:

Project Completion (all project activities completed):

10/01/2000

10/01/2000

06/30/2002

Project Closing (all financial transactions executed):

12/01/2000

08/31/2002

Summary of Current Project Status, Issues and Actions:



	(A)	A Aijocraéeid (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$253,792	\$253,792	\$0	\$0	\$94,244	\$159,5 4 8
World Bank (BB) Non-ESMAP Trus	\$0 st \$0	\$5,435 \$20,000	\$0 \$0	\$0 \$0	\$5,435 \$20,000	\$0 \$0
Total	\$253,792	\$279,227	\$0	\$0	\$119,679	\$159,548



Project Title: Power Trade in Nile Basin Phase 2

Region / Country: Africa Region

Origin of Funds: Core

Task Manager: Mangesh Hoskote

Project Development Objective

Advance a coordinated approach to the promotion of regional electricity markets in Nile Basin countries.

Key Indicator

A Nile Basin Power Forum, with an agreed strategic framework, creates an environment conducive to power trade through continued dialogue, review and analysis of common issues of interest. and information exchange

Expected Outputs

- High-level policy consensus to promote the development of regional electricity markets in the Nile Basin is established.
 - The establishment of a regional power forum is launched.
- 3. Investment opportunities at the sub-regional level

(O. .baidiam . Aatiam Duanuama and Idantifical)

Key Indicators

- Mandate and guidelines to launch a power forum are agreed at policy level.
 - Agreed proposal for a Nile Basin Power Forum is developed and funding is secured for long-term implementation.
- 3. XX Investment opportunities at sub-regional level are identified and pursued within NBI Subsidiary Action

Implementation Progress

Component Activities

Engage in discussions with bilateral donors to secure long-term support for the Power Forum.; Hire consultants as necessary to support the process.; Host Policy & Strategy Workshops for senior level power officials.; Host series of technical meetings with power sector technical representatives to formulate scope & function of Power For; Identify priority projects and develop project outlines for SAPs.; Plan Policy & Strategy Workshop with power sector technical representative; Review investment options identified in Scoping Study with representatives from sub-regional subsidiary action programs. Submit Power Forum proposal to power officials for endorsement

Approval Date: 12/1/1999

Expected Dates for: Original Revised

Project Completion (all project activities completed): 10/01/2000 12/31/2003

Project Closing (all financial transactions executed): 01/01/2001 03/31/2004



07/25/2003:

1. During Jan-Jun 2003, the activity supported a three day workshop (Feb 24-26, 2003) that attracted the participation of High Level Power Experts in the Nile Basin to formulate a Vision for the Nile Basin Power Forum.

It also supported the historic First Meeting of the Ministers Responsible for Electricity in the Nile Basin that was held in Dar es Salaam from May 19-20, 2003.

- 2. The 10 Ministers Responsible for Electricity in the Nile Basin signed the historical "Dar es Salaam Declaration" supporting the cooperative development of a regional electricity market.
- 3. DISBURSEMENT projections. FY04 Balance of funds.
- 4. CHANGES in project design/expected date of completion. Delays were caused by the need to establish the Nile

	(A)	AAHowaeeld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$504,000	\$504,000	\$2,851	\$48,430	\$474,698	\$29,302
World Bank (BB) Non-ESMAP Trus	\$30,000 it \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$534,000	\$504,000	\$2,851	\$48,430	\$474,698	\$29,302



Project Title: Water & Sanitation and Energy Public Private Partnership Operator and Investor

Workshop

Region / Country: Middle East and North Africa--MENA

Origin of Funds: Core

Task Manager: Anna Bjerde

Project Development Objective

Key Indicator

Increased capacity among clients to attract private sector and increased level of private sector deals

Representation by key stakeholders, decision makers and utility operators at the workshop

Expected Outputs

Key Indicators

Workshop dissemination kit (so that workshop can be replicated in other regions/sectors)

Practical handbook for conducting private sector

Implementation Progress Component Activities

Workshop

Approval Date: 12/18/2002

Expected Dates for: Original Revised

Project Completion (all project activities completed): 10/01/2003 No revision

Project Closing (all financial transactions executed): 11/01/2003 No revision

Summary of Current Project Status, Issues and Actions:

09/24/2003: ESMAP co-financed a workshop aimed at advancing the level of private sector participation in the water and energy sectors in the Middle East and North Africa (MENA) region. Organized by the World Bank, the roundtable was supported and sponsored by ESMAP, the Joint European Commission/World Bank Program on Private Participation in Mediterranean Infrastructure (PPMI), the Public-Private Infrastructure Advisory Facility (PPIAF), and the Water and Energy Anchor of the World Bank. The two-day roundtable in Lebanon looked at the critical financing and policy needs for the water and power sectors in the Middle East and North Africa—the driest region in the world. The event gathered, by invitation only, 150 participants from governments, the private sector and the donor community for horizontal discussion, the presentation of case studies and workshop-style debate.

Participants at the roundtable discussed several critical areas for improving water and power infrastructure, like private sector participation and regulation. While home to five percent of the world's population, the region has only one percent of the planet's accessible fresh water and with its high population rate, energy investment needs are also high, estimated at about \$300 billion between 2000 and 2010. It is clear that the private sector will play a significant role in meeting the financing needs of both sectors. But to attract the private sector, proper regulatory frameworks based on transparent procedures need to be in place. Private sector participants at the roundtable called for more



Budget Summary as of June 30, 2003

Disbursed Remaining Balance Outstanding Disbursed Jan 1 -Jun 30, 2003 A**A floc vaée**kt Commitments to Date (B) (G=B-(A) (*C*) (D) (*E*) **ESMAP Trust Funds** \$60,000 \$0 \$60,000 \$0 \$0 \$60,000 World Bank (BB) \$0 \$31,546 \$0 \$31,546 \$31,546 \$0 Non-ESMAP Trust \$0 \$0 \$0 \$0 \$0 \$0 Total \$60,000 \$91,546 \$0 \$31,546 \$31,546 \$60,000



Project Title: Cambodia - Renewable Energy Action Plan

Region / Country: East Asia and Pacific--Cambodia

Origin of Funds: Sweden;

Task Manager: Rebecca C. Sekse

Project Development Objective

Ministry of Industry, Mines and Energy (MIME) and Electricite du Cambodge (EDC) improve performance in efficient rural renewable electricity supply

Key Indicator

At least 10 projects prepared

At least 5 employees with necessary skills in MIME HQ and EDC

MIME established rural-renewable energy budget line

At least 3 donor supported projects prepared in an officient way, ready for implementation

Expected Outputs

(A) Renewable Energy Action Plan formulated;(B) A strategy for MIME to coordinate the International Assistance for Renewable Energy Development formulated;(C) Dissemination Program implemented

Key Indicators

(A1) Identified technical, economic and market potential for renewable energy technologies for (i) small hydro (ii) solar PV and (iii) others; (A2) Identified at least 3 broader issues that cut across technologies e.g. policy, planning and institutional; (B1) Draft final action plan and draft donor coordination paper; (C1) At least 100 key

Implementation Progress

Component Activities

(A1) Renewable Energy Study tours and workshop implemented. ;(A2) Renewable Energy Study teams Formed (focussing on: (i) small hydro (ii) solar PV, and (iii) policy, financial and i;(A3) High level Renewable Energy Development Steering Committee established (to guide and coordinate work of the teams a;(B1) High level Renewable Energy Development Group Established (to guide and coordinate work of the teams and formulated;(C1) Implemented dissemination Workshop;(C2) Formulated discussion and promotional material;(C3) Build Capacity at MIME to inform

Approval Date: 5/11/2001

Expected Dates for: Original Revised

Project Completion (all project activities completed): 12/31/2002 06/30/2004

Project Closing (all financial transactions executed): 03/31/2003 12/31/2004



10/02/2003: During the period Jan-June 2003, the third and final National stakeholder consultation workshop was planned and implemented. The workshop took place on the 23rd of May, 2003 in Phnom Penh. Based on the discussion at the workshop and feedback received from participants, the consultant team and the government have finalized the 3 phased 10 year Renewable Energy Action Plan (REAP). In addition, the work on a rural renewable electricity policy as well as a strategy document have also been completed during this time. These documents were presented and discussed at the REAP workshop. Also, additional preparatory work was undertaken towards finalization of the Royal decree and sub-decree for establishment of a Rural Electrification Fund (REF). The need for the establishment of the REF as a clear and transparent mechanism to promote rural electrification in Cambodia came out of REAP stakeholder consultations.

Impact of Work to date

ESMAP support has helped the government to prepare a 10 year action plan to promote renewable energy. The concept of the Rural Electrification Fund (REF) has gained wide acceptance and is now being operationalized by the government through a Royal Decree and Sub-decree. The REF will receive IDA and GEF support of US\$ 6 million to implement the first phase of REAP. These IDA/GEF funds will leverage about US\$ 18 million in private sector funds, bring total investments under the REF to about US\$ 24 million. An executive summary of the REAP report is attached.

Disbursement projections

It is expected that remaining funds of about US\$ 50,000 will be fully utilized by February 2004. The activities to be completed are as follows

- (1) REAP website updating (aprox US\$ 8000)
- (2) Translation of all REAP documents i.e REAP report, policy and strategy into Khmer (aprox US\$ 5000)
- (3) Workshop for announcement of REF and pre-registration of sub-projects (developd under REAP) (aprox US\$ 12.000)
- (4) Interim support for the project management unit till IDA/GEF project becomes effective in January 2004. (aprox US\$ 25,000)

Changes in project design/problems encountered

No particular delays were experienced during this period, but REAP schedule has been delayed partly due to the team changes within the Bank team as well as momentum lost in the preparation of the IDA/GEF project during 2002 (as a result of Japanese co-financing falling through)

Consultants hired

During this period, one local consultant was hired -Mr. Kunthap Hing to work with the international consultant on the



Budget Summary as of June 30, 2003

Disbursed Outstanding Disbursed Remaining Jan 1 -Jun 30, 2003 A**A floc vaée**kt Commitments Balance to Date (G=B-(B) (A) (*C*) (*E*) (D) **ESMAP Trust Funds** \$308,000 \$308,000 \$23,000 \$63,090 \$231,051 \$76,949 World Bank (BB) \$170,000 \$0 \$0 \$0 \$0 \$0 Non-ESMAP Trust \$0 \$0 \$0 \$0 \$0 \$0 \$308,000 Total \$478,000 \$23,000 \$63,090 \$231,051 \$76,949



Project Title: Philippines - Village power fund and incubator for renewable energy enterprises

Region / Country: East Asia and Pacific--Philippines
Origin of Funds: Core; Netherlands; ; Switzerland

Task Manager: Selina Wai Sheung Shum

Project Development Objective

Achieve sustainable, market-based electrification of remote, rural communities through community/NGO/government partnerships

Expected Outputs

Established a model for sustainable development and implementation of community-based projects and demonstrated a flexible delivery mechanism for financing of such projects using the principle of cost recovery and considering local capacity to pay.

Key Indicator

No. of communities served No. of private sector groups directly/indirectly participating (NGOs, supply companies, etc.) Total No. of households energized

Key Indicators

 Community-based project operational Household energized in cost-effective manner
 VPF mechanics/conditions developed and successfully tested

Implementation Progress

Component Activities

1. Village Power Incubator Services (includes capacity building for communities to plan, prepare feasibility studies and

Approval Date: 12/7/2000

Expected Dates for: Original Revised

Project Completion (all project activities completed):06/30/200206/30/2003

Project Closing (all financial transactions executed): 09/30/2002 08/31/2003



07/30/2003: The following is a capsule report that summarizes the progress of the work under the Pilot Village Power Fund and Incubator Services for Community-based Rural Energy Projects with funding from the ESMAP during the period January to June, 2003. The local consultants include PEI and SIBAT.

I. Accomplishment as they relate to project objectives:

The Project, as approved, had set out to attain 4 specific objectives as follows:

- 1. To improve access to basic energy service in off-grid areas using least cost options.
- 2. To build capacity within the local communities and empower them to plan, and implement community-based power projects in a sustainable manner.
- 3. To demonstrate a sustainable mechanism for delivering financial assistance to community-based projects based on local capacity to pay.
- 4. To help transition and mainstream community-based credit toward future commercial lending.

Project Preparation Stage. Early on, two (2) pilot projects were identified, one in Bagong Bayan, Roxas, Palawan and the other in Binosawan, Rapu-Rapu, Albay. Both these projects are located in remote communities without grid electricity. The projects were designed as community-based projects that would provide the residents in the area basic energy services as well as a livelihood component to complement and assure the viability of the energy component. At the outset, project preparation with the community, which included extensive community consultations were conducted, first to confirm the desire of the entire community to undertake the projects, as project sponsors, and second to designate their representatives with whom our field people can work with to conceptualize and study the best options for energy development by the community. The results of these consultations and communications with the community enabled the people to participate in the development project from the very beginning of project conceptualization and allowed them to give their inputs towards what kind of project will be developed.

As a result of the consultation processes, feasibility studies for both pilot projects were conducted. Considering that the two pilot areas are located in coastal municipalities, it was by coincidence that both the communities chose an ice plant as their complementary livelihood project. The least cost option for the projects were evaluated and determined to be micro-hydro systems with back-up diesel gensets, which could provide sufficient power the proposed ice plant projects for the two communities.

The feasibility study for the Binosawan Project was completed and submitted to the Bank in December 2002 while the second feasibility report for Bagong Bayan was submitted February 2003. During the conduct of the feasibility studies, baseline information were gathered particularly that of the socio-economic conditions of the residents as well as their current energy expenditure patterns. The information gathered were used as important inputs in the setting of parameters for the project studies, i.e., tariff, market conditions, economic analysis, etc. and would be the basis for assessing the impact of the projects in the future.

In the course of the feasibility assessment, PEI worked closely with local NGOs that gave assistance in community organizing work to derive consensus among community members. The consultation process basically took several stages, which included, discussions with the community, local government officials, national agencies, including the rural electric cooperatives in whose franchise the areas are included.

PEI was likewise assisted by international consultants, INFRAS, a Swiss Company that provided assistance in technical, social and financing issues.

The period January-June 2003, saw the pilot projects progress from feasibility to implementation stage. The results of the feasibility studies were presented to the communities and once again, the peoples' final commitment to the projects were secured prior to implementation. In presenting the studies, emphasis was placed in project sustainability, which would require each household to pay for the use of electricity, with a view of allowing the projects



and rules on how the community equity will be provided by the families were formulated and agreed upon. These decisions were concretized in terms of resolutions passed by the People's Organization (PO), the community organization tasked to operate the project. Resolutions included, donation/ permit to the use of land, labor, etc. as community equity to the project, as well as agreements on how the fruits of the projects will be divided, particularly allocating a certain % of surplus for community projects. In all these meetings, the local NGOs, which shall be providing oversight guidance to the communities during full operations were allowed to take charge of the meetings. This approach was taken to ensure that a sense of ownership would be inculcated in the communities from the very beginning. For Bagong Bayan, PEI likewise provided assistance to the PO to obtain legal registration status from the Securities and Exchange Commission. This gave the PO the legal personality to transact any future business transaction the community may desire to undertake.

Construction Stage. The construction of the micro-hydro projects started in January for Rapu-Rapu, Albay and in March for Roxas, Palawan. To date, the construction of the power house in Rapu-Rapu is 80% completed, while the civil works are on-going. In Roxas, the construction of the weir has been completed and the canals and forebay are on-going. The communities are contributing their labor as equity to the projects and the residents are taking their turns working on the projects. Meanwhile, PEI was able to finally obtain funding for the ice plant component from the Department of Agriculture's Bureau of Post-harvest Research and Extension (BPHRE). With this, the grant agreements for the facility and ground breaking of the ice plant in Palawan was held last February. The procurement for the facility is on-going. Similarly, procurement of the electro-mechanical and other materials for the projects were partially completed. This is partially being done by the local NGO, in behalf of the community in the case of the UNDP funding and PEI, in the case of the ESMAP funding. Tender documents (national shopping) was prepared and finalized after consultation with the local procurement specialist of the World Bank (Philippine Office). Request for Quotations from suppliers have been released.

On the other hand, the Guidelines for the Setting –up and Operationalization of the Village Power Fund was prepared. The Report benefited from inputs by the International Consultants who gave comments and suggestions on the initial draft and prepared a report of other international best practices. The Guidelines are currently being improved further based on additional comments received. The experience derived from the implementation of the pilot projects as well as best practices from other parts of the world, e.g. Sri Lanka would help to put more flesh into the guidelines.

Moreover, PEI is now working with the local NGOs to prepare the operating systems for the projects. A set of operating manuals (OM) will be prepared to guide the PO in implementing both the hydro and the ice plant components of the projects. As soon as the OM is completed, capacity building and training on how to operate the systems, both on technical and financial management aspects will be conducted. To ensure operational sustainability, PEI, SIBAT and the local NGO shall remain to have oversight functions until PEI is satisfied that the

	(A)	AAHowateid (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$371,500	\$371,500	\$0	\$24,448	\$75,293	\$296,207
World Bank (BB) Non-ESMAP Trus	\$0 1 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$371,500	\$371,500	\$0	\$24,448	\$75,293	\$296,207



Project Title: Stimulating the market for family-hydro for low-income households in Ecuador

Region / Country: Latin America and Caribbean--Ecuador

Origin of Funds: Netherlands

Task Manager: Philippe J-P. Durand

Project Development Objective

To create a market serving tens of thousands of people in Ecuador and many more in other developing countries, within a 5 year period.

Pico-hydro will be providing a low-cost source of electricity to 30 rural households in Ecuador at the end of the 18-month project and retailers will be preparing to continue to develop and service the market

Key Indicator

- Number of households relying on pico-hydro at the end of the project.
 - Number of households using pico-hydro within a 5-year period
 - Number of retailers operating in the market.
 - Number of organisations developing a market in

Expected Outputs

Internal report on the impact, costs and uses of pico-hydro.

Thirty pilot projects installed across three locations in Ecuador.

Training of engineers in installation and maintenance.

Workshop to stimulate business involvement in the
market.

Report on potential for pico-hydro in other developing

Key Indicators

- RRA and production of internal reports for inclusion in final report.
 - Number of systems installed.
 - Number of engineers trained.
 - Number of organisations attending workshop in Quito.
 - Report produced and disseminated to over 500

Implementation Progress

Component Activities

1. Technology and market study 1.1 Assess market in the Andes; 1.2 Assess market in Vietnam; 1.3 Assess factors supporti;2. Pilot projects installed 2.1 Determine good sites; 2.2 Install & maintain equipment;3. Training - Train engineers;4. Impact Assessment - RRA in pilot project areas to determine socio-economic impact;5. Dissemination 5.1 Business Opportunities Workshop; 5.2 Assess potential in other countries; 5.3 Final project report;6. Bank staff input and publication 6.1 Bank staff support; 6.2 Edit. print & distribute report

Approval Date: 5/20/2002

Expected Dates for:

Project Completion (all project activities completed):

12/22/2003

No revision

Project Closing (all financial transactions executed):

06/15/2004

No revision



09/06/2003: The two consulting firms selected for executing this activity, an international firm (IT Power) and a local one (Trama TecnoAmbiental), have been contracted and the study is now under execution.

A supervision mission was conducted in April 2003 to confirm the commitment of the Minstry of Energy and Mines to support the activity, promote its findings and contribute to the sustainability and replicability of picohydrpower schemes with private involvement in Ecuador. The mission's aide memoire is attached.

IT Power has already conducted the first mission to Vietnam and the Philippines, under DFID parallel financing, to review the status, constraints and prospects of picohydropower market development in these countries.

Mark is undarway in Foundar to salact situs for the nilat arainets

	(A)	Apported (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$141,000	\$141,000	\$112,310	\$11,365	\$11,365	\$129,635
World Bank (BB) Non-ESMAP Trus	\$17,400 t \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$158,400	\$141,000	\$112,310	\$11,365	\$11,365	\$129,635



Project Title: Mexico - TA for long-term program for renewable energy development

Region / Country: Latin America and Caribbean--Mexico

Origin of Funds: Core

Task Manager: Charles M. Feinstein

Project Development Objective

Achieve significant contribution of renewable energy technologies (RETs) in energy supply mix of Mexico within the medium term (about 10 years)

Key Indicator

- Number of LSGC RET projects firmly identified at program initiation (1-2 yrs after ESMAP project)
- Number of policy actions recommended by ESMAP report enacted by GOM
- Number of personnel from various government and private agencies and trained in RET project implementation

Expected Outputs

A recommended long-term strategy (about 10 years) to create initial markets for large-scale grid-connected (LSGC) RETs in Mexico, and sustain these markets commercially. Strategy includes recommendation for financing incremental costs.

Key Indicators

- Publication by ESMAP of Strategy Report - Endorsement by SE of report's recommendations

Implementation Progress

Component Activities

Task 1: Review-- existing institutional and policy framework for RET development; experience with past RET projects; ong; Task 2: Review policy options to create initial markets for LSGC RETs (NOFFO, Portfolio Standards, etc) and select suita; Task 3: Develop APL-type 10-12 year program for RET development, with well-defined outline of Phase 1 and logically argu

Approval Date: 11/14/2000

Expected Dates for:

Project Completion (all project activities completed):

Original

03/31/2002

10/31/2003

Project Closing (all financial transactions executed):

06/30/2002

12/31/2003

Summary of Current Project Status, Issues and Actions:

07/14/2003: In addition to the previously described studies (a) - (d), a fifth study briefly reviewing the environmental impacts of the Mexico energy sector and the environmental benefits of renewable energy was comissioned.

All five studies are now complete. A draft ESMAP Activity Completion Report (Blue Cover) integrating and summarizing this work has been prepared and is being readied for editing and external peer review in August, 2003. Publication is anticipated by the end of the calendar year. Meanwhile, the strategy developed under the ESMAP activity was adopted for and is integral to the Government of Mexico commitment to the World Bank/GEF Mexico Large-scale Renewable Energy Development Project, which was authorized at the \$25 million GEF grant level as part of an approved GEF Work Program at the May 2003 GEF Council meeting.



	(A)	AAHowateld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$100,000	\$100,000	\$0	\$37,136	\$95,405	\$4,595
World Bank (BB) Non-ESMAP Trus	\$15,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$115,000	\$100,000	\$0	\$37,136	\$95,405	\$4,595



Project Title: Policy & Strategy for the Promotion of Renewable Energy Resources in Nicaragua

Region / Country: Latin America and Caribbean--Nicaragua

Origin of Funds: Netherlands

Task Manager: Clemencia Torres

Project Development Objective

A detailed policy strategy for the development of renewable resources (on-grid and off-grid) under the current sector conditions is adopted.

Key stakeholder group and their interests identified.

Conflicts in stakeholder interests addressed and

Key Indicator

A detailed policy strategy for the development of renewable resources (on-grid and off-grid) under the current sector conditions is adopted.

Key stakeholder group and their interests identified.

Conflicts in stakeholder interests addressed and

Expected Outputs

1 Current regulatory and macro-economic situation of Renewable Energies is known

2 Market for the development of renewable energy is known

3 Recommendations for Policy Strategy for the Development of Renewable Energies have been developed

4 CNE and other stakeholders have increased capacity

Key Indicators

1 Barriers and potential are identified

2 Demand and supply have been quantified

3 Policy and strategy recommendations have been made

4 Self-assessments of stakeholders, quality of

Implementation Progress

Component Activities

1 Situation Analysis

1.1 Identify market barriers, strengths and weaknesses (technical, regulatory, fiscal, financial) t;2 Market Study 2.1 Proposal for development and structure of potential market for renewable energy

2.2 Workshop;3 Policy Strategy Options

3.1 Policy Analysis - Energy indicators, and economic policy

3.2 Perspectives for the inclusio;4 Capacity

4.1 Workshops for CNE

4.2 Elaboration of training material

4.3 Evaluation models for renewable energy, for gr;5 Seminar for dissemination of results

Early Outroach Workshoper Bublications



Approval Date: 3/27/2002

Expected Dates for: Original Revised

Project Completion (all project activities completed): 07/30/2004 No revision

Project Closing (all financial transactions executed): 10/30/2004 No revision

Summary of Current Project Status, Issues and Actions:

07/10/2003: Brief Description of the Activity. As finalized in September, 2002, with the lead counterpart agency, the Comisión Nacional de Energía (CNE), the ESMAP activity to promote renewable sources of energy is composed of four related components:

- 1. An overarching diagnostic covering policy and strategy recommendations for a range of renewable resources; and
- 2. A set of three case studies, which will examine in-depth the current policy/regulatory framework and perceived investment barriers as they specifically apply to the main renewable resources in Nicaragua:
- (a) Geothermal;
- (b) Grid-connected wind; and
- (c) Hydro, ranging from small-scale mini-grid schemes to large-scale run-of-river and impoundment plants.

The studies 2 (a-c) will feed into and form the basis for the synthesis of findings and recommendations. This is why the overarching diagnostic is scheduled to be prepared only after the studies for the various renewable sources of energy have been finalized.

Progress achieved as of June 30 in the various case studies: Geothermal. A field visit by an international geothermal energy development consultant and initial analysis of barriers took place in May, 2003, and report preparation is in progress. An early conclusion is that over 400 MW of geothermal energy could be commercially developed in Nicaragua over the coming decade (cf. total present installed electric capacity of about 550 MW). Development of these resources could place Nicaragua in an advantageous position of an exporter of clean energy to neighboring countries through the SIEPAC Central America interconnection. However, investment potetential has been held back to date by perceptions of country political risk, delays and complexities in the geothermal concessioning arrangements, difficulties in obtaining adequate and secure power purchase agreements (PPAs) in the recently liberalized national power market, and disadvantageous taxation arrangements which place disproportionate burdens on capital-intensive renewables relative to fossil energy sources. This component is expected to be completed in September, 2003.

Wind. This component is initially evaluating the impacts of a recent presidential decree which provides for mandatory dispatch of wind (and run-of-river hydro as another intermittent renewable) into the national grid system, up to limits governed by the onset of negative economic and grid operational impacts. With the assistance of consultants affiliated with ICE, the Costa Rican utility, the CNE is performing differential with/without wind system least-cost generation expansion analyses to evaluate the economic competitiveness and impact of the injection of increasing amounts of wind energy. In parallel, the consultants are assisting the Centro National de Despacho de Carga (CNDC, the national dispatch center) to evaluate the impacts of increasing wind energy availability on dispatch regulation, transmission load-flow and grid stability. This work should be completed in September, 2003, and the outputs will then be analyzed against international best practice to form recommendations on grid integration, commercial development incentives and contract/PPA forms. An international consultant to assist in this synthesis is currently being recruited.



Budget Summary as of June 30, 2003

Disbursed Remaining Balance Outstanding Disbursed Jan 1 -Jun 30, 2003 A**A floc vaée**kt Commitments to Date (G=B-(B) (A) (*C*) (*E*) (D) **ESMAP Trust Funds** \$250,000 \$250,000 \$79,150 \$38,515 \$57,395 \$192,605 World Bank (BB) \$45,000 \$0 \$0 \$0 \$0 \$0 Non-ESMAP Trust \$0 \$0 \$0 \$0 \$0 \$0 \$57,395 Total \$295,000 \$250,000 \$79,150 \$38,515 \$192,605



Project Title: Africa Rural and Renewable Energy Initiative (AFRREI)

Region / Country: Africa Region

Origin of Funds: Core; France

Task Manager: Arun P. Sanghvi

Project Development Objective

The objective is to accelerate rural access to electricity and Information and Communication Technologies (ICTs) in selected African countries to facilitate rural transformation, which is significant improvement in the productivity of rural enterprises and in the quality of health, water and education services delivered in the

Key Indicator

- · Establishment of regulatory system, satisfactory working of Rural Electrification (RE) Board, RE Agency and RE Fund, and financial intermediation mechanism for rural electrification;
- Number of homes, enterprises, public institutions (health clinics, schools, water supply facilities), trading centers, and communities with increased access to modern energy/ICTs;
- Number of people benefiting from improved delivery of health, education, and water services;
- Employment/economic gain due to SME participation in the project;
- Number of public and private telephones installed in previously unserved sub-counties.
- Number of District Headquarters with Internet POP and public Internet access facility.

Expected Outputs

Key Indicators



The expected outputs are the supervision of the Uganda ERT project, and the preparation of suitably adapted ERT projects in Tanzania, Swaziland, Ghana, Nigeria, and Zambia over the next three years. The outcomes at the country level will be significant improvement in the productivity of rural enterprises and in the quality of health, water and education services delivered in the project areas. At the global level, it will be greater familiarity with the ERT concepts, and selective use as appropriate - which has already begun with the Sri Lanka Renewable Energy for Rural Development Project (Board approval in June 2002) and the Bolivia Rural Electrification and ICT Project (PCD approval in May 2002). The work will explicitly incorporate local consultants and NGOs such as in Uganda, where the AFRREI program already has utilized numerous local firms and individuals, as well as NGOs such as Action Aid Uganda and CEFORD. In this process, the local entities not only provide valuable work products, but also receive targeted training in relevant areas. More broad based training activities for public, private, and NGO stakeholders are routinely included within the project designs. Finally, local academic institutions are included in both project preparation activities as well as project implementation. For example in Uganda, training seminars were provided by AFRREI team members at Mukarere University during project preparation. In Tanzania, local tachnical institutes will be used in implementation of the

Key deliverables are supervision reports for Uganda ERT Project, and project preparation documents for other countries: Swaziland to Board in FY04, Tanzania Board FY 05, Other countries appraisal in FY05
 Beneficiaries are rural people in project target areas, as well as those in other areas where other donors, e.g., SIDA in Tanzania, incorporate ERT concepts into the

Implementation Progress Component Activities

Uganda - Supervision ERT Project
 Tanzania and Swaziland – Preparation of ERT Projects
 Two or three additional count

Approval Date: 1/10/2003

Expected Dates for: Original Revised

Project Completion (all project activities completed): 12/31/2005 No revision

Project Closing (all financial transactions executed):



07/10/2003: 1. ACHIEVEMENT OF its OBJECTIVES: AFRREI activities were meant to be co-financed by ESMAP-NTF funds; the other sources of funds were the Danish AFRREI TF, BB, GEF, etc. The proposed activities have taken as envisaged, but there has been no need to draw upon the ESMAP funds because of (i) the availability of additional funds from other sources, primarily Consultant Trust Funds, and (ii) some mission delays as a result of the Iraq war. Specifically, (i) the preparation of the Tanzania ERT project restarted after a delay that occurred because the Country Director wanted the Sector Board to review the entire Tanzania energy sector strategy, (ii) GEF pipeline entry took place for the South Africa Renewable Energy Market Transformation and Swaziland ERT projects, (iii) implementation of the Uganda ERT project continued to be satisfactory. There was also good progress on peparing a proposal for the promotion of productive uses of electricity.

- 2. What is the IMPACT of this work to date? The main impact is increasing interest and mainstreaming of some of the core ideas incorporated in the ERT approach. For example, Bank-financed projects in Ethiopia, Mozambique, Sri Lanka, and Bolivia already include some elements of the ERT approach.
- 3. DISBURSEMENT projections: The project's budget of around \$ 200,000 is expected to fully committed and expensed in the first half of FY04; some of the funds will be used for the preparation of a project in Zambia, and a redsign of the project in Tanzania to incorporate some elements of power sector reforms.
- 4. CHANGES in project design/expected date of completion: There are no change in project design but the funds

	(A)	AAHowateld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$200,000	\$200,000	\$62,900	\$0	\$0	\$200,000
World Bank (BB) Non-ESMAP Trus	\$0 • t \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$200,000	\$200,000	\$62,900	\$0	\$0	\$200,000



Project Title: Corporatization of Distribution Concessions through Capitalization

Region / Country: Africa--Ghana

Origin of Funds: Core

Task Manager: Mangesh Hoskote

Project Development Objective

Assess the feasibility of incorporating employee share ownership as an integrated approach to the capitalization of distribution utilities.

Key Indicator

[Original proposal not in log-frame format]

Expected Outputs

Organize and conduct a workshop on the types of employee ownership arrangements in privatization strategies;2. Conduct a valuation of a selected distribution utility franchise;3. Conduct a prefeasibility study of integrating employee share ownership into the capitalization of the selected distribution utility franchise;4. Organize and conduct a workshop to discuss the prefeasibility study findings

Key Indicators

[Original proposal not in log-frame format];;;

Implementation Progress

Component Activities

Distribution of the Green Cover among officials from the Ministry of Energy; Exploratory mission; Preparation and review of a draft report outlining the Employee Stock Ownership Plan (ESOP)

Approval Date: 7/1/1995

Expected Dates for: Original Revised

Project Completion (all project activities completed): 10/01/19 06/30/2001

Project Closing (all financial transactions executed): 12/01/1999 12/31/2001



07/25/2003: During Jan-Jun 2003, how did the activity advance towards the ACHIEVEMENT OF its OBJECTIVES (as set out in the proposal approved by ESMAP). Please be sure to focus your progress report on substantive issues. No activity.

- 2. What is the IMPACT of this work to date? A study that outlines a modality for Employee Stock Ownership Plans in privatization of a distribution company.
- 3. DISBURSEMENT projections. Please indicate projections for each half-year 'till the end of the project. Project has been closed.
- 4. CHANGES in project design/expected date of completion. Please also report problems encountered/causes for delays. Ministry of Energy wanted to do an independent assessment of power sector reforms that were recommended by the previous administration. This assessment was only completed in February 2003, and in April

	(A)	AAHowaéeld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$73,490	\$73,490	\$0	\$0	\$73,490	\$0
World Bank (BB) Non-ESMAP Trus	\$0 \$ \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$73,490	\$73,490	\$0	\$0	\$73,490	\$0



Project Title: Rationing Energy in a 'Rational' Way

Region / Country: Global

Origin of Funds: Core

Task Manager: Luiz T. A. Maurer

Project Development Objective

To demonstrate that system-wide electricity shortages can be dealt with in ways that are more efficient to deal than rolling black-outs

Key Indicator

Better management of electricity shortages

Expected Outputs

Expected outcomes:

The study should provide a technical basis as to the superiority of the proposed method (quotas with economic signals) over the traditional "rolling black-outs", particularly for "energy" rationing (as opposed to capacity).

The study will focus on the case study of Brazil, but will draw some conclusions and extract best practices on the implementation of large scale rationing programs in This study should indicate which of those lessons should be applicable, to varying degrees, to other countries, where rationing may turn out to be the only,

Key Indicators

Implementation Progress

Component Activities

a) Define the problem – Types of rationing and how to deal with them. Metering requirements. Operational complexities of

Approval Date: 11/25/2002

Expected Dates for: Original Revised

Project Completion (all project activities completed): 10/31/2003 No revision

Project Closing (all financial transactions executed): 12/31/2003 No revision



08/11/2003: Under Implementation. TOR prepared and discussed with LAC in early 2003. Some back and forth interaction to get LAC satisfied with the scope and deliverables. Focus on international versus Brazil was an issue to be agreed.

Selection of consultants took place immediately. Mr. Mario Veiga Pereira, from PSRI was selected and subsequently hired in June to develop the assignment. Total cost (lump sum) is US\$ 25k.Mr. Pereira was specially qualified because he and his consulting firm had hands-on experience in assessing the Brazilian government during the entire rationing process (2001-2003).

Some difficulties in the hiring process were raised by the Procurement Area, but those we were able to overcome those (e.g. Mr. Pereira's international experience, since the project was classified as global). Work started in late June. First deliverable (first draft) expected to be available in late August. Final report to be deliverd two weeks after

	(A)	Apporateid (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$50,000	\$50,000	\$2,925	\$3,993	\$7,726	\$42,274
World Bank (BB) Non-ESMAP Trus	\$0 at \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$50,000	\$50,000	\$2,925	\$3,993	\$7,726	\$42,274



Project Title: Rural Electrification & Power Reform in Central America

Region / Country: Latin America and Caribbean Region

Origin of Funds: Netherlands; Core

Task Manager: Douglas French Barnes

Project Development Objective

- (a) Complete background study on rural electrification options in Central America and Panama.
 - (b) Development of priorities for grid and off grid electricity projects for rural areas.
- (c) Assess strategies to develop market for products to serve people without access to grid electricity.
- (d) Assess feasibility of user's associations and private entrepreneurs to promote electricity service in rural

Expected Outputs

- (i) Complete background review of countries in the region, including sector policies affecting rural distribution.
- (ii) Develop priorities for grid and offgrid electrification in consultation with the country governments.
 - (iii) Complete a workshop on electrification in one of

Key Indicator

[Original proposal not in log-frame format]

Key Indicators

[Original proposal not in log-frame format]

Implementation Progress

Component Activities

[Original proposal not in log-frame format]

Approval Date: 10/1/1997

Expected Dates for: Original Revised

Project Completion (all project activities completed): 07/01/2000 10/31/2003

Project Closing (all financial transactions executed): 08/01/2000 12/31/2003



07/30/2003: The draft of the paper has been completed and a presentation has been made available within the World Bank. The study has found that power sector reform in Central America as it was originally implemented all had programs to deal with rural access to electricity. However, these programs were not followed up with concrete action, and there has been little progress in rural electrification in Central America, with the exception of Guatemala. The paper analyzes the reasons for this lack of progress and makes recommendations for the countries to assist them in implementing a program.

The work is quite complex, and it has just been completed. However, the LCR region is quite interested in the findings, as the issue of power sector reform and rural electrification is an issue for which governments are increasingly requesting assistance. This study should provide a framework for that assistance.

The project disbursements are completed. The project will close with a final ESMAP report in Fall, 2003.

	(A)	Appowateid (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$302,000	\$305,539	\$0	\$0	\$305,539	\$0
World Bank (BB)	\$0 st \$0	\$1,688 \$0	\$0 \$0	\$0 \$0	\$1,688 \$0	\$0 \$0
Total	\$302,000		\$0	\$0	\$307,227	\$0



Project Title: Energy Sector Reform - Phase 1

Region / Country: Latin America and Caribbean--Mexico

Origin of Funds: Core

Task Manager: Charles M. Feinstein

Project Development Objective

Provision of better decision making tools to Secretaria de Energia.

Key Indicator

Production of a first draft White Paper on Energy Policy by Secretaria.

Expected Outputs

 First draft of White Paper on policy supplied to Secretaria.;2. Draft report on governance of state enterprises supplied to Secretaria.;3. Outline of alternative taxation schemes presented.;4. 3 workshops with senior staff in Secretaria on issues of sector reform;Macroeconomic impact of energy sector

Key Indicators

First draft for White Paper on policy completed.;2.
 Collection of data on oil sector required for analysis of impacts of alternative tax regimes.;3. Paper on governance of state owned enterprises completed in first draft.;4. Workshops delivered.;synthesis report and in country seminar

Implementation Progress

Component Activities

Fuels policy paper;Governance Paper;Institutional strengthening;Macroeconomic Implications of Energy Reform;Policy White paper;Taxation paper and software

Approval Date: 8/1/1999

Expected Dates for: Original Revised

Project Completion (all project activities completed): 06/01/2000 04/30/2004

Project Closing (all financial transactions executed): 09/01/2000 06/30/2004

Summary of Current Project Status, Issues and Actions:

07/14/2003: Significant delays in finalizing the contract for transmission pricing modeling and web site development with the Insituto de Investigaciones Electricas (IIE) were encountered due to differences in IIE and World Bank contracting requirements. However, these differences were resolved and the contract was executed on June 30, 2003. Contract implementation by IIE is now proceeding and is expected to take approximately 9 months.



Budget Summary as of June 30, 2003

Disbursed Outstanding Disbursed Remaining Jan 1 -Jun 30, 2003 A**A floc vaée**kt Commitments Balance to Date (G=B-(B) (A) (*E*) (*C*) (D) **ESMAP Trust Funds** \$402,000 \$390,446 \$172,534 \$50,660 \$193,884 \$196,562 World Bank (BB) \$150,000 \$877 \$0 \$0 \$877 \$0 Non-ESMAP Trust \$0 \$0 \$0 \$0 \$0 \$0 \$194,761 Total \$552,000 \$391,323 \$172,534 \$50,660 \$196,562



Project Title: Expanding Rural Access to Infrastructure

Region / Country: Africa-Nigeria

Origin of Funds: Netherlands

Task Manager: Malcolm Cosgrove-Davies

Project Development Objective

i) Identify and detail workable approaches for expanding coordinated and synergetic rural & peri urban access to local level infrastructure especially power, telecomm, and water. Local infrastructure includes distribution and sales networks, but does not include transmission, bulk transport, or trunk-line infrastructure. Given the local nature of the work, the participation of State and local governments, private sector, cooperatives, and NGOs, will be emphasized, while still taking account of Federal level issues. Reflecting the Nigerian context, the study will select a limited number of regions or states where the local condition is more suitable for a truly participative approach. In addition, the first phase will propose selective approaches in terms of combination of the various infrastructure services with an aim to maximize synergies.

ii) Identify, based on the conclusions of the first phase regarding the characteristics of the desirable local environment and the optimal combination of synergetic infrastructure services, specific "intervention points" (a place, a number of infrastructure services to be combined in each place) with promising prospects for sustainable expansion of rural infrastructure access

iii) Identify which interventions should be Bank-supported consistent with the CAS and the Bank's comparative advantage in Nigeria. Given the significant uncertainties anticipated in this project, it is expected that it will focus on a modest number of investments (Objective ii), and

Expected Outputs

Expected outcomes: (i) Issue and Strategy paper on expanding rural access to infrastructure in Nigeria; (ii) Concept Note for potential Bank-supported operation.

Implementation Progress

Component Activities

Key Indicator

Key Indicators



1. Enabling Framework – Building on existing sector-specific work in power, telecomm, and water, conduct a review and ass

Approval Date: 11/25/2002

Expected Dates for: Original Revised

Project Completion (all project activities completed): 12/31/2003 No revision

Project Closing (all financial transactions executed): 03/31/2003 No revision

Summary of Current Project Status, Issues and Actions:

06/27/2003: 1.

- · Initial assessment of private sector interest in rural infrastructure (indicating that local private sector has an appetite, although foreign interest is very weak)
- · Confirmation of State Government interest, including provision of needed subsidies
- Development of specific project concepts in Delta and Niger States, including service area, project sponsor, scale and scope of investment, etc. (based on workshops held in June 2003)
- · Development of a Retail Outsourcing concept with NEPA
- · Agreement on roadmap for incorporating investment promotion work into ongoing Privatization Support Project
- 2. IMPACT
- · High-level Government/NEPA buy-in through participation and presentations at the 6th Power Sector Reform Leader's Workshop (in which outsourcing of retail electricity provision was identified as a key in revenue improvement), as well as the June workshops and related mission activities.
- · Focused pilot project development team empowered to proceed with investment preparation (with continued support facilitated through remaining ESMAP funds)
- · Local banks have indicated interest in supporting investments
- 3. DISBURSEMENT projections.
- · ESMAP funds expected to fully disburse by December 2004.
- 4. CHANGES in project design/expected date of completion.
- Due to Board decision to pursue "low" portfolio path for Nigeria, stand-alone rural infrastructure project will move to a slower development track, or may be developed as a project component within projects in the lending pipeline

	(A)	Apporated (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$48,000	\$48,000	\$2,339	\$15,142	\$20,753	\$27,247
World Bank (BB) Non-ESMAP Trus	\$146,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$194,000	\$48,000	\$2,339	\$15,142	\$20,753	\$27,247



Project Title: Rural Electrification Regulation Framework

Region / Country: East Asia and Pacific--Philippines

Origin of Funds: Netherlands

Task Manager: Selina Wai Sheung Shum

Project Development Objective

Support GOP strategy to achieve full electrification by opening RE market to private sector

Key Indicator

Project will develop the regulatory framework within which competitions for subsidy can be developed, and that allows for effective operation, investment, and regulation over time

Expected Outputs

The project will deliver a draft regulatory framework, complete in every respect, that can relatively easily be turned into an order by the regulator; and a strategy for allowing PSP in the operating assets of the Small

Key Indicators

Output success will be measured by: issuance of the RE regulatory framework as an order by ERC; and approval of a strategy for PSP in SPUG. Impact will be measured over time by: new connections made under the new regulatory framework; and by performance improvement in SPUG assets (translating into declining or ended

Implementation Progress Component Activities

Work in Task 2 (PSP in SPUG) will parallel Task 1, and will follow the same schedule of analysis, proposal development,;Task 1

Work will be done in three stages:

Approval Date: 12/19/2002

Expected Dates for: Original Revised

Project Completion (all project activities completed):12/31/2003No revisionProject Closing (all financial transactions executed):03/30/2003No revision



08/18/2003: 1. The main objectives of the ESMAP-funded project "Rural Electrification Regulation Framework" is to support the Government of Philippines (GOP) strategy to achieve full electrification by opening the rural electrification (RE) market to private sector. More specifically, this will be advanced by developing clear and effective regulation of RE that provides for private sector participation (PSP) and incorporates output-based subsidy mechanisms and a plan for PSP in the Small Power Utilities Group (SPUG) of the National Power Corporation.

In order to achieve this objective, an additional \$300,000 was obtained from the Global Partnership on Output-Based Aid (GPOBA) in June 2003. ESMAP funds (\$230,000) and GPOBA funds (\$230,000) were combined into contract for a Regulatory Framework Advisor. The contracted advisor, Castalia Strategic Advisors, began their Inception Mission for the activity on July 23, 2003. Progress towards meeting the objective was made through initial meetings with GOP organizations, developing GOP/Castalia working arrangements and collaboration, addressing key issues to achieving effective regulation in the RE sector, and developing SPUG options.

2. IMPACT

As the project is still in its initial phase, the major impact of the work to date is that a Regulatory Framework Advisor has been contracted and begun to engage GOP on the key issues of RE regulatory reform. This direct collaboration has help focus GOP on the project goals and the allocation of required GOP inputs to achieve these goals. As a result, the GOP has begun to accept ownership for the project and work directly towards the project objectives with the consultants.

- 3. DISBURSEMENT projections. All funds are expected to be disbursed in the first half of FY04, with ESMAP funding 50% of the total amount indicated.
- 4. CHANGES in project design/expected date of completion. The original schedule as proposed in the ESMAP application was for work to be completed by approximately July 2003 with approval by GOP of a new regulatory framework in September 2003. Due to the need to obtain GPOBA funding, the project has been delayed approximately 3 months. The Inception Mission began in July 2003 and other key dates remain as agreed in the above schedule (Question #3) as proposed by Castalia.
- 5. CONSULTANTS HIRED. The consulting team is led by Castalia Strategic Advisors based in New Zealand. Castalia has 22 years of experience in planning institutional reform and PSP in the electricity sector and has carried out approximately 60 projects in this area. The team also consists of legal advisors Allens Arthur Robinson of Australia and Abello Concepcion Regalo & Cruz of the Philippines, who are both currently working on regulation and competition issues in the Philippine electricity industry.

	(A)	A Aijocraéeid (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$230,000	\$230,000	\$184,000	\$0	\$0	\$230,000
World Bank (BB) Non-ESMAP Trus	\$40,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$270,000	\$230,000	\$184,000	\$0	\$0	\$230,000



Project Title: Regulatory issues of off-grid energy service delivery as part of national rural

electrification strategies

Region / Country: Latin America and Caribbean Region

Origin of Funds: Netherlands

Task Manager: Clemencia Torres

Project Development Objective

- Achieve improvement of private sector led off-grid electrification in target countries through:
- Well-adopted public-private partnerships
- Improved efficiency and sustainability of existing and future off-grid concessions and licenses through increased capacity of regulators and concessionaires

Key Indicator

- No. of off-grid projects carried out
- No. of private companies involved in off-grid work
- No. of off-grid households provided connection
- No. of off-grid energy service concessions operating in a sustainable and efficient way

Expected Outputs

1. Workshop Proceedings;2. Final report including recommendations on regulation of rural off-grid concessions and draft elements of standard bidding documents;3. Capacity built in target countries (regulators and concessionaires);4. Interest created in private sector

Key Indicators

Positive feedback from workshop participants; Positive feedback on final report and publication as ESMAP report; More interest of private sector in future biddings

Implementation Progress

Component Activities

Task 1: Literature Review ;Task 2: Field Visits;Task 3: Stakeholder interviews;Task 4: Draft Study;Task 5: Seminar ;Task 6: Final Report

Approval Date: 7/23/2001

Expected Dates for:

Original Revised

Project Completion (all project activities completed): 08/30/2002 05/30/2004

Project Closing (all financial transactions executed): 11/30/2002 06/30/2004



07/10/2003: Report as of June 30, 2003: Several of the key country case studies have been finalized (Argentina, Brazil, Bolivia, Nicaragua). First drafts for new regulatory frameworks (that will include offgrid solutions in a seamless and explicit way - while fostering private sector participation) have been drafted with inputs from this ESMAP project in Bolivia and Nicaragua. Efforts by the Brazilian regulator ANEEL to define technical standards for SHS have been discussed regarding the importance of integrating those into a broader regulatory framework for offgrid systems. The parallel ESMAP study on Brazil Rural Electrification was of much help to identify promising options for such new offgrid regulations and their implementation. Several cross cutting themes have been identified (e.g. lowering costs of regulation in remote offgrid areas through user participation and provider participation, synergies with OBA verification schemes, and use of ICT tools such as simputers) and discussed with local regulators as well as the normative sector bodies in the LCR target countries. During the July 2003 GVEP workshop in Bolivia, several of the active participants from target countries will meet and exchange experiences on how to address the cross cutting issues that were identified.

As next steps, the first draft report will be produced based on the identified key issues and options, non LCR case studies will be drafted, and this material will be used as the input document for a hands-on clinic with the regulators

	(A)	Appoweed (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$150,000	\$150,000	\$0	\$0	\$13,852	\$136,148
World Bank (BB) Non-ESMAP Trus	\$20,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$170,000	\$150,000	\$0	\$0	\$13,852	\$136,148



Project Title: Rural Infrastructure in Chile: Improving Efficiency and Reaching the Poor

Region / Country: Latin America and Caribbean Region

Origin of Funds: Core

Task Manager: Jennifer J. Sara

Project Development Objective

The objective of this work is to develop a cross-sectoral strategy for improving the efficiency, effectiveness and impact of rural infrastructure services on the well being of the rural poor in Chile. At the same, time, the WB has a lot to learn from Chile's positive experience to date in achieving such remarkable service coverage rates using innovative concession mechanisms. A second objective of this work is, therefore, to document and disseminate the Chilean experience to other countries and continents. ESMAP has already financed a study which documented the service delivery model for rural electrification in Chile. This current proposed work would build on that analysis to also look at the use and impact of the services by the rural poor, and the cross-sectoral synergies with other

Expected Outputs

The strategy would be adopted by Government to improve the way rural infrastructure services are planned and delivered so that they better respond to the cross-sectoral needs and demands of poor rural consumers and have a positive impact on poverty alleviation and economic growth. This strategy would include innovative ways of providing the rural poor with energy services, through more appropriate technologies as well as more community-based participatory approaches of which Chile has rather limited

Key Indicators

Key Indicator

Implementation Progress

Component Activities

- A. The following studies will be implemented:
- (i) Analysis of the linkages between availability of rural infrastructure



Approval Date: 12/16/2002

Expected Dates for: Original Revised

Project Completion (all project activities completed):

Project Closing (all financial transactions executed): 06/30/2003 No revision



10/23/2003: On 10/09/03 the task manager sent a status report.

Final Report:

1. During Jan-Jun 2003, how did the activity advance towards the ACHIEVEMENT OF its OBJECTIVES (as set out in the proposal approved by ESMAP)

Activities undertaken during this period led to the achievement of the objectives of this work. The two consultants conducted field work, completed a final report, and presented their findings at a National Workshop on Rural Infrastructure in Santiago, Chile on June 25, 2003.

The study covered the following issues:

Current access to services (quality and cost) and alternative delivery options for the unserved population (focusing on viability of renewable energy options)

Efficiency and sustainability of traditional and non-traditional service delivery models (focusing on diesel generators and photovoltaic systems in the municipalities of San Pedro de Atacama and Curepto)

Strengths and weaknesses of delivery systems in regards to meeting demand

Identification of future research needs (regarding the sustainability, financial viability, service quality, and economic impact of electricity project in isolated areas, involving renewable energy sources). Two file attachments can be found under the implementation section in the project's database.

2. What is the IMPACT of this work to date?

This study identified the need for innovative off-grid solutions to reach the unserved population and highlighted the existing management challenges threatening the efficiency and sustainability of current and future off-grid rural electrification projects. These findings were presented at a rural infrastructure workshop attended by senior members of the Chilean Government (Ministries of Public Works, Agriculture, Interior, Transport and Communications, National Energy Commission and its Rural Electrification Program) and World Bank specialists.

The results of this work are being incorporated into a an economic and sector work (ESW) analyzing access, efficiency, and sustainability of rural infrastructure services in Chile. The consultants' findings are being included in the generation of a cross-sectoral rural infrastructure project in Chile, with special attention paid to addressing the institutional challenges associated with the provision of rural electricity services. Study results have also contributed to developing a follow-up research program to address demand assessment and operational management of off-grid electricity solutions. TORs in both, Spanish and English; final report; and a presentations have been added to the implementation section in the project's database.

- 3. DISBURSEMENT projections. Please indicate projections for each half-year 'till the end of the project: All funds were dispersed in FY03: \$7500 per consultant for a total of \$15,000
- 4. CHANGES in project design/expected date of completion. Please also report problems encountered/causes for delays: The project was completed in a timely manner without unforseen complications.

5.CONSULTANTS HIRED: A team of two recognized Chilean experts, Francisco Covarrubias Fernandez and



	(A)	A Aijocraéeid (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$15,000	\$15,000	\$0	\$15,000	\$15,000	\$0
World Bank (BB) Non-ESMAP Trus	\$0 1 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$15,000	\$15,000	\$0	\$15,000	\$15,000	\$0



Project Title: Assessment of Power Sector Reform Priorities in Selected Countries in

Sub-Saharan Africa: A Survey of African Power Sector Decision-makers

Literature review

Region / Country: Africa Region

Origin of Funds: Core

Task Manager: Kwawu Mensan Gaba

Project Development Objective

Key Indicator

Overall Objective:

Capture the opinion of African Decision Makers and their constituents on power sector reform

Review of the literature on power sector reform in Africa

Survey of decision makers and the representatives of the general public in selected countries (3 Francophone and 3 Anglophone countries

Survey design of decision makers and representatives of

Selection of articles and communications on power sector reforms in Africa.

Critical evaluation and identification of knowledge gaps

Preparation of survey questionnaires Survey design Data collection

the public in selected African countries

Expected Outputs

Key Indicators

Report on the literature review

Survey results

Analysis of survey results

Dissemination of results State-of-the-art review of power sector reform in Africa Preliminary findings report

- (a) Power sector reform accounts for findings from this project
- (b) Improvement of communication strategy components of power sector reforms
- (c) Impact assessment of power sector reform achievements

Findings reflected in new Africa energy strategy, CAS, PRSPs.

Feedback received through workshops and peer reviewers

Implementation Progress Component Activities

Survey of decision makers and the representatives of the general public in selected countries (3 Francophone and 3 Anglo: Preparation of preliminary reports; Review of the literature on power sector reform in Africa



Approval Date: 1/22/2003

Expected Dates for: Original Revised

Project Completion (all project activities completed): 09/30/2004 No revision

Project Closing (all financial transactions executed): 12/17/2004 No revision

Summary of Current Project Status, Issues and Actions:

	(A)	AAHowaeeld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$150,000	\$150,000	\$0	\$0	\$0	\$150,000
World Bank (BB) Non-ESMAP Trus	\$0 st \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$150,000	\$150,000	\$0	\$0	\$0	\$150,000



Project Title: Clean Air Initiative in Sub-Saharan African Cities

Region / Country: Africa Region

Origin of Funds: Belgium

Task Manager: Chantal Reliquet

Project Development Objective

Reduction of air pollution, especially lead, generated by motorized transport in Sub-Saharan Africa particularly in Cotonou, Benin.

Key Indicator

- Adoption of Action Plans.
- Preparation of legislation on fuels and vehicles.
- Adoption and enforcement of legislation on lead-free dasoline

Expected Outputs

- 1. Cotonou, Benin
- Increased awareness of the dangers of urban air pollution; stakeholder endorsement of policies to mitigate vehicle pollution.
- Baseline and updated data on vehicle emissions and in-depth analysis of air quality and pollution effects on local health and productivity.
- · Identification of cost-effective measures and outline of action plan.
- 2. Lead Phase-Out
- · Consensus on lead phase-out policy at country level.
- · Change in regulation regarding leaded and unleaded gasoline.
- Progressive adoption of unleaded gasoline.
- Roet practice cases for dissemination

Key Indicators

- Effectiveness of national seminar (number and representativeness of participants, seminar quality).
- Availability of data and conclusions of case study.
- Proposed measures:
 - fuel-targeted
 - vehicle-targeted
 - traffic management.
- · Policy guidelines.
- National action plan.
- Legislation (phasing, tax incentives, enforcement)

Implementation Progress

Component Activities

Capacity Building; Case Studies and National seminars; Creation of a regional network of expertise; Dissemination; Implementation of action plans: Dakar, Ouagadougou, Abidjan, Cotonou, Lagos; Implementation of action plans: Douala, Harare, Nairobi; Phasing out of leaded gasoline; Program Coordination and Management; Purchase of monitoring equipment; Regional seminars; Research and development; Setup of national and regional databases

Approval Date: 3/24/2000

Expected Dates for:

Original Revised

Project Completion (all project activities completed):

05/18/2002

10/31/2003

Project Closing (all financial transactions executed):

06/15/2002

12/31/2003



Summary of Current Project Status, Issues and Actions:

	(A)	AAHowateki (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$210,000	\$210,000	\$0	\$930	\$98,837	\$111,163
World Bank (BB) Non-ESMAP Trus	\$1,243,000 \$1 \$720,000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$2,173,000	\$210,000	\$0	\$930	\$98,837	\$111,163



Project Title: Clean Fuels Africa Project: Phasing Out Leaded Gasoline in SSA Importing

Countries

Region / Country: Africa Region

Origin of Funds: Netherlands; Core

Task Manager: Eleodoro O. Mayorga Alba

Project Development Objective

To promote integrated clean fuels policies in Africa that simultaneously provide improve public health, promote sustainable development, and reduce conventional air pollution and GHG emissions

Key Indicator

Elimination of lead from Mauritania, Equatorial Guinea, Ethiopia, and Tanzania

Expected Outputs

- 1. Bring together and work in partnership with all stakeholders NGOs, governments, and industry representing all disciplines that need to be involved in phase-out and prevention, including environment, energy, health, finance, children's welfare, and so forth;
- 2. Provide policy assistance in developing national action plans for phase-out that contribute to broader clean air goals through transfer of knowledge on phase-out and clean fuels and their relationship to climate change and the development and exchange of best practices;
- 3. Catalyze and build the capacity of African NGOs and NGO networks to work on phase-out and related clean fuels issues; and
- 4. Work with African NGOs to conduct public awareness campaigns to alert the public to the dangers of lead and the need for national plans for phase-out

Key Indicators

Documented commitment of policymakers to lead elimination

Endorsement of action plans by highest decision makers

Implementation Progress

Component Activities

1. Complete Issues paper and plan Kick-Off Meeting;2. Hold Kick-Off Meeting;3. Select consultants and prepare Strategy Papers;4. Country Visits for Presentation and Discussion of Draft Strategy Papers;5. Edit, Translate, and Reproduce Strategy Papers;6. Plan Clean Fuels Africa Workshop for importing countries;7. Convene clean Fuels Africa Workshop;8a. Prepare, Edit, Translate, Produce, Disseminate Workshop Report;8b. Prepare, Edit, Translate, Produce, Disseminate Bilingual Project Report;9. Conduct In-Country Follow-Un



Approval Date: 7/24/2002

Expected Dates for: Original Revised

Project Completion (all project activities completed): 03/31/2004 No revision

Project Closing (all financial transactions executed): 05/31/2004 No revision



Summary of Current Project Status, Issues and Actions:

07/28/2003: In summary – by end- June 2003, we have completed the presentation of 3 out of the 4 national action plans for the elimination of leaded gasoline committed under this project. Already Ethiopia has adopted a decision to eliminate leaded gasoline and will offer car consumers lead free gasoline from January 1st. 2004. Mauritania and Tanzania will probably follow in the forthcoming months.

These SSA oil importing countries will be the first in the continent consuming unleaded gasoline demonstrating that this is a win-win solution, a first step of an air quality management policy, with significant savings to the economies and important benefits to health and urban environment. There is no change on the project design.

From a total ESMAP TFs contribution of 257,000 USD, disbursements to date are equivalent to 168,000 USD. For the next semester – ending Dec 2003 disbursements are equivalent to 50,000USD and for the first semester 2004 disbursements are going to be 39,000USD.

Activities for the next six month include: (i) workshop for the presentation of the Mali action plan, (ii) contribution to the SSA refiners meeting that will take place in Cape Town in October, and (iii) preparation of TOR for developing air quality monitoring capacity in large SSA cities

Mauritania – The initial mission took place as scheduled in January and the workshop to present the draft action plan was held in Nouakchott 4-5 Mai. Attached is the consultant report including the workshop recommendations. This report is being published by the team of the Africa Clean Air Initiative, same for the other 3 national plans.

In essence the report of Mauritania recommends to immediately start the importation of unleaded gasoline that will bring benefits to the economy, the consumers (motor vehicles and fishing boats) and the environment.

The local coordinator, Dr. Abdoulaye Sy, Advisor to the Ministry of Energy and Water, has prepared the attached communication for the Cabinet that would be part of the agenda of the session of 25/06/03.

Mali – the initial mission to collect data and meet the stakeholders in Mali took place April 28 – 30, 2003. The contract of consultant Jim Hubbard was extended for the preparation of the action plan of this country. In addition to consultant J. Hubbard, the mission included Amadou Diouf, Code Thiaw and Soudou Diagne from AFRICACLEAN.

In the case of Mali, the most critical issue is the lack of a regulatory agency able to ensure a minimum of quality control over the petroleum products. The market has been completely deregulated and imports are brought into Mali by several small and large companies without sufficient control over the products specs. Gasoline imports usually come from the refineries of Abidjan and Dakar, but because of current problems in Cote d'Ivoire, imports of gasoline of low lead content are started to take place from Lome. The draft national plan for Mali is expected to be available end August and the workshop early September 2033.

Tanzania – The initial mission to collect data and meet the stakeholders took place 13 – 14 February, 2003 and the workshop for the presentation of the draft report took place 9-10 June 2003. The participants recommended the elimination of importations of leaded gasoline and the need to start an air quality improvement campaign. During the workshop British Petroleum one of the largest distributors decided to start selling unleaded gasoline. This is a very positive step that will be triggering a response from the government to regulate that all gasoline should be unleaded in the entire country. Attached is the consultant draft report. It will require small improvements in the section dealing with the public information campaign before final editing to be published.

Ethionia - The initial mission to collect data and most the stakeholders took place 10-11 February 2003 and the



	(A)	A Aijocraée id	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$256,997	\$256,997	\$14,000	\$95,699	\$162,369	\$94,628
World Bank (BB) Non-ESMAP Trus	\$0 1 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$256,997	\$256,997	\$14,000	\$95,699	\$162,369	\$94,628



Project Title: Developing Regional Clean Air Networks

Region / Country: Global

Origin of Funds: Netherlands

Task Manager: Jian Xie

Project Development Objective

Build the capacity in urban air quality management of local environmental and other sector agencies in selected cities of LAC, Africa, ECA and EAP

Key Indicator

- · Creation of inter-sector air quality management teams at city level
- Setting-up of AQM information systems, data-bases and tools
 Improvement of AQM regulatory frameworks

Expected Outputs

- Establishment or consolidation of regional Clean Air Initiative networks
- Assistance in action planning to the selected cities through the regional networks
- Staff of agencies have been exposed to training and on-line information in UAQM
- Policy and technical knowledge generation

Key Indicators

- Governance agreements for the 4 regional networks are functioning well
- Workshops and Action Plans completed and endorsed in 12 cities (over 3 years) in LAC, AFR, ECA, EAP
- Relevance and availability of on-line information; delivery of UAQM DL course in the 4 regions
- 3 policy and technical research studies per year; internal Rank KM program established

Implementation Progress

Component Activities

1. Management of the regional networks: Partnerships, Steering Committee, Fund-raising; 2. City-specific workshops and Action Plans: LAC, SSA, ECA, EAP; 3. Dissemination and Outreach tools: Clean Air Web-site, Distance Learning UAQM course; 4. Knowledge generation: UAQM toolkit, Clean technologies Infopool, Research & studies, Bank-wide Knowledge Sharing; 5. Clean Air Initiative program management

Approval Date: 12/7/2000

Expected Dates for: Original Revised

Project Completion (all project activities completed): 06/29/2001 10/31/2004

Project Closing (all financial transactions executed):



Summary of Current Project Status, Issues and Actions:

08/26/2003: 1. Progress between January and June, 2003. The CAI website has been further consolidated and a new management system is being developed to allow greater involvement of different regional partners and ease the uploading and administration of the global and regional Clean Air websites.

The Diesel Days were organized in January and provided invaluable information regarding the issues involved in addressing in-use diesel emission in developing country cities. A number of technical experts, private sector companies, development organizations, and government agencies participated in the two days organized by the World Bank and the World Resources Institute (WRI). The outcomes of the discussions were very useful in starting the process of developing a study in Bangkok on a comprehensive approach to this problem. The coming two years WBI, EASES and local and international partners will work together on this program. The Mobile Source Handbook is being prepared by the Air Quality Thematic Group to develop guidelines for addressing air pollution problems from vehicles in cities. The Clean Air Initiative is closely involved in the preparation of this strategic document for task managers and decision makers around the world. The CAI is organizing consultation workshops in Asia and Latin America to discuss the main topics presented in the Handbook with regional experts, and provide feedback on the main messages and accuracy of the points made. The first consultation workshop was held at the Asian Institute of Technology (AIT) in Bangkok on Thursday June 19th. The new CAI-Asia brochure is also finalized and will be printed in July. The Clean funding for the Study on Air Quality in Rio de Janeiro Metropolitan Region is continuing. The Clean Air Initiative, which collaborated with Renault and Rio de Janeiro, is providing support to a number of follow up activities and looking for establishing linkages with other regional and international partners to maximize the impact of this study.

A step-by-step toolkit for Economic Valuation of the Health Impacts of Air Pollution was prepared and presents a brief overview of the methods commonly used to quantify the health impacts of air pollution and to value them. It focuses on translating changes in ambient air quality into associated cases of premature mortality and morbidity and on the methods used to value these health effects. A toolkit on Cost-Effectiveness of Air Pollution Control Policies is currently being prepared, and will be soon available.

The Clean Technologies Information Pool (Infopool) website has been reviewed and the revised version has been placed on the net. Comments received from the Thematic Group of the World Bank, the International Energy Agency, and the U.S. Department of Energy have been incorporated in the revised version. A final review of the Info Pool will be conducted before the Info Pool is translated into Spanish and possibly Portuguese.

An Inspection & Maintenance Program is being designed to support the enhancement and implementation of integrated vehicular inspection and maintenance systems in selected partner cities. The program is scheduled to be launched by the time of the next workshop in April 2003. ESMAP funding will be provided to the capacity enhancement and training components of this program. The Federal University of Rio de Janeiro and the World Bank Institute finalized the preparation for the delivery of the Portuguese version of the Urban Air Quality Management Distance Learning Course, based on the successful Spanish version delivered three times in the region. The delivery is scheduled for August – September 200, over 15 sites have signed up, and we expect over 300 participants.

The preparation of the Urban Air Quality Management Distance Learning Course for Asia has been almost finalized. A Training of Trainers workshop was held in June with the participation of 15 facilitators from 6 different countries. Each of them will take the materials produced by the World Bank for delivery of a course on the subject in their own country. A website will provide up to date information and opportunity to interact among the people. A couple of videoconferences will be organized using the GDLN or other technology. It is expected that China, Philippines, Thailand and Vietnam will deliver the course in the coming half year.

2. IMPACT to date. The Clean Air Initiative has continuously and successfully strengthened the linkages with the Air Quality Thematic Group and strengthening the linkages with operations in the Bank. Important advancements were also made with the finalization and delivery of the distance learning courses for Asia and Brazil, and the preparation for the overhaul of the CAI website. Several activities implemented so far have helped build the capacity of decision makers in member cities through a combination of technical and policy advisory services, workshops to enhance or develop city air quality action plans, transfer of knowledge through web-based and Distance Learning programs, and the creation of "south-south" networking opportunities both face to face, and through virtual communication. At the same time, a number inter-sector teams at the city level, of tools such as air quality management information systems, and the improvement of regulatory frameworks. The CAI team has been seeking to create a framework for stronger ties between lending and non-lending air quality management work in various sectors within the Bank, to



website and communication tools, around US\$ 20,000 for regional workshops, US\$ 25,000 on the distance learning course, US\$ 20,000 for consultancies and US\$ 5,000 for communications tools. Overall management of the program will add to about US\$ 30,000.

- 4. Changes in project design/expected date of completion. The project design remains the same, but the date of completion should be extended until December 2004. Due to the problems described below.
- 5. Please also report problems encountered/causes for delays. The main issue has been the implementation of certain activities due to the delay between the first and second installment from ESMAP. This uncertainty delayed the planning of activities for FY03.

The heavy reliance on the partnership in designing and implementing activities also resulted in some delays in the implementation. Especially the CAI-LAC program is experiencing some delays in disbursement due to the increased regional ownership of the program and, at the same time, ensuring that fiduciary responsibilities are met by the partners. The good news is that the regional partners are very actively involved in the design and implementation of the program and have increased ownership over the activities that are organized.

	(A)	AAHowaeeld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$900,000	\$900,000	\$104,040	\$52,817	\$440,277	\$459,723
World Bank (BB) Non-ESMAP Trus	\$0 1 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$900,000	\$900,000	\$104,040	\$52,817	\$440,277	\$459,723



Project Title: Source Apportionment of Fine Particulates in Developing Countries

Region / Country: Global

Origin of Funds: Netherlands

Task Manager: Todd M. Johnson

Project Development Objective

To assist local stakeholders (government, NGOs, academic/research, private sector) understand the sources of fine particulates in their localities in order to make more scientific and technically-sound decisions to limit emissions and exposures.

Key Indicator

- Outcome indicators include policy statements and general knowledge among stakeholders about the sources, and importance, of controlling fine particulate air pollution in their locality.
- Impact indicators include air pollution policies and control interventions that address fine particulates (as opposed to other air pollutants) in a technically and economically efficient manner

Expected Outputs

- 1. Case studies. Source apportionment studies for fine particulates would be completed in at least three cities.
- 2. Capacity Building. Local officials and experts gain knowledge and experience in conducting source assessments.
- 3. Policy discussions. The implications of the assessment work are broadly discussed with policymakers.
- 4. Dissemination. Broad dissemination activities of the

Key Indicators

- Quality of the case studies.
- Number of local staff involved in the case studies and related training activities.
- Number and level of policymakers involved in the policy discussions.
- Dissemination and use of the case studies and analytic tools.
- . Number of narticinante in dissemination workshops

Implementation Progress

Component Activities

1. Case studies 1A. Six cities; 1B. Review Existing Work; 1C. New Top-down Analysis; 2. Capacity Building 2A. Case study training; 2B. Training for other stakeholders; 3. Policy discussions 3A. In developing country cities and with national environment agencies; 4. Dissemination 4A. Case study reports; 4B. Seminars

Approval Date: 5/21/2002

Expected Dates for:

Original Revised

Project Completion (all project activities completed):

02/28/2003

12/31/2003

Project Closing (all financial transactions executed):

04/30/2003

03/31/2004

Summary of Current Project Status, Issues and Actions:



	(A)	AAHowateld (B)	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-
ESMAP Trust Funds	\$295,000	\$295,000	\$54,673	\$19,955	\$54,729	\$240,271
World Bank (BB) Non-ESMAP Trus	\$100,000 \$1 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$395,000	\$295,000	\$54,673	\$19,955	\$54,729	\$240,271



Project Title: South Asia Urban Air Quality Management Strategy

Region / Country: South Asia Region

Origin of Funds: Netherlands

Task Manager: Masami Kojima

Project Development Objective

Acceptance of an air pollution abatement strategy by municipal and/or federal governments which is realistic, cost-effective, and sustainable given the limited financial and human resources available in the region

Key Indicator

Indicators

- 1. Intensified dialogue and agreements with client governments and the donor community on a strategic and clearly sequenced approach to urban air quality improvement, and on the preferred scope and role of donor assistance.
- 2. Increased awareness of the social costs and cross-sectoral nature of urban air pollution, as well as its links to poverty

Outcomes

- 1. Greater institutional capacity to develop cost-effective strategies in the future
- 2. All important sources of pollution addressed, not just

Expected Outputs

- 1. Strategy note prepared
- 2. Issues notes prepared
- 3. Meetings and discussions with donor and government officials in India held
- 4. Cost-effectiveness calculations
- 5. Three workshops in the region
- 6. Issues notes translated into the vernacular; ESMAP

Key Indicators

- 1. Strategy paper written (4 weeks)
- 2. Several issues notes (6 months)
- 3. Minutes of meetings, back-to-office reports and aide-memoires (4 months)
- 4. Calculations completed and policy options ranked (4 months)
- 5. Workshops held

0.1

Implementation Progress

Component Activities

1. Economic analysis of air pollution measures, and identifying gaps;2. Preparation of several issues notes;3. Holding consultation meetings;4. Preparation of a strategy note;5. Holding regional workshops;6. Publications in English and local languages



Approval Date: 10/23/2000

Expected Dates for: Original Revised

Project Completion (all project activities completed): 12/31/2001 11/15/2002

Project Closing (all financial transactions executed): 03/31/2002 12/31/2002

Summary of Current Project Status, Issues and Actions:

06/24/2003: 13 briefing notes have been issued to date, 3 in the first half of 2003:

Briefing note no. 11 Health impacts of outdoor air pollution

Briefing note no. 13 The science of health impacts of particulate matter.

Of all the topics covered by the 13 briefing notes, addressing emissions from in-use vehicles through better inspection and certification has emerged as a key area for follow-up and substantive engagement. The Ministry of Road Transport and Highways (MoRTH) in the Government of India has approached the World Bank for input for the purpose of revamping their current inspection system which is widely regarded as being ineffectual. Under this ESMAP program, the World Bank has met with the ministry officials twice and provided an approach paper upon the request of the Secretary of MoRTH. The approach paper, based to a large extent on the assessment of the inspection system issued in October 2002 under this ESMAP project, was circulated to the transport commissioners in all the states and Union Territories in India, and they were invited to attend a brainstorming meeting to discuss how to strengthen the inspection system on June 10, 2003. At the June meeting, the Secretary formed two working groups --- one on administrative and the other on technical improvements --- and asked the working groups to report back to him in 8 weeks. The World Bank was asked to be a member of both groups. Significant policy dialogue is expected in the next several months.

The recommendations of the approach paper are also in the process of being implemented in Mumbai as the first pilot case in India under the Mumbai Urban Transport Project. The pilot is intended to introduce substantially improved test protocols and administrative controls in the inspection system for commercial vehicles, and expected to start in early 2004. A considerable amount of technical details remain to be worked out between now and the start of the pilot.

These recommendations are also being shared with the Governments of Sri Lanka and Bangladesh, both of which are in the process of establishing a vehicle inspection system for the first time.

Many of the points stressed in the briefing notes have also been incorporated in the World Bank policy document, "Urban Air Pollution: Policy Framework for Mobile Sources," which has completed an internal review and is now undergoing an external review and consultation process.

The remainder of the project budget will be disbursed between now and the end of December 2003 when this



	(A)	A AHOOVANEI J	Outstanding Commitments (C)	Disbursed Jan 1 - Jun 30, 2003 (D)	Disbursed to Date (E)	Remaining Balance (G=B-E)
ESMAP Trust Funds	\$195,000	\$195,000	\$64,515	\$9,183	\$96,488	\$98,512
World Bank (BB) Non-ESMAP Trust Fund	\$0 \$ \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
Total	\$195,000	\$195,000	\$64,515	\$9,183	\$96,488	\$98,512

ESMAP Values your Feedback

We would also like to take the time to ask you the following:

If you have found this report useful, or would like to provide comments on our reports and services, please log on to our website at http://www.esmap.org and leave your feedback. In this way we can better understand our audience's needs and improve the quality of our knowledge products.

Yes, I would like to continue receiving a printed copy of the Semiannual Status of ESMAP Portfolio of Projects.

No, I wish to discontinue receipt of the printed version of the Semi Annual Status of ESMAP Portfolio of Projects. I rather view it at http://www.esmap.org. But please e-mail me when it gets posted on your web.

Name		 		
Address				
				
City/Country				
City/Country		 		
State	Zin			
Daytime Phone#	P			
Dayume Phone#				