

*Oil Industry Training for Indigenous People:  
The Bolivian Experience*

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**ENERGY SECTOR MANAGEMENT ASSISTANCE PROGRAMME (ESMAP)**

**PURPOSE**

The Joint UNDP/World Bank Energy Sector Management Assistance Programme (ESMAP) is a special global technical assistance program run as part of the World Bank's Energy, Mining and Telecommunications Department. ESMAP provides advice to governments on sustainable energy development. Established with the support of UNDP and bilateral official donors in 1983, it focuses on the role of energy in the development process with the objective of contributing to poverty alleviation, improving living conditions and preserving the environment in developing countries and transition economies. ESMAP centers its interventions on three priority areas: sector reform and restructuring; access to modern energy for the poorest; and promotion of sustainable energy practices.

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# **Oil Industry Training for Indigenous People: The Bolivian Experience**

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**September 2001**

Joint UNDP/World Bank Energy Sector Management Assistance Programme  
(ESMAP)

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## Preface

Increasingly, Latin American countries are looking upon oil and gas exploitation as an opportunity to augment their incomes, balance their budgets, and improve public investment in social sectors. The improvements made in legal frameworks and standard exploration-exploitation contracts have encouraged more private companies to invest in the region. Consequently, exploration and exploitation projects are being carried out in areas that are increasingly more sensitive in social and environmental terms, particularly in the Amazon basin.

The Amazon region is home to a vast diversity of indigenous peoples that are highly sensitive to the impact of hydrocarbon activities. Greater efforts are required both to reduce the effects of these activities, particularly indirect impacts, and to give indigenous peoples greater opportunity to share in the benefits accruing from such activities. Within the framework of a series of national and international legal instruments—the most important being Convention 169 of the International Labor Organization (ILO)—indigenous peoples have a guaranteed right to be consulted and to enjoy the benefits of the development of natural resources in their territories. At present, most national laws in Latin America protect the social, economic, and cultural integrity of these peoples in the event of the exploitation of said resources.

The region's indigenous peoples have become more organized and are now prepared to voice their own demands. Oil- and gas-related operations in various countries are affected by delays and higher costs due to growing environmental and social problems and difficulties in establishing relationships with indigenous communities and governments. These problems stem largely from a lack of mutual understanding. Governments and industries know little about the cultural idiosyncrasies, problems, and needs of indigenous peoples. At the same time, because the indigenous communities are unacquainted with the particular characteristics of the oil and gas industry, they find it difficult fully to comprehend overall operational scope, environmental impact assessments, and, above all, management plans. An enhanced mutual knowledge would foster the proactive incorporation of business and skilled labor opportunities into the economies of indigenous peoples, thus enabling them to participate actively in the development of hydrocarbon resources in their territories and, in broader terms, in the development of their respective nations.

In order to improve this technical and intercultural knowledge, the joint UNDP/World Bank Energy Sector Management Assistance Programme (ESMAP)—with the assistance of the Canadian International Development Agency (CIDA) and at the request of the Bolivian government and indigenous peoples—designed a pilot training program to instruct indigenous peoples on the impact of hydrocarbon activities. In view of the lack of power supply in indigenous communities in the Bolivian Amazon region and the limited supply of state resources for rural electrification at the time the program was designed, the impact of rural electrification projects was included in the training agenda.

The pilot training program in Bolivia was sufficiently successful to warrant the publication of this report. The objective is to describe the Bolivian training experience as an example of good practice, so that governments and other parties interested in the oil industry in the region will have the information they require to replicate the experience in other areas, taking advantage of the lessons obtained to discuss and design new experiences.

ESMAP focuses on the role of energy in the development process, with a view to reducing poverty, improving living standards, and preserving the environment.<sup>1</sup> Its strategic objectives include the continuation of sector reforms, the promotion of industrial practices that are acceptable in environmental and sociocultural terms, and efforts to improve the socioeconomic situation of indigenous peoples.

The Oil, Gas and Chemical Products Department<sup>2</sup> and the Environmentally and Socially Sustainable Development Division<sup>3</sup> of the World Bank's Vice Presidency for Latin America and the Caribbean, in close collaboration with the Latin American Energy Organization (Organización Latinoamericana de Energía, or OLADE)<sup>4</sup> have designed a program on energy, population, and the environment with similar objectives. This publication is part of a broader effort whose objectives are as follows:

- Establish a means of communication between Latin American Governments regarding environmental and social laws and regulations governing hydrocarbon activities and the problems encountered in their application (current means of communication on such matters are deficient and there are no consistent negotiations between the industry and indigenous communities).
- Identify and develop common approaches to make current national regulations more consistent, so that the industry's operations in the Sub-Andean region can deal with environmental and social issues in a coherent manner.
- Facilitate communication and carry out joint training programs between indigenous communities, the oil and gas industry, and governments to increase knowledge sharing.

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<sup>1</sup> See <[www.worldbank.org/html/fpd/esmap](http://www.worldbank.org/html/fpd/esmap)>.

<sup>2</sup> See <[www.worldbank.org/html/fpd/energy/oilgas.htm](http://www.worldbank.org/html/fpd/energy/oilgas.htm)> and <[www.ifc.org/ogm](http://www.ifc.org/ogm)>. The World Bank Group has combined most IBRD/IDA and IFC activities in the sector into a central Oil, Gas and Chemicals Department.

<sup>3</sup> See <[www-esd.worldbank.org](http://www-esd.worldbank.org)>.

<sup>4</sup> See <[www.olade.org.ec/idiomas/ingles/default.htm](http://www.olade.org.ec/idiomas/ingles/default.htm)>; Spanish-language version at <[www.olade.org.ec](http://www.olade.org.ec)>.

## Acknowledgements

This report was drawn up under the sponsorship of the Energy Sector Management Assistance Programme (ESMAP) together with the Vice Ministry of Energy and Hydrocarbons and the Confederation of Indigenous Peoples of Bolivia (Confederación de Pueblos Indígenas de Bolivia, or CIDOB). The pilot program was jointly financed by the Canadian International Development Agency (CIDA) and implemented with the collaboration of the consulting firm E2 Environmental Alliance.

The program's main sponsor was the World Bank, represented by Eleodoro Mayorga Alba, Lead Petroleum Economist of the Oil, Gas and Chemical Products Department. The local coordinator, Economist Víctor Hugo Ayala, represented the Vice Minister of Energy and Hydrocarbons; Messrs. Nicolás Montero and Marcial Fabriciano represented CIDOB; and consultants Leo Bouckhout, Rob Stuart, José Zárate, Humberto Toledo, and Paul Cox represented E2 Environmental Alliance. The Bolivian Chamber of Hydrocarbons, and in particular the firms Maxus, Chaco, Andina S.A., Enersol, and Gas Trans-Boliviana, collaborated with the program.

Maria Claudia Pabón compiled the information and prepared the Spanish version of this document. The text was reviewed by Carlos Perafán, an anthropologist of the Inter-American Development Bank's Department of Indigenous Affairs; Mónica Castro, consultant for the Environmental Unit of the Bolivian Vice Ministry of Energy and Mines; and Alonso Zarzar, Social Development expert of the Quality Control Unit within the Social Department of the World Bank's Regional Office for Latin America and the Caribbean. Marjorie Puentes from ESMAP helped edit the Spanish document, MariCarmen Pizarro (consultant) translated it into English, and Chris Marquardt (consultant) edited the English version.



## Acronyms and Abbreviations

<b>ARPEL</b>	Regional Association of Oil and Natural Gas Companies in Latin America and the Caribbean
<b>CAF</b>	Andean Development Corporation ( <i>Corporación Andina de Fomento</i> )
<b>CBH</b>	Bolivian Chamber of Hydrocarbons
<b>CIDA</b>	Canadian International Development Agency
<b>CIDOB</b>	Confederation of Indigenous Peoples of Bolivia ( <i>Confederación de Pueblos Indígenas de Bolivia</i> )
<b>COICA</b>	Coordinating Body for the Indigenous Organizations of the Amazon Basin ( <i>Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica</i> )
<b>CSO</b>	Competent Sector Organization
<b>CTCSA</b>	Technical Committee on Social and Environmental Control
<b>DGB</b>	General Biodiversity Bureau
<b>CEA</b>	competent environmental authority
<b>EAP</b>	Energía, Ambiente y Población (Energy, Environment, and Population) program
<b>EIA</b>	environmental impact assessment
<b>EIAS</b>	environmental impact assessment study
<b>EIS</b>	environmental impact statement
<b>EPP</b>	environmental protection plan
<b>EM</b>	environmental manifest
<b>ER</b>	environmental record
<b>ERHS</b>	Environmental Regulations for the Hydrocarbons Sector
<b>ESMAP</b>	Energy Sector Management Assistance Programme
<b>GRPA</b>	General Regulations for Protected Areas
<b>IDB</b>	Inter-American Development Bank
<b>ILO</b>	International Labor Organization
<b>IPCTs</b>	Indigenous people's communal territories ( <i>tierras comunitarias de origen</i> )
<b>MDE</b>	Economic Development Ministry
<b>MDSP</b>	Sustainable Development and Planning Ministry
<b>NC</b>	National Coordinators
<b>NG</b>	natural gas
<b>NGO</b>	nongovernmental organization
<b>OLADE</b>	Latin American Energy Organization ( <i>Organización Latinoamericana de Energía</i> )
<b>PA</b>	protected area
<b>Petrobras</b>	Petróleo Brasileiro S.A.
<b>RIO</b>	regional indigenous organization
<b>SEIAS</b>	social and environmental impact assessment study
<b>SERNAP</b>	National Service for Protected Areas
<b>UTHER</b>	Technical Hydrocarbon and Rural Electrification Units [CIDOB]
<b>YPFB</b>	Yacimientos Petrolíferos Fiscales Bolivianos



## Executive Summary

1. As much as the capitalization of the national oil company (Yacimientos Petroliferos Fiscales Bolivianos, or YPFB) and the construction of the Santa Cruz-Porto Alegre gas pipeline have opened up investment opportunities in oil and natural gas exploration in Bolivia, they have also had significant sociocultural and environmental impacts. Access to export markets has encouraged oil companies to penetrate new areas, including some that are particularly fragile from environmental and social points of view. Undoubtedly, the indigenous communities in Bolivia's eastern region have been among the most affected.
2. At the same time, indigenous peoples have made great progress in claiming their consultation and participation rights as key instruments for conserving their territories and cultures and improving their socioeconomic conditions. They are beginning to understand the importance of gaining access to training on oil-related issues to ensure their survival. They realize that without a better knowledge of the industry's legal, technical, economic, and environmental issues, they have a limited chance of ensuring their cultural integrity, exercising the consultation and participation rights Bolivian law grants them, and taking advantage of the opportunities the oil business provides.
3. Hence the significance of the training experience described herein. Under the sponsorship of the Energy Sector Management Assistance Programme (ESMAP), with funds from the Canadian International Development Agency (CIDA) and with the close collaboration of the Vice Ministry of Energy and Hydrocarbons and, in particular, the Confederation of Indigenous Peoples of Bolivia (Confederación de Pueblos Indígenas de Bolivia, or CIDOB), a pilot program was carried out to train indigenous instructors in matters related to the oil and gas industry.
4. The following were the program's objectives: (a) respond to the challenge presented by the current demands of indigenous peoples regarding the adequate implementation of processes that guarantee the consultation and participation rights established in Bolivian laws and in ILO Convention 169; (b) provide training to indigenous instructors in their own language, so that they may become multiplying agents within their communities, disseminating the knowledge acquired during the training process; and (c) create the right inter-cultural conditions so that oil investments are compatible with sustainable development principles, particularly in terms of the sustainability of the social, economic, and cultural integrity of indigenous peoples and protecting the environment of their indigenous territories.
5. The program consisted of providing training and transferring basic oil technology to 35 representatives of indigenous peoples during two courses, and selecting five participants from the first group to be trained as instructors. Training on the hydrocarbon sector focused on helping indigenous people improve their knowledge of the regulations governing the sector as they apply to operations within their indigenous territories. In this way, indigenous people can establish better relations with oil companies and the government and, consequently, abide by the regulations.
6. The program was carried out in three phases. During Phase 1 (Preparation), the program's promoters met with representatives of indigenous peoples to decide on the training subjects, the number of participants, and the intercultural training methodology to be applied. Phase 2 (Development) consisted of the training itself, which comprised two stages: during stage

one, 20 indigenous representatives attended a two-week training course in Santa Cruz, Bolivia, including field visits and intercultural discussions with the oil companies operating in the area. During stage two, five people were selected from the original group for a short workshop held in Calgary, Canada, to be trained as instructors and to share experiences with representatives of the Canadian First Nations, which possess rights and businesses in the oil and gas industries in the province of Alberta. During Phase 3 (Dissemination), upon their return from Canada, the indigenous instructors demonstrated their newly acquired skills at a second course in Santa Cruz and Chapare, in which a new group of 15 indigenous representatives was trained.

7. Each course was split into two sessions, one covering the hydrocarbon sector and the other covering rural electrification. For the hydrocarbon session, basic information was provided on (a) hydrocarbon operations (exploration, production, transport by pipelines); (b) laws and regulations concerning social and environmental impacts relevant to program planning, negotiation, assessment, approval, and supervision; (c) responsibilities of institutions in charge of environmental and social issues on a local and national scale; and (d) the role and responsibilities of oil and gas companies and their relationships with the central government and local authorities. Emphasis was placed on project planning, assessment of environmental impacts, project approval and monitoring, and the role of indigenous representatives in abiding by the regulations.

8. The following were the most important lessons obtained from the pilot program: (a) The project helped participating representatives of indigenous peoples' organizations increase their knowledge about how the oil and gas industry works, including its regulations and responsibilities in terms of compensation and impact management; (b) the indigenous representatives were able to point out particular problems affecting their communities and draw up action plans to tackle the problems in the future, identifying the need to seek support for executing the plan; (c) the relationship with First Nations enabled the Bolivian indigenous participants to become interested in business opportunities for their own people in the field of hydrocarbons; (d) the contact with indigenous representatives allowed the oil companies that had made their premises available and provided unconditional support to the project, to understand the way of thinking and concerns of indigenous peoples, particularly those related to indirect impacts on their cultural integrity; (e) although the participants were satisfied with the results of the experiment, the need to increase the training activities and intercultural discussions was evident; and (f) the need to continue with this type of training for other activities involving the development of natural resources in indigenous territories was emphasized.

9. At the end of the exercise, the consultants included the following recommendations in their assessment report:

- a. Management of the program should be the responsibility of agents involved in the program who live in areas where the activities are taking place;
- b. Plenary meetings should be held at the start of the activities so that the representatives of indigenous peoples can get to know the consultants and help prepare the materials;
- c. The courses should emphasize the exchange of experiences between indigenous peoples from different countries;
- d. Indigenous instructors should receive additional training and participate in hydrocarbon activities;



- e. Training conducted by indigenous instructors in indigenous communities should be technically monitored;
  - f. Training activities must be decentralized;
  - g. It is not advisable to combine certain sectors (such as electrification and hydrocarbons) in a single training program;
  - h. Indigenous representatives who attend more than one course should receive financial compensation for their efforts;
  - i. Consideration should be given to using this model to train indigenous people in the forestry and mining sectors.
10. Critics of the program allege that it asks indigenous people to adopt views from other cultures—that is, that donor organizations are trying to convince Bolivia's indigenous peoples to accept an oil and gas development program based on development proposals that would negatively affect the cultural survival of their indigenous towns and communities. In response to this criticism, it must be stressed that the experiment was designed at the request of indigenous organizations, following their own guidelines and based on intercultural criteria aimed at tackling a problem that the indigenous peoples themselves recognize. Part of the strategy includes improving the indigenous peoples' legal and technical knowledge on the subject and increasing their opportunities for discussion and participation.
11. It is worth noting the following consequences of this pilot program:
- a. CIDOB created Technical Hydrocarbon and Rural Electrification Units (UTHERs) within its regional organizations to deal with matters concerning oil and gas exploration and exploitation, including consultation, participation, and impact-mitigation issues. Consequently, CIDOB requires assistance to improve the training process and thus increase its know-how so that the UTHERRs can participate in the environmental and sociocultural monitoring of hydrocarbon operations.
  - b. The Bolivian government has applied for a loan from the World Bank to improve the management of the environmental and social impacts of hydrocarbon operations within a participatory framework involving all concerned.
  - c. The Government of Ecuador, by consensus with the Council for the Development of Nationalities and People of Ecuador and the indigenous peoples of the Ecuadorian Amazon region, has requested aid from the World Bank, within the ESMAP framework, to reproduce the Bolivian training program in Ecuador.
  - d. Within the framework of the tripartite meetings between the oil and gas industry, governments, and indigenous peoples of the Amazon region promoted by the World Bank and OLADE, it was recommended that the program be repeated in all Amazon countries.



# 1

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## Introduction

1.1 Sub-Andean countries have been accelerating the development of hydrocarbon projects and promoting investments in gas and oil exploration and exploitation operations. These activities have increased due to (a) the need for tax revenues in Amazon countries, each of which views the hydrocarbon sector as the best solution for overcoming its economic problems and improving its fiscal balance, and (b) the extent of the potential exploration areas in these countries, particularly those situated in the Amazon and Orinoco watersheds. Increased activity in these areas has given rise to operations in sensitive zones. Such zones are considered sensitive not only because of potentially negative impacts on fragile ecosystems due to spills or earth, air, and water pollution, but because of possible negative effects on the sociocultural environment of indigenous peoples with culturally susceptible characteristics.

1.2 In several countries in the region, industrial operations have experienced unexpected delays due largely to increasing environmental and social problems, regulatory requirements, and the reactions of indigenous peoples whose negative experiences in the past have given them cause to oppose many of these activities and make use of the legal actions within their reach. The costs of these delays hinder these countries' ability to attract the international capital investments required to undertake the desired activities, placing many countries at a disadvantage for negotiating contracts with the industry. These countries also have to cope with national and international criticism from nongovernmental organizations (NGOs) and indigenous organizations because of the inability of the industry and governments to find adequate solutions to these problems.

1.3 Indigenous peoples in the region have increased their organizational efforts in order to face the problem of hydrocarbon operations in their own territories. They now have local, national, and regional organizations of various types, the most prominent being the Coordinating Body for the Indigenous Organizations of the Amazon Basin (Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica, or COICA),<sup>5</sup> which deals mainly with the oil and gas issue. These organizations have made considerable progress in their dealings with the oil and gas industry—particularly considering how the industry affected their social and cultural survival in the early days, and how they were not consulted, but completely excluded from participating in the benefits of hydrocarbon operations.

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<sup>5</sup> For information contact [coica@uio.satnet.net](mailto:coica@uio.satnet.net).

1.4 Consequently, two issues dominate the regional indigenous peoples program regarding this problem: (a) the direct and indirect impacts of the operations and (b) indigenous community participation, particularly in terms of monitoring the operations and in the income obtained from oil and gas. Indigenous peoples believe that neither the governments nor the oil companies properly evaluate the impacts of oil and gas operations on their territorial, social, economic, and cultural integrity, and that the measures governments and companies take to relieve such impacts are therefore unsatisfactory. They demand more respect for their territories as well as for their cultural traditions, which differ from those of modern societies. Furthermore, they believe they are not properly consulted prior to the operations, since no consideration is given to their limitations in terms of language, time management, and technical level of understanding. They find they are consulted about the contents of the operations without the governments and the industry making greater efforts to understand their ideas, peculiarities, and areas of cultural sensitivity. Lastly, they consider the idea of the sub-soil being national property to be unfair. They also think it unfair that governments fail to fulfill the obligation of granting them the economic participation stipulated in Convention 169 of the International Labor Organization (ILO),<sup>6</sup> Article 15, which is essential for improving their standard of living.

1.5 The concerns of indigenous peoples, as expressed during regional discussions of recent years, can be summarized as follows:

- a. Indigenous peoples perceive the industry's operations as an intrusion on their habitat because, in the past, the operations generally caused negative impacts on many of their territories.
- b. At the same time, indigenous peoples perceive that the operations provide the opportunity to obtain goods and services that are not usually provided by the state; they would thus like to participate in the operations as partners, either with governments or private industries. However, they lack information concerning environmental risks, their legal rights, and the potential benefits they can expect from gas and oil operations.
- c. Indigenous peoples strongly request respect for the protection of their cultural values.

1.6 Three recent developments reveal a positive attitude on the part of governments and the oil and gas industry that will help establish an adequate social environment for sustaining the industry in the long term: the evolution of regulatory frameworks, the dissemination among companies of good practices for reducing social impacts, and the efforts made to improve consultation and discussions between governments, the industry, and indigenous peoples.

1.7 Every Sub-Andean country has either a hydrocarbon law that refers directly to the environment, or an environmental law that refers directly to hydrocarbons, with regulations that cover certain areas. All countries have specific regulations related to indigenous peoples or communities. Those with constitutions developed during the 1990s have confirmed the multi-ethnic character of their nations and have included specific measures to protect the cultures of their indigenous peoples. Furthermore, several international mechanisms have been adopted in this respect, the most prominent being ILO Convention 169, which since its adoption in 1989 has

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<sup>6</sup> See <[www.ilo.org/public/english/region/ampro/mdtsanjose/indigenous/derecho.htm](http://www.ilo.org/public/english/region/ampro/mdtsanjose/indigenous/derecho.htm)> for more on Convention 169, including the text in English; for Spanish text see <[www.oit.or.cr/mdtsanjo/indig/derecho.htm](http://www.oit.or.cr/mdtsanjo/indig/derecho.htm)>.

become part of the legal systems of most countries in the region. The provisions of this convention include aspects that are relevant to the hydrocarbon industry, such as the obligation to consult indigenous peoples and allow them to participate actively and economically in developing natural resources in their territories, protecting their territories and subsistence economies, and regulating involuntary resettlements. Nevertheless, so far there are no standards to make the two bodies of regulatory law (environmental and hydrocarbon law) consistent, which is why ESMAP has supported concerted actions between the parties and the publication of regulations for hydrocarbon activities in indigenous territories. Different stages of these concerted actions are now taking place in Bolivia, Colombia, Ecuador, and Peru.

1.8 Governments and the industry are heightening their awareness of the problem of conducting oil and gas exploration and exploitation activities in environmentally and culturally sensitive areas. The application by regional governments of new regulatory frameworks for environmental and cultural protection and their evident efforts to obtain funds for that purpose, coupled with the industry's improved operating practices in the Amazon region, are important indicators of the willingness of both sectors to improve operating standards, better evaluate environmental impacts to include socio-cultural effects, and allow indigenous peoples to share the benefits of the operations. The industry, particularly a significant number of large international companies, has made progress with (a) innovations geared towards consultation and the implementation and monitoring of agreements with local communities, particularly indigenous peoples; (b) social investment and partnership agreements with the communities; and (c) new social development policies in their programs. All parties concerned recognize the positive aspects of these efforts. However, because these measures have not been followed consistently by small companies or local companies, the measures need to be enhanced to guarantee the sustainability of future operations.

1.9 Nevertheless, it is worth pointing out that the relationship and dialogue between the parties involved in this joint effort in the region have improved noticeably as a result of the endeavors to apply the consultation obligation stipulated in ILO Convention 169, Article 6. This has not only been applied by governments, but also by the industry in its field activities and contract areas, as well as in other regional initiatives. For instance, the "Oil Dialogues" sponsored by Harvard University<sup>7</sup> since 1997 have enabled a closer relationship between the industry, NGOs, and representatives of indigenous peoples. The Energía, Ambiente y Población (EAP)<sup>8</sup> program implemented since 1998 (sponsored by the World Bank and OLADE and supported by ESMAP and other donor organizations) had greater repercussions, including tripartite meetings between representatives of governments, the industry, and indigenous communities in the Andean region. These meetings have been held regularly for the past three years (1999–2001). During both the Harvard and the EAP meetings, participants placed a high priority on the consultation issue, and EAP meeting participants discussed the development of regulatory training frameworks. The EAP meeting participants also expressed interest in dealing with the issue of the direct participation of indigenous peoples in the economic benefits of the oil and gas operations (mentioned in the ILO Convention 169, Article 15) as well as giving

<sup>7</sup> The "Dialogues on Oil in Fragile Environments" are convened and coordinated by the Program on Nonviolent Sanctions and Cultural Survival (PONSACS) of the Weatherhead Center for International Affairs, Harvard University. See <[www.wcfia.harvard.edu/ponsacs/DOCS/oil.htm](http://www.wcfia.harvard.edu/ponsacs/DOCS/oil.htm)>.

<sup>8</sup> Energy, Environment, and Population.

consideration to “exclusion zones” on the basis of their cultural and environmental sensitivity. These issues have been included in the agenda for the next EAP meetings.

1.10 The World Bank has highlighted these issues through its policies and initiatives, of which the following are worth mentioning:

- a. The updating of Operational Policy (OP) 4.10 incorporates the “informed participation” concept.<sup>9</sup> It also establishes that when projects supported by the Bank involve the commercial exploitation of natural resources in territories owned or used by indigenous peoples, the latter must be kept informed of their rights under national or generally practiced laws, taking into consideration the potential impacts on their lifestyles, environment, and use of resources. They must also be consulted at an early stage, made to participate in decisions that affect them, and allowed to share the benefits of the operations, which must be culturally compatible and designed to meet the needs and preferences of indigenous communities. Adverse impacts must be prevented or reduced to a minimum.
- b. The purpose of the EAP program is to help governments in the region exchange experiences and develop common criteria for better managing the environment in oil and gas operations in indigenous territories. The first step was to appoint high-ranking officials as national energy coordinators for this task. So far, the EAP program has encouraged tripartite discussions in each country between the different agents (government, industry, and indigenous peoples), developing an information network with the help of the Andean Development Corporation (Corporación Andina de Fomento, or CAF), promoting training projects, and preparing reference documents to improve regulatory frameworks with the collaboration of the Regional Association of Oil and Natural Gas Companies in Latin America and the Caribbean (ARPEL). The program is considering the following initiatives: (a) The Inter-American Development Bank’s efforts to begin loaning governments the funds needed to conduct preliminary consultations in areas open to exploration; (b) drawing up maps of exclusion zones from the indigenous peoples’ perspectives; and (c) comparing the oil income transferred to the regions for development purposes, particularly the part corresponding to the indigenous peoples directly affected by the operations. Annex A contains a summary of EAP activities.
- c. A select group of oil companies and NGOs has consolidated and disseminate good practices via a website devoted to ways of dealing with the social impact of hydrocarbon operations.<sup>10</sup> The website addresses the following subjects: (1) consultation with and participation of indigenous peoples; (2) the collection, management, and distribution of oil rents; (3) good government and human rights; (4) better regulations and environmental practices; and (5) social investments by the social sector.

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<sup>9</sup> See <<http://wbln0018.worldbank.org/essd/essd.nsf/IndigenousPeoples/Draft+Cover>>.

<sup>10</sup> See <[www.worldbank.org/html/fpd/energy/oil&gas/BestPractices/index.html](http://www.worldbank.org/html/fpd/energy/oil&gas/BestPractices/index.html)>.

1.11 In brief, the consultation process played an important role in establishing dialogue between governments/the industry and indigenous peoples. Hampering these efforts, however, is an evident lack of mutual understanding of the idiosyncrasies of each party. The industry believes the indigenous peoples have no knowledge of the technical aspects of their activities; governments claim that neither the industry nor the indigenous peoples are aware of the bylaws governing both parties; and indigenous peoples say that both the governments and the industry lack sufficient knowledge of their cultures to ensure a truly productive dialogue. It is evident that indigenous people's ability to understand environmental impact assessments (EIA) and environmental protection plans (EPP) will be particularly helpful in increasing their involvement in the design and drawing up of such plans. It is also critical they increase their familiarity with both good industrial practices and the examples of the participation of indigenous peoples in the hydrocarbon industry in other regions of the world.

1.12 From the point of view of a dynamic situation in which more changes are expected, it is essential for all concerned—indigenous peoples, governments, and the industry—to learn more about each other. In response to the misgivings about the lack of intercultural training scenarios, ESMAP decided to support an experimental training program for indigenous peoples, focusing on the concerns described in the previous paragraph. The program was requested on behalf of the Bolivian Confederation of Indigenous Peoples (Confederación de Pueblos Indígenas de Bolivia, known as CIDOB)<sup>11</sup> with the assistance of the Bolivian government's Vice Ministry of Energy and Mines, which would coordinate the operation. It was decided to design a participatory methodology whereby the indigenous peoples themselves would determine the training topics, participants, and scope of the training course. Bolivia was chosen as the site of the pilot program because it is a country in which the concerns described above exist in the practice and are intensely expressed by its governments, its oil and gas industry, and its indigenous peoples. Bolivia has the highest percentage of indigenous peoples in America (50.51 percent)<sup>12</sup> and has recently attracted substantial investments in gas pipelines and in exploration work in new areas. The country also has one of the most dynamic indigenous peoples movements in the region.

1.13 Chapter 2 of this report describes the program's background. It addresses the development of the oil and gas industry in Bolivia, the specific demands of indigenous peoples in this respect, the progress made with the relevant legislation, and the circumstances under which this training program was designed.

1.14 Chapter 3 describes the experience of program implementation, which was split into three phases: a preparatory phase, a development (training) phase, and a dissemination phase. Chapter 4 includes the lessons, recommendations, and future steps envisaged as a result of the experience. As already mentioned, Annex A describes the Population, Energy and Environmental Program; Annex B contains the text of the proposed regulations governing hydrocarbon activities in the indigenous peoples' communal territories (IPCTs, or *tierras comunitarias de origen*) of Bolivia.

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<sup>11</sup> See <[www.cidob.f2s.com](http://www.cidob.f2s.com)>.

<sup>12</sup> *América Indígena* (Indigenous America) v. LIII, 4, Mexico, 1993, page 223.





# 2

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## Background

### Development of the Oil Business in Bolivia

2.1 Bolivia's hydrocarbon industry began in 1926 with the arrival of Standard Oil of New Jersey in the Chaco region. It developed slowly until 1996 (following the passage of important legislation in the early 1990s), when the national oil company (Yacimientos Petrolíferos Fiscales Bolivianos, or YPFB) increased its capital and began exporting gas. During this time Bolivia's indigenous communities suffered significantly from the adverse environmental and social effects of increasing forestry, mining, and hydrocarbon operations in what Bolivian law terms their *tierras comunitarias de origen* (indigenous peoples' communal territories, or IPCTs). By the late 1990s, investments—public and private, Bolivian and non-Bolivian—in the hydrocarbon sector had increased more than 10 times compared to the investments made by the state company, amounting to about US\$800 million a year. In Bolivia, oil and gas explorations, particularly the latter, have concentrated in the so-called “traditional” region, where the majority of oil operations and indigenous lands or protected areas are located. At present, 20 IPCTs are affected by 32 exploration concessions—that is, 22 percent of IPCTs and 28 percent of oil concessions. In 10 IPCTs, 95 percent or more of the concession blocks overlap the territories of indigenous peoples. This overlapping is likely to increase when exploration activities begin in non-traditional areas, causing even more significant social and environmental impacts.

### *The Gas Pipeline to Brazil and the Opening of New Regions to Exploration*

2.2 The sociocultural impacts on indigenous peoples are increasing as a result of the construction and operation of gas pipelines from Bolivia to Brazil (Santa Cruz to Porto Alegre and Cujaba) and the greater production required to meet natural gas export commitments. The largest of these, and the longest in South America, is the Bolivia-Brazil pipeline. The pipeline is 3,110 kilometers long and runs from Santa Cruz, Bolivia to Porto Alegre, Brazil. The investment amounted to approximately US\$2 billion, of which US\$1.5 billion was invested in Brazil. It is the largest private investment in Latin America, since the private sector owns 57 percent of the entire project and Petrobras and YPFB own the rest. It was financed by the Inter-American Development Bank (IDB), the World Bank, and the Andean Development Corporation (Corporación Andina de Fomento, or CAF), in addition to other business finance sources. The pipeline runs through several sensitive ecosystems, such as the dry tropical primary forest of Gran Chaco, the Pantanal—the largest marshland in the world—and the tropical rainforest

southeast of Brazil. It is anticipated that the gas will improve the air quality of the towns in southeastern Brazil, and reduce the use of other polluting fuels.

2.3 The Bolivia-Brazil pipeline, which was designed to be joined with the Argentina-Brazil gas pipeline, will carry gas from Argentina to Cujaba in northern Brazil. The pipeline has a capacity of 30 million cubic meters per day (MMcm/d), which should be compared with the maximum of 16 MMcm/d of gas specified in the first part of the gas importation agreement signed between Brazil and Bolivia. In this respect, the successful gas exploration in that country was partly responsible for the economic sustainability of the project. Two local carrier companies will transport the gas from Bolivia to Brazil. As a result of impact mitigation negotiations, it was agreed that Petrobras would take over the design, engineering, and construction of the gas pipeline on the Bolivian side for a fixed price of US\$350 million. According to the environmental assessment, the project will be socially and environmentally sustainable only if the regulations governing such matters in both countries are followed and good international practices are replicated. This project is expected to have a significant effect on the Bolivian economy, in terms of both overall economic growth and the development of the productive and export potential of the hydrocarbon, mining, and farming sectors. However, because the transportation capacity of the Bolivia-Brazil gas pipeline is greater than the current demand for gas, new markets are expected to open within a few years and hydrocarbon exploration and exploitation activities will become more intensive. This could have a greater effect on indigenous settlements in eastern Bolivia.

2.4 The Bolivian government will receive about US\$180 million in taxes obtained from transporting gas during the contract's first 20 years, and a considerably higher sum (not yet determined) from royalties stemming from new gas exploitation. According to the assessment report issued by the World Bank in 1997 during the preparation of its financial aid operations,<sup>13</sup> the certified reserves in Bolivia indicate that, apart from meeting Bolivian needs, 82,000 million cubic meters of proven, probable, and potential reserves could be exported to Brazil. Situated in an area between Santa Cruz and the border with Argentina, these reserves are large enough to supply the amounts contracted for the first 10 or 12 years of the gas pipeline's operations, with a deficit of 20,000 cubic meters thereafter. Over the last three years, this figure has risen considerably as a result of important discoveries that have increased gas reserves in Bolivia from 5 trillion cubic feet to nearly 46 billion cubic feet.

### **Development of the Indigenous Peoples Movement and Hydrocarbon Activities in Bolivia**

2.5 Standard Oil's arrival in Chaco in 1926 affected hundreds of Guaraní Indian communities. Upon arrival of BHP Petroleum in the Bolivian Amazon region in 1993, local indigenous organizations claimed that they had not been previously consulted. The same occurred when Repsol began its operations. In September 1995, CIDOB and the Bolivian government signed a Deed of Convention. Following the capitalization of YPFB, gas and oil explorations multiplied in the Amazon and Chaco regions of Bolivia (17 oil blocks were leased). In 1996, the Hydrocarbon Law was discussed, for which CIDOB made some proposals. In August of that year, indigenous peoples organized a march that ended with the signing of an agreement between the indigenous peoples movement and the government, stipulating that new

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<sup>13</sup> World Bank, *Project Appraisal for a Proposed Loan for a Sector Development Project, Bolivia-Brazil Pipeline* Report 16769 BR (November 26 1997), p. 31.

regulations governing hydrocarbon activities in indigenous lands (see Annex B) would be studied and issued. To this effect, CIDOB created its own Technical Hydrocarbon and Rural Electrification Unit (UTHER) specializing in oil and gas problems, acting as consultants to indigenous people regarding development plans for the Bolivia-Brazil and River San Miguel-San Matias gas pipelines. The drafting of hydrocarbon regulations for indigenous peoples territories began in 1997; technical amendments were made to this document in 1998 to meet the specific needs of both the indigenous peoples and the hydrocarbon sector, under the principles of fair and equitable practices.

2.6 These events prompted CIDOB—which is currently creating several regional UETHERs—to request and become involved in the pilot training program covered by this report. The indigenous people movement in Bolivia has ample political experience. Clearly defined objectives concerning hydrocarbons have been established, and funds have been provided by various local and international NGOs.

### ***Consultation and Participation Rights***

2.7 Different documents in Bolivia mention the rights and obligations of indigenous peoples, including the Political Constitution of the State, Law 1648 (ratifying the Agreement to Create the Development Fund for Indigenous People), the Environmental Law, the Popular Participation Law, the Hydrocarbon Law, the Forestry Law, the National Agrarian Reform Service Law, the Regulations for Protected Areas, the environmental regulations for the hydrocarbon sector (ERHS), and the environmental regulations governing the other sectors of the economy. Indigenous people are not properly aware of these numerous provisions because it is difficult for them to gain access to relevant information. Despite the assistance received, their continuing lack of funds and skilled human resources impedes their knowledge of their rights and obligations, which makes it difficult for them to fulfill their obligation to respect socio-environmental regulations applying to the hydrocarbon sector.

2.8 ILO Convention No. 169, which Bolivia ratified by means of Law 1257 of June 1991, refers to the consultation rights of indigenous communities and their involvement in impact studies and in the economic benefits of natural resources developed in their territories. As far as consultation rights are concerned, Article 6.1 of the Convention prescribes that through appropriate procedures and, in particular, through representative institutions of indigenous peoples, governments must “consult the peoples concerned, through appropriate procedures and in particular through their representative institutions, whenever consideration is being given to legislative or administrative measures which may affect them directly.” Furthermore, Article 6.2 states that “consultations....shall be undertaken, in good faith and in a form appropriate to the circumstances, with the objective of achieving agreement or consent to the proposed measures.”<sup>14</sup>

### ***The Need for a Transparent Environmental Supervision***

2.9 As regards indigenous peoples’ involvement in impact studies, Article 7.3 of the ILO convention establishes that “Governments shall ensure that, whenever appropriate, studies are carried out, in co-operation with the peoples concerned, to assess the social, spiritual, cultural

<sup>14</sup> The source for all Convention No. 169 quotes in this report is <<http://ilolex.ilo.ch:1567/scripts/convde.pl?C169>>. For the Spanish-language version see <<http://www.oit.or.cr/mdtsanjo/indig/conv169.htm>>.

and environmental impact on them of planned development activities. The results of these studies shall be considered as fundamental criteria for the implementation of these activities.”

2.10 The parties understand that environmental protection, including its sociocultural aspects, is a preliminary condition for ensuring the survival of indigenous peoples. Environmental impact assessments determine the effects that industry operations might have on the environment, society, and culture of indigenous peoples. Designed on the basis of these assessments, mitigation measures are incorporated into environmental protection plans (EPPs). According to the legal framework, indigenous people must participate in drawing up the studies, identifying the impacts, and designing mitigation measures. These measures must be put into effect and their implementation verified; hence the current prominence of environmental controls. Several NGOs engaged in such issues have gained vast experience in monitoring activities, offering their services to governments, the industry, and affected communities, within a tendency that favors independent monitoring schemes. Furthermore, the direct involvement of the indigenous people representatives in monitoring activities requires that community members in charge of such duties be trained. The improved standards for environmental impact assessments aimed at protecting the integrity of indigenous people territories, societies, and cultures; the use of independent monitoring schemes that involve grass roots organizations and indigenous communities; and the effective application of mitigation measures and agreements have become the most acceptable instruments of good practice to guarantee a transparent management of the environment.

### ***The Right to Share the Benefits***

2.11 Lastly, as far as financial participation is concerned, Article 15.2 of the Convention states the following:

“In cases in which the State retains the ownership of mineral or sub-surface resources or rights to other resources pertaining to lands, governments shall establish or maintain procedures through which they shall consult these peoples, with a view to ascertaining whether and to what degree their interests would be prejudiced, before undertaking or permitting any programmes for the exploration or exploitation of such resources pertaining to their lands. The peoples concerned shall wherever possible participate in the benefits of such activities, and shall receive fair compensation for any damages which they may sustain as a result of such activities.”

2.12 The income indigenous people receive from oil and gas operations appears in the following forms: (a) compensation for land use; (b) indemnities for damages caused to their property; (c) compensation for impacts, and (d) possible direct participation in the benefits obtained from the development of natural resources in their territories. Compensation and indemnities are well-established practices in the region. Both are related to specific damages and current land market values. In the case of collective property such as the IPCTs in Bolivia, individual compensation must be restricted to cases of proven individual damage. With the exception of North America, indigenous communities have no ownership rights to sub-soil resources, which belong to the respective nation. Nevertheless, national laws generally acknowledge a regional participation in the benefits. The way such royalties are distributed causes certain disputes. In particular, when income is distributed through territorial entities, the royalties never reach the indigenous communities who actually live in the operating sites. Furthermore, although Article 15 of the ILO Convention No. 169 mentions the right of direct participation, so far none of the countries in the region has included this type of reference in their

legislation; thus there is much to be done in this respect. Colombia is the only country to have reformed its laws to grant indigenous people a direct income from oil operations,<sup>15</sup> thus complying with the provisions set forth in Article 15 of the ILO Convention No. 169.

## **The Search for Consultation and Participation Mechanisms**

2.13 The Bolivian experience with indigenous peoples in the hydrocarbon sector involved two aspects: (a) the proposed regulations governing hydrocarbon activities in indigenous territories and (b) the pilot training program covered by this report.

### ***Regulations Governing Hydrocarbon Activities in Indigenous Territories***

2.14 In September 1996 the Bolivian government and CIDOB signed an agreement whereby the government undertook to approve a supreme decree that would regulate hydrocarbon operations in IPCTs. Preliminary studies began in 1996 with the assistance of ESMAP and financing from the Canadian International Development Agency (CIDA). The regulations were drawn up in consultation with indigenous communities, companies involved in the sector, and different government organizations, all of whom participated actively in (a) identifying the groups to be regulated, (b) agreeing on the scope and contents of the project's terms of reference, (c) conducting a comparative analysis of relevant existing legislation, and (d) agreeing on the final wording of the regulations.

2.15 In the past three years, using their own resources, government and regulatory authorities have worked closely with CIDOB, the most representative organization of affected indigenous communities. This included visiting each of the indigenous communities in the affected area in order to listen to their concerns and establish the most important aspects that they believe should be included in the regulations. Likewise, meetings were held with the Bolivian Chamber of Hydrocarbons (CBH) through consultation and concerted actions. Government institutions involved in this matter were also consulted.

2.16 The following were the lessons and recommendations arising from this participatory process: (a) designers must be aware of the idiosyncrasies and customs of the people affected by the regulations; (b) designers must establish accurate terms of reference, by consensus with those involved; (c) the terms of reference must clearly define the methodology, consultation, and participation procedures and the program's levels of jurisdiction and target groups; (d) efforts must be made to encourage interested parties to participate fully in the design and final approval of the document; and (e) mechanisms must be established to gradually gather and standardize basic data and information regarding every agreement reached, to prevent any delays.

2.17 The regulations' purpose is to regulate consultations with indigenous peoples and communities and their participation in the prevention, monitoring, and control of the social and environmental impacts of hydrocarbon activities in their IPCTs. The draft regulations establish three technical components:

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<sup>15</sup> Article 4 of Law 619, issued in 2000, stipulates that 5 percent of departmental royalties and 20 percent of municipal royalties be allocated to an indigenous people when natural resources are developed within its territory or at least five kilometers from its borders.

- a. Compulsory consultation with indigenous communities and their participation in the principles governing the relationship between the managers of a hydrocarbon activity and the indigenous group, clearly defining their obligations and responsibilities.
- b. A social and environmental impact assessment study (SEIAS) as part of the environmental impact assessment (EIA). The SEIAS will help identify the social and environmental effects of hydrocarbon operations, establishing appropriate mitigation measures and the corresponding compensation.
- c. Conflict-resolution procedures through a licensed conciliation entity.

2.18 The final version of the regulations (and the decree containing them) is currently being drafted and the government will submit it to CIDOB and the CBH for its final approval. (The text of the current draft decree is attached as Annex B.<sup>16</sup>) This will be the first legislation of its kind in Latin America—the first to establish regulations for the consultation and participation process, thus preventing and mitigating conflicts between indigenous peoples and the oil and gas industry by creating “strategic relations” between them. The goal is a hydrocarbon sector that is sustainable from the standpoints of economics, environment, society, and culture.

### ***Reasons for Designing a Pilot Training Program***

2.19 In principle, these and other participatory actions in Bolivia have laid the foundation for indigenous peoples to intensify their involvement in the oil and gas industry, so that they may (a) increase their involvement and effectiveness in evaluating the impacts of industry operations on their communities and in designing mitigation measures and, consequently, (b) improve their chances of sharing the benefits of these operations.

2.20 However, the vulnerability of indigenous communities in the face of these activities has hindered their development. The Bolivian government, NGOs, and donors have made great strides in dealing with this situation during the last decade—as have the indigenous organizations, which have expressed their desire to improve their knowledge of the oil and gas industry for the reasons stated above. In response to this, various donor organizations, including the World Bank, have promoted programs to develop the capacity of indigenous peoples to participate in the exploitation of natural resources.

2.21 The program described in this report was designed to improve the knowledge and understanding of indigenous representatives regarding the planning and development of hydrocarbon activities in or near indigenous territories. In this case, rural electrification was specifically included as an additional training subject.

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<sup>16</sup> The draft regulations presented in Annex B have only two clauses still in discussion between CIDOB and CBH: clauses 2 and 34. The rest of the regulations have been approved by both parties.

# 3

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## The Bolivian Experience

3.1 With funds obtained from CIDA and ESMAF, the World Bank carried out a pilot training program to instruct representatives of indigenous communities in the social and environmental effects of the hydrocarbon industry and rural electrification. The representatives were selected in accordance with the wishes of the communities themselves.

3.2 The training program involved three phases. In Phase 1, 20 representatives of regional organizations were trained. In Phase 2, five indigenous instructors were selected and trained so that they themselves could repeat the process in their own communities. Part of this phase took place in Canada, where participants shared experiences regarding the hydrocarbon industry with a group of representatives from First Nations. During Phase 3, the five trained instructors trained a new group of 15 indigenous representatives. The purpose of dividing the training program into three phases was, first, to ensure that participants would take the utmost advantage of the course; and second, to ensure that the five representatives trained as local consultants during the first phase, would train the second group.

3.3 Training, conducted mainly in the city of Santa Cruz, lasted for approximately one year. The three phases involved the following activities:

- a. *Preparation:* Appointing representatives of regional indigenous organizations, holding the first coordination and assistance meeting, preparing training programs with consulting firms, and holding the second coordination meeting with representatives of regional organizations, consulting firms and expert local consultants.
- b. *Training:* Training the indigenous representatives, establishing the training group, and training local instructors. Organizing a trip to Canada for the five representatives of Bolivian indigenous peoples to prepare material for the course to be reproduced in Bolivia and to share Canadian indigenous peoples experiences in the hydrocarbon industry.
- c. *Dissemination:* Local instructors training other representatives of regional organizations, submitting a report on the training course for consultation and dissemination purposes, and introducing the training program to promote the continuity of this pilot program in the future.

3.4 In general terms, the program's objective was to improve the capacity of indigenous communities in Bolivia to understand and effectively participate in hydrocarbon

projects and the development of rural electrification in their territories. The specific training objectives were (a) to increase the awareness of indigenous organizations regarding the importance of their involvement in the development of the hydrocarbon industry and electricity in their indigenous peoples areas, and (b) to establish closer relationships between the oil and gas industry, indigenous peoples, and the government.

## **Phase 1: Preparation**

### ***Participatory Design of the Training Program***

3.5 A short course was held in the city of Santa Cruz between July 20 and July 24, 1999. The course was attended by representatives of the Bolivian government and the Bank as well as by E2 Environmental Alliance consultants, an outreach worker, and 18 members of Bolivian indigenous peoples invited by CIDOB. All parties collaborated to establish the main guidelines regarding the scope and contents of the training program.

3.6 On the first day, to introduce the subject to the representatives of indigenous communities, various presentations were made regarding indigenous peoples legislation, environmental management, and the hydrocarbon and electricity sectors, as well as the experience of Canadian indigenous peoples in hydrocarbon operations. On the following days, the following activities were held with the participation of the outreach worker:

- a. Individual and group activities were held to define the objectives and design the participatory methodology of the training program. Work groups were formed according to subjects and each group established their objectives, expected results, and verification indicators. Group 1 studied the possibility of improving the capacity of indigenous organizations to deal with the government and oil industry and help find ways to mitigate the social and environmental impact of oil and gas operations. Meanwhile, Group 2 discussed the negotiating skills of the trainees, Group 3 discussed their improved knowledge and involvement in the hydrocarbon and rural energy sectors, and Group 4 dealt with the equipment and training materials required to guarantee that training would continue.
- b. Subsequently, at a plenary meeting, indicators were established based on the subjects assigned to each group, the selection criteria of participants, the number of representatives to be trained, the number of trainees who would reproduce the training process, the training materials, and the sites of the courses. The possibility of establishing close ties with indigenous communities in Canada was mentioned.
- c. On the last day, all participants discussed the results and recommendations of the working groups and defined next steps such as (1) program participants would be selected in accordance with the agreed criteria and (2) the E2 Environmental Alliance consultants would prepare a revised, detailed proposal to be examined and validated at the next workshop.



## ***Introduction of the Training Program***

3.7 On October 15, 1999, a course was given in Santa Cruz to introduce the contents of the training program. This event was attended by approximately 30 representatives of indigenous peoples, the Bolivian government, the World Bank, and E2 Environmental Alliance. Following a general introduction about the training program, the group discussed what contents and information would be required for the forthcoming meeting with all the participants in November (i.e., the first training course). A detailed presentation of the program followed, covering both the hydrocarbon and rural electrification sectors. The length of the first course was established (three weeks) as well as the specific contents of the program, including field visits to oil and rural energy facilities. For this course, it was proposed that each indigenous peoples representative submit individual action plans of specific interest to his or her community, so that they could be incorporated into the training program as case studies. This event provided the opportunity to review training areas of greater interest for indigenous representatives, organizational details, and the contribution expected from the industry. Course participants concluded the session by approving the proposed training program and establishing a tentative date and place for the next course.

## **Phase 2: Development**

### ***First Training Course: Santa Cruz***

3.8 Santa Cruz was also the location of the first training course, held between November 15 and December 4, 1999. The 17-day session included field visits and presentations. CIDOB selected 18 indigenous representatives from different Bolivian regions to participate. E2 Environmental Alliance promoted the course with the cooperation of visiting speakers and private companies operating in the area, particularly Maxus, Chaco, Andina S.A., Enersol, and Gas Trans-Boliviana.

3.9 During the first three days, the topic was rural electrification. Two instructors from the Vice Ministry of Mines and Hydrocarbons and the National Environmental Unit described the procedures indigenous communities could follow to develop electrification projects. The class visited a local distributor of photovoltaic switchboards—the branch office of Enersol in Bolivia—which had installed more than 10,000 switchboards in different small communities. On the fourth day the subject changed to basic concepts related to hydrocarbon development (laws, environmental and social impacts, basic exploration concepts, etc.). On the sixth day, Saturday, a field visit was made to the Chaco-Carrasco Gas Plant.

3.10 The second week of the training program also focused on the hydrocarbon sector. It began with a review of the gas plant site visit, and continued with discussions and presentations of the environmental and sociocultural effects of hydrocarbon operations. Two additional field visits were made, one on the 10<sup>th</sup> day to the Paloma-Sururbi fields of the firm YPF-Maxus, and the other on the 12<sup>th</sup> day, to the Andina gas field in Rio Grande and the classification plant operated by Gas Trans-Boliviana (in the initial sector of the Bolivia-Brazil gas pipeline). The week concluded on Sunday with individual meetings where instructors helped the indigenous representatives design their personal action plans. During the first two weeks of the course, speakers were invited to make brief presentations on the different perspectives of the

oil and gas industry. The guest speakers made valuable contributions to the training course and created much interest among the indigenous representatives.

3.11 During the third week of the course, matters concerning indigenous peoples were discussed and an official from the Vice Ministry of Energy and Hydrocarbons made a presentation on the progress of the draft “Regulations Governing Hydrocarbon Activities in Indigenous Peoples’ Communal Territories.” A representative of Canadian Assembly of First Nations described the experience and interaction of Canadian indigenous peoples with the hydrocarbon industry. On the 15<sup>th</sup> day a general review took place, followed by a final examination and presentations by participating indigenous representatives. Finally, five representatives were selected to receive additional training during the program’s second phase. The main criteria for this selection were the communication skills and place of origin of the individuals, with a view to covering all the sub-regions in Bolivia.

3.12 On the afternoon of the 16<sup>th</sup> day, with the participation of representatives of the government, industry, and the Bank, a closing ceremony was held at which the achievements of the course were highlighted. The consultants expressed their satisfaction with the performance and enthusiasm of indigenous peoples participants and the fact that the industry had opened its facilities and provided assistance for the training process. The Vice Ministry of Energy and Hydrocarbons stressed that regulations governing the treatment of hydrocarbon operations in IPCTs were being drawn up and, at the same time, details were being finalized for negotiating a new loan from the Bank to continue the initiatives proposed at the training course, among other things.

### ***Workshop: Calgary, Alberta***

3.13 The workshop held in Calgary (in the province of Alberta, Canada) began on February 7, 2000, and lasted 11 days. The objective was to provide additional training to the five representatives of Bolivian indigenous peoples selected to be trainers, on matters concerning rural electrification and hydrocarbons. The purpose of this course was to prepare the representatives for their role as instructors, reinforcing the training they received in the first course in Bolivia two months earlier. During the first morning, the participants discussed the course outline and decided to include such issues as compensation and the development of mediation and negotiation skills.

3.14 The four priority issues discussed during this course were (a) additional training in rural electrification and hydrocarbon operations, computer skills, and Internet access; (b) instruction on matters concerning negotiations with the government and the oil and gas industry to obtain compensations; (c) meetings with Canadian indigenous organizations to share their experience with the hydrocarbon industry in Canada; and (d) the teaching skills that would allow the participants to fulfill their role as instructors.

3.15 The workshop included three and a half days of additional training in hydrocarbon activities, focusing on Bolivian laws and regulations, seismic and geological activities, and the transport of hydrocarbons through pipelines. These subjects were selected once again because it was felt that there had not been enough time during the first course to cover them in detail. Fieldwork in Canada included visiting seismic exploration companies, so that the trainees could gain first-hand knowledge of how seismic equipment works. A whole day was devoted to reviewing and expanding on the rural electrification issue. The morning was spent in the

classroom reviewing basic concepts and ideas and the rest of the day was spent visiting three power companies in Calgary. The group visited a photovoltaic supplier, the firm PowerPool of Alberta, and the Aborigine Affairs Section of Trans Alta Utilities, the largest power generators in the Province of Alberta.

3.16 A subsequent day was devoted to studying the negotiation of compensations with the government and the oil and gas industry. This included a study of the Chad-Cameroon oil transport project, which incorporated a compensation program for an indigenous group. Games were used to teach negotiating skills. This section of the program was well received by the indigenous participants, who expressed their interest in the subject and in receiving additional training in the future.

3.17 Another two days were spent in the company of representatives from Canadian indigenous organizations. This experience gave the Bolivians a basic understanding of the relationship between the Assembly of First Nations, the Canadian government, and the oil sector. The First Nations representatives also shared information concerning their other activities in Indian reservations, including education, irrigation, the distribution of power, and supervision.

3.18 Last, a study plan was drawn up and materials prepared for the dissemination phase, which would take place in Bolivia during the program's final course. The Bolivian indigenous instructors agreed with the course dates the course proposed by the Bank and CIDOB. It was agreed that the first five days would be devoted to preparing materials for the dissemination activities that the indigenous instructors would be responsible for, and that the course would only be attended by the five indigenous instructors and staff of the consulting firm.

### **Phase 3: Dissemination**

#### ***Second Training Course: Santa Cruz and Chapare***

3.19 The dissemination course was given in Santa Cruz and in the Chapare region of Bolivia. The five days were spent in Santa Cruz—preparing the training materials for the indigenous instructors and instructing the new indigenous participants—and the last four days were spent in Chapare. This third course focused mainly on developing and demonstrating the skills acquired by the five indigenous instructors selected during the first course in November 1999.

3.20 During the first five days, four members of E2 Environmental Alliance helped the five indigenous instructors prepare their teaching materials. The materials were designed for each individual presentation, on the basis of information provided during the first two courses and the personal experiences of the indigenous instructors. The documents were prepared electronically, giving instructors an added opportunity to improve their computer skills. As previously agreed with the indigenous instructors during the course in Calgary, this course was divided into five topics, one for each instructor.

3.21 The new indigenous representatives selected as trainees for the new indigenous instructors, arrived in Santa Cruz at the beginning of the second week. A presentation on rural electrification was followed by two days of classes, an audiovisual presentation on rural electrification, and a field visit on rural electrification issues. Hydrocarbon issues were then introduced, with laws and regulations discussed on the first day. The next day saw a general

presentation of hydrocarbon activities and oil exploration work. Matters concerning the environmental and socioeconomic effects of hydrocarbon activities were covered on the last two days of the second week. An official from the Vice Ministry of Energy and Hydrocarbons made a further presentation of the proposed hydrocarbon regulations.

3.22 The E2 Environmental Alliance consultants attended the presentations the indigenous instructors made, to provide additional information. The participants considered this “training-team” approach important because it gave indigenous instructors the opportunity to rely on the technical expertise of the consulting firm for specific issues. This external participation was considered vital for the success of the course. Furthermore, additional speakers were invited during the course of the week to provide information on specific subjects. The participation of local guest speakers was of great value to the program, as they provided interesting and relevant information for the development of every issue covered by the course.

3.23 During the third week, the group traveled to the Chapare region to finish reviewing course materials and begin their field visits in hydrocarbon areas. They visited the Chaco-Carrasco Gas Plant and a nearby exploration zone. During the last week, the indigenous instructors and trainees reviewed the course materials. Each instructor worked with a group of three trainees. The use of small groups was considered beneficial for both instructors and trainees.

3.24 On the last day of the course, the indigenous representatives briefly presented their personal action plans. These plans highlighted the difficulties of their particular communities and proposed ways to help their fellow community members solve each problem. The day concluded with a closing ceremony at which the program’s objectives and achievements were pointed out. The E2 Environmental Alliance consultants expressed their admiration for the effort and enthusiasm the indigenous instructors and trainees had shown during the courses. Confirming what they had stated at the first course in November 1999, the participants suggested that financial organizations and the government should continue their efforts to support the initiative that began with this program.

# 4

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## Lessons, Recommendations, and Future Steps

### Lessons Learned

4.1 Following are the main lessons learned during the implementation of the pilot program in Bolivia:

- a. The program was carried out thanks to the willingness shown by the Bolivian government, the Vice Ministry of Energy and Hydrocarbons—through its Environmental Unit—and the indigenous communities represented in CIDOB. The government adopted a favorable policy that openly encouraged the participation of indigenous peoples. This was evident in the serious consideration given to reforming hydrocarbon regulations to incorporate the sociocultural variable into environmental impact assessments.
- b. Likewise, the fact that the parties identified common objectives was considered an essential requirement for the program's success, allowing the final scope of the program to be defined.
- c. As the program was prepared, it was important to be able to rely on a good outreach worker to spur a consensus on the general aspects of the experiment, particularly the future incorporation of indigenous peoples ideas into the program's design and the responses likely to be obtained within a reasonable period, making the design of the course possible.
- d. Equally important was the selection of the participants, which was based on the following criteria:
  - Representation of various regions and indigenous communities
  - Minimum qualifications in terms of communication skills, basic technical knowledge, and awareness of local problems related to hydrocarbon operations
  - Including women in the selection to promote gender issues in the training process.
- e. Good logistics were of great importance, particularly as regards the availability of local staff and services and the selection of sites for the courses: having hydrocarbon activities nearby made it easier to plan field visits.

- f. Also essential was the ability to adjust schedules to the work timetables of the indigenous peoples participants, to ensure their continuous attendance of the courses and to avoid affecting their daily obligations.
- g. The cooperation of the industry was of great help, since all the facilities were provided to allow field visits to be scheduled during training hours. Equally important was the industry's willingness to listen to the concerns of the indigenous communities within the intercultural objective of the program. This allowed them to gain insight into indigenous points of view regarding the industry's operations and management of impacts, particularly the indirect impacts related to the preservation of their culture.
- h. Finally, it was important to allow civilians—including NGO representatives—to participate in the courses and express their viewpoints. They were represented by NGOs with different approaches, thus proving the program's willingness to provide opportunities for different opinions or stances to be expressed.

## Recommendations

4.2 On the basis of contributions made by indigenous representatives at the end of each course, the opinions of the consulting team in charge of training, and the experience of the local coordinator of the training program in Bolivia, the following recommendations are made with a view to improving the program and suggesting guidelines for future activities:

- a. Detailed planning of logistical support is required for the training program, taking into consideration all the risks implicit in its execution. This is not a simple task for a program whose participants are from isolated areas lacking banking facilities and reliable means of communication, even if they are backed by the entity representing them.
- b. At the beginning of the courses, adequate time should be allotted for the indigenous representatives to (a) interact with the consultants, so that consultant and participant can overcome cultural differences and get to know each other; (b) review the training materials and learn how the consultant would use them; and (c) contribute ideas for preparing the training materials—ideas that include their own experiences and cultural views. The time spent doing this during Phase 1 was invaluable. The establishment of good relations and confidence are obviously important factors in the success of an experience of this nature.
- c. The courses must continue to emphasize the exchange of ideas and experiences between Bolivian indigenous peoples and other local communities or aborigines. The exchange of information and experiences between members of Canada's Assembly of First Nations and the Bolivian indigenous representatives was especially important considering that, because the First Nations communities had had experiences with the hydrocarbon industry similar to those of Bolivian indigenous peoples, they could explain the problems they had faced participating in the development of hydrocarbon activities in their own lands. This information could help Bolivia's indigenous peoples avoid some of the same problems.

- d. The coursework must address both theoretical and practical aspects and include the participation of companies involved in hydrocarbon projects in the area. It is best when theory is reinforced with case studies of hydrocarbon operations.
- e. The cooperation of the country's main oil companies and the participation of guest speakers for specific issues must also be ensured. For the training program to become sustainable over time and established formally as an ongoing activity, course planners should consider paying guest speakers for their services to ensure their formal commitment. Otherwise, it will be very difficult to continue with this work, since guest speakers cover far more fields of expertise than can be acquired by indigenous instructors during such a short training period. In short, it is recommended that the entity or consulting firm in charge of the training program should include a budget allocation for such activities.
- f. Courses should focus on either rural electrification or hydrocarbons, but not both. The course described in this report addressed both topics at the same time and, because they are complex issues covering a wide range of subjects, the information was presented in a general rather than specific manner—over a longer training period than would otherwise have been necessary. If it is necessary to deal with both issues, separate courses should be planned.
- g. Some future training programs in Bolivia should be held outside Santa Cruz, preferably in regional centers. The program trained a total of 35 indigenous representatives; most traveled considerable distances to reach Santa Cruz, and many mentioned that this could be an impediment for future participants. It would help to conduct the courses in different regions of Bolivia. Cities such as Trinidad, La Paz, and Tarija could be considered potential sites.
- h. Finally, the training program should be continuous and not restricted to the experimental stage. This recommendation is justified by the feasibility of reproducing the program in other areas using the five indigenous representatives trained as instructors in the pilot program. In the specific case of this program, certain aspects should be reconsidered before reproducing it. For example, the program should consider paying indigenous representatives who commit long periods of time to the course and its objectives. In this case their expenses were reimbursed, but none of them received fees. This could be considered reasonable for those participating in a single course, but the five trained instructors who gave up more than eight weeks of their time may not be willing to continue in this type of program without receiving adequate pay.

## Future Steps

4.3 With a view to upgrading and disseminating the lessons learned during this program, and in order to strengthen and consolidate the program itself and to complement the strategic actions ESMAP supports in the region, the following steps are recommended:

- a. Support CIDOB's effort to create regional UETHERs (see Chapter 2). This requires improving indigenous knowledge to levels that will enable the UETHERs to participate effectively in the environmental and sociocultural monitoring of hydrocarbon operations. CIDA has expressed interest in implementing Phase 2

(training) of the program for Bolivian indigenous peoples. On this occasion, the possibility of analyzing opportunities for small-scale utilization of natural gas in rural areas would be included.

- b. Expedite the World Bank loan for which the Bolivian government has applied to improve the management of the environmental and social impacts of hydrocarbon operations within a participatory framework involving all concerned.<sup>17</sup>
- c. Support the request made to the Bank by the Government of Ecuador, together with the Council for the Development of the Nationalities and People of Ecuador and the Confederation of Indigenous Peoples Nationalities in the Ecuadorian Amazon (CONFENIAE) within the framework of ESMAP, with a view to repeating the Bolivian training experience in Ecuador.
- d. Together with other multilateral organizations—such as the Inter-American Development Bank (IDB), the Andean Development Corporation (CAF), or other NGOs—study the possibility of adopting joint plans and strategies to promote the inclusion of the sociocultural mitigation and indigenous peoples participation components in hydrocarbon activities.
- e. Repeat this experience in other countries of the Andean-Amazon watershed where indigenous peoples are affected by hydrocarbon operations.<sup>18</sup>

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<sup>17</sup> The World Bank has approved the loan, and since late 2000 it has been under implementation.

<sup>18</sup> The experience has been replicated in Ecuador since early 2001. Preparatory work has been completed and the first training course will take place in September 2001.



# Annex A

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## **The Population, Energy and Environmental Program**

The Population, Energy and Environmental Program (PEE)—hereafter referred to by its original acronym EAP (Energía, Ambiente y Población)—is a response to the challenge of developing a hydrocarbon industry compatible with basic objectives of sustainable development in the 11 countries that share the Sub-Andean watershed.

During the last decade, oil and gas exploration and exploitation activities focused their operations towards areas that are considered fragile in environmental and social terms. At the same time, the indigenous peoples who have always lived in these areas clearly expressed their demand for the recognition of their territorial rights, the conservation of their culture and the improvement of their socioeconomic conditions.

Companies awarded concessions in these areas have had to begin consultation and participation processes—often at their own initiative—granting compensations even though there are no standards in force to define proper rules of fair play in this respect. Other companies, particularly those with transnational operations, have designed policies and combined their efforts to obtain a better understanding of the new situation. At the same time, indigenous communities have become better organized at claiming their rights, forcing government officials in these countries to start facing this emerging problem despite their limited information and resources.

The EAP program is a joint initiative of the Latin American Energy Organization (Organización Latinoamericana de Energía, or OLADE) and the World Bank. It began in 1998 with the aim of helping governments exchange experiences and develop common criteria for better managing the environmental and social aspects of oil and gas operations in indigenous territories. The starting point was the request that OLADE and the Bank extended to governments to appoint high-ranking officials to play the role of national coordinators (NCs) so that they could get to know one other and compare their experiences.

At their first meeting, the NCs agreed to conduct a comparative study of legal, regulatory, and institutional frameworks applicable to hydrocarbon operations in the Sub-Andean watershed. The result clearly revealed the need to carry out joint activities, within the framework of a long-term action program involving the industry and the indigenous organizations, in order to find solutions to the emerging problems.

In essence, after two meetings of the most important agents (NCs, oil companies, ARPEL as the framework organization for the industry in the region, and COICA as coordinator of indigenous

organizations in the Amazon region), the EAP program created the conditions for tripartite discussions that would give rise to some joint activities, with the assistance of international institutions also committed to sustainable development. These activities include:

- Carrying out tripartite discussions in each country, with a view to improving the communication between the most important agents, making it easier to improve standards and, if relevant, resolving conflictive situations.
- Developing an information network, with the assistance of CAF and OLADE. The latter has created a website<sup>19</sup> so that interested parties can gain easy access to relevant information in all the countries, including regulations, events, and relevant studies.
- Preparing reference documents to perfect the regulatory frameworks for the industry's operations in the Sub-Andean watershed, under common criteria agreed by interested parties. This activity will be consistent with the terms of reference prepared by mutual agreement and within the framework of the finance program between CIDA and ARPEL.
- Designing a training program to improve environmental and social standards, as well as dialogue between agents. This is an ongoing activity in five countries (Bolivia, Colombia, Ecuador, Peru, and, more recently, Venezuela) with the help of the Carls Duisberg Foundation and the consulting services of Harvard University and the Latin American Future Foundation.

In addition to these four main activities of the EAP work program, the following new initiatives have begun:

- Efforts by the Inter-American Development Bank (IDB) to loan funds to governments willing to carry out preliminary consultations before opening new areas to exploration.
- The preparation of maps of exclusion zones, based on indigenous perspectives, as an initial proposal to compare them with areas of a great biodiversity and intensive exploration activities. These maps would be drawn up, with the assistance of Conservation International and probably CAF, at the same time as the EAP program is being carried out.
- A comparison of the resources obtained from oil income allocated to the development of the regions in which the industry operates, particularly the part received by the indigenous communities directly affected by the operations.

All these activities are currently in different stages of preparation. It is clear, however, that the EAP program is breaching a critical gap in communication and dialogue between important agents seeking new solutions—and that, consequently, interested parties and aid institutions are paying attention to it. The next tripartite meeting will be held again in Cartagena (Colombia) from May 23 to May 25, 2001.<sup>20</sup>

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<sup>19</sup> See <[www.olade.org.ec/idiomas/ingles/default.htm](http://www.olade.org.ec/idiomas/ingles/default.htm)>; the Spanish-language version is at <[www.olade.org.ec](http://www.olade.org.ec)>.

<sup>20</sup> At the time of printing, this meeting had already taken place.

# Annex B

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## **Project: Regulations Governing Hydrocarbon Activities in Indigenous Peoples' Communal Territories**

### **Draft Supreme Decree**

#### **WHEREAS:**

The Bolivian Constitution, Article 171, establishes the acknowledgement, respect and protection of the social, economic, and cultural rights of the indigenous peoples population in the country, particularly of natives living in their indigenous peoples' communal territories [*tierras comunitarias de origen*], within the framework of the law, guaranteeing their identity, values, languages, customs and institutions with respect to the use and development of sustainable natural resources;

Convention No. 169 of the International Labor Organization concerning Indigenous and Tribal Peoples in Independent Countries, approved and ratified by means of Law 1257 of July 11, 1991; Environmental Law 1333 of April 27, 1992; the General Regulations for Protected Areas approved by means of Supreme Decree 24781 of July 31, 1997; and Hydrocarbons Law 1689 of April 30, 1996, acknowledge the rights of indigenous peoples people proclaimed by the Magna Carta;

Hydrocarbon activities are of a public nature and involve national projects that could affect indigenous peoples' communal territories (IPCTs) which is why an agreement with the National Government and the Confederation of Indigenous People of Bolivia (CIDOB) was signed in 1996, establishing the commitment to approve a standard to regulate hydrocarbon operations in NCTs,<sup>21</sup> among other things;

In compliance with Articles 96 and 102 (Item 1) of the Bolivian Constitution,

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<sup>21</sup> Native community territories. These are referred to in the main document as *indigenous peoples communal territories*, or IPCTs.

**THE CABINET COUNCIL HEREBY DECREES:**

**Article 1.** Let all 42 articles, 9 titles and 2 chapters of the Regulations Governing Hydrocarbon Activities in IPCTs be approved, the texts of which form part of this Supreme Decree.

The State Minister responsible for the Economic Development Office shall take charge of the execution and enforcement of this Supreme Decree.

Issued at the Government Palace in the city of La Paz, this \_\_\_\_ day of \_\_\_\_ of the year two thousand and one.

**Regulations Governing Hydrocarbon Activities  
in Indigenous Peoples' Communal Territories**

**TITLE I  
GENERAL PROVISIONS**

**CHAPTER I  
PURPOSE AND SCOPE OF APPLICATION**

**Article 1: Purpose**

These Regulations shall govern consultations with and the participation of indigenous peoples and communities in matters concerning the prevention, monitoring and control of the social and environmental impacts of hydrocarbon activities in indigenous peoples' communal territories (IPCTs), based on the principles contained in the Peruvian Constitution, Article 171, Convention 169 of the International Labor Organizations Regarding Indigenous peoples and Tribal Populations in Independent Countries, ratified by Law 1257 of July 11, 1991, Environmental Law 1333 of April 27, 1992, the General Regulations for Protected Areas. 24781 of July 31, 1997, Hydrocarbons Law 1689 of April 30, 1996 and its Regulations, Arbitration and Conciliation Law 1770 of March 10, 1997, and other applicable provisions in force.

**Article 2: Scope of Application**

The provisions of these Regulations shall apply to the activities identified in the Hydrocarbons Law, Article 9 undertaken in IPCTs officially registered as fixed assets, claimed and certified by the National Agrarian Reform Institute.

**CHAPTER II.  
INITIALS AND DEFINITIONS**

**Article 3: Initials and definitions**

For the purpose of these Regulations, the Glossary included as Appendix 1<sup>22</sup> shows the initials and definitions contained in this legal provision, as well as those included in Environmental Law 1333 and its Regulations, in the Environmental Regulations for the Hydrocarbon Sector and other related legal provisions currently in force.

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<sup>22</sup> See end of this annex.

## TITLE II INSTITUTIONAL FRAMEWORK

### CHAPTER I GENERAL PRINCIPLES

#### **Article 4: Competent Authorities**

Within the framework of the provisions set forth in the Hydrocarbons Law 1689, Article 11, activities involving the exploration, exploitation, transport and distribution of natural gas through networks are national projects; consequently, VMARNDF as the competent Environmental Authority and VMEH as the Hydrocarbon Sector authority, shall be the entities responsible for conducting prevention, inspection, monitoring and environmental control activities, in compliance with the duties and responsibilities assigned to them in Environmental Law 1333 and its Regulations.

## TITLE III CONSULTATION AND SOCIAL-ENVIRONMENTAL ASSESSMENT CHAPTER (SEAEC)

### CHAPTER I PARTICIPATION, INFORMATION AND CONSULTATION RIGHTS OF AFFECTED INDIGENOUS PEOPLES OR COMMUNITIES

#### **Article 5: General Principle**

While the SEAC is being drawn up and until the corresponding environmental permit is obtained for the project, works or activity, as well as during the application of the prevention and mitigation measures mentioned in the SEAC, the information, consultation and participation rights of indigenous peoples or communities affected by hydrocarbon activities within their IPCT shall be obligatory.

### CBH (PARTICIPATION) AND CIDOB (FA) PROPOSAL

#### **Article 6: Information, consultation and participation procedure in the SEAC**

- a. Once the Principal knows the project's category, he must send the RIO a written notice of the date of the meeting at which the planning process will begin to draw up the SEAC, at least ten (10) calendar days in advance, attaching relevant information concerning the project. In turn, the RIO must accredit the appointment of its technical team, which for the purpose of the Regulations shall be confirmed as the valid counterpart required to carry out the SEAC.
- b. At the planning meeting, the plan and schedule for the consultation process shall be drawn up, establishing responsibilities for the preparation of the SEAC within a maximum period of forty-five (45) calendar days. At the same time, the indigenous peoples communities to be consulted during the Public Consultation process will be decided by mutual agreement.
- c. Within the Public Consultation which the Principal shall carry out within the framework of the RPCA, Article 162, the consultation process conducted with the indigenous peoples

communities affected by the participation of the technical team appointed by the LNO must at least contain the provisions set forth in these Regulations, Article 7.

- d. The Principal shall submit a final version of the SEAC within a maximum period of 30 days from the date of the planning meeting, so that the document can be discussed within the LNO.
- e. Once discussions within the LNO have concluded, the technical team will raise its observations, suggestions and recommendations to the Principal, within a maximum period of fifteen (15) calendar days from the deadline established in the previous point.
- f. The Principal will submit the ELAS and the corresponding SEAC to the competent authorities so that the environmental permit can be processed.
- g. Finally, the MACPIO will forward a copy of the SEAC to the CIDOB within a period of no more than forty eight (48) hours from its receipt.

#### **Article 7: Consultation Contents**

The following are the minimum aspects to be included in the consultation:

- a. Identification and accreditation of representatives of all parties involved in the consultation process.
- b. Schedule, location and duration of the activities anticipated by the Principal.
- c. Location of the camps and facilities, including the opening of access roads.
- d. Identification of areas for domestic and/or traditional community use and/or fishing and hunting areas.
- e. Identification, prediction and assessment of negative social, economic, and cultural impacts.
- f. Identification and assessment of positive impacts on communities within the project area.
- g. Proposed measures to prevent, reduce, control and correct negative social-environmental impacts.
- h. Proposed preventive health and safety measures.
- i. Social-environmental inspection and monitoring program.
- j. Program of job opportunities for community members, if guaranteed by the RIO, identifying the level of qualification required.

#### **Article 8: Information, Consultation and Participation While the SEAC Is Being Drawn Up**

I. The SEAC must be based on the information created by indigenous peoples communities through the RIO while the ELAS is being drawn up.

II. The information, consultation and participation process with affected indigenous peoples communities and the RIO shall be carried out within the framework of the provisions set forth in the Environmental Law, Article 93, the RPCA, Article 162 and the ERHS, Article 21. Together with the SEAC, the Principal must send the OSC all supporting documents obtained during this process.

## CHAPTER II

### SOCIAL-ENVIRONMENTAL ASSESSMENT CHAPTER (SEAC)

#### **Article 9: Application of the SEAC**

When exploration, exploitation, development and/or field production or transport of hydrocarbon activities are taking place in IPCTs, the drawing-up and presentation of the SEAC will be required as an overall part of the EIAS.

#### **Article 10: Scope**

The objective of the Social-Environmental Assessment Chapter (SEAC) is to identify and evaluate potential positive and negative impacts caused by the implementation, operation, maintenance and abandonment of a hydrocarbon project/works/activity on the affected IPCT, in order to establish the measures required to enhance the positive effects and prevent, reduce and control negative impacts. Also, when mitigation measures are unable to prevent or mitigate an identified impact, to determine the compensation to be given to the indigenous peoples or communities concerned.

#### **Article 11: Contents**

The SEAC shall include the following components:

- a. The location of the area in which the hydrocarbon project/works/activity will take place.
- b. Specifications of the ethnic-historic, socioeconomic, cultural aspects involved in the management of natural resources by indigenous peoples or communities within IPCT, identifying traditional development areas. This survey must be based on fieldwork carried out jointly by the Principal and the RIO.
- c. Identification of the potential social, economic, and cultural impacts caused by the project/works/activity, in accordance with the provisions set forth in the previous point.
- d. Qualification of the magnitude of the impact on the living standards, customs, production systems, use and management of natural resources and settlements of the affected indigenous peoples communities in IPCT.
- e. Specific measures to prevent, reduce and control the negative impacts of the project/works/activity on the indigenous peoples and/or communities in IPCT.
- f. The Company's Code of Conduct.
- g. Estimated cost of the proposed social-environmental prevention and mitigation measures.
- h. Appraisal of the social-environmental impacts likely to affect indigenous peoples or communities in IPCT, taking into consideration cost/benefit criteria at national, regional and local levels in order to establish adequate compensation.
- i. The amount and form of the compensation established for affected indigenous peoples and/or communities.

#### **Article 12: Assessment Procedure**

I. When exploration, exploitation, development, field production and transport activities take place within IPCT, the SEAC shall become an overall part of the EIAS and shall be governed by

the provisions set forth in those Regulations and in the Environmental Law and its Regulations. Consequently, the assessment and approval of the SEAC shall be governed by the technical/administrative EIA procedures established in the RPCA and the ERHS.

II. Due to its specific nature, the OSC shall submit the SEAC to the MACPIO (the competent authority for indigenous peoples affairs) for its assessment within a period of no more than forty eight (48) hours, respecting the terms and procedures established in the ERHS for the assessment of the ELAS, so that the corresponding report can be sent to the CEA and included in the Environmental Impact Assessment process.

### **Article 13: Notification and Appeal**

I. If they fail to agree with the SEAC, the Principal and/or the indigenous peoples community concerned may request the intervention of the CEA so that this entity may call a trans-sector meeting with representatives of MACPIO and VMEH, the affected RIO and the Principal, with a view to settle the conflict.

II. Should there be no conflicts and once the consultation and participation procedures with the indigenous peoples communities concerned have been completed, the CEA shall inform the Principal and the RIO of the approval of the SEAC, attaching a copy of the Environmental Permit.

III. Should the parties fail to reach an agreement regarding the contents of the SEAC, they shall abide by the provisions set forth in Article 34 hereinbelow.

## **TITLE IV RELATIONSHIP BETWEEN THE PRINCIPAL AND INDIGENOUS PEOPLES COMMUNITIES**

### **CHAPTER I GENERAL PRINCIPLES**

### **Article 14: Principles**

The relationship between the Principal and the affected indigenous peoples and/or communities in IPCT, shall be governed by the following principles:

- a. Rights and obligations: The rights and obligations of the parties shall be established in accordance with the regulations in force.
- b. Acknowledgement: In the event of any conflicts of interest between the parties, they must acknowledge each other and show mutual respect, through discussions and mediation.
- c. Information: Affected indigenous peoples and/or communities have a right to be informed and consulted promptly and truthfully.
- d. Consultation and participation: Affected indigenous peoples and communities have a right to be consulted beforehand and to participate in the social-environmental prevention and control process, within the framework of Article 8.
- e. Prevention: Negative social-environmental, cultural and socioeconomic impacts must be prevented, establishing adequate mitigation and compensation mechanisms, when relevant and enhancing positive impacts.



## CHAPTER II

### RIGHTS AND OBLIGATIONS OF THE PRINCIPAL AND ITS CONTRACTORS

#### **Article 15: Acknowledgement and Respect**

The Principal and its contractors shall acknowledge and respect the individual and collective rights of indigenous peoples and communities, in terms of their identity, uses and customs and the protection and preservation of natural resources and the environment in the IPCT concerned, abiding by the legal provisions in force, particularly ILO Convention No. 169, ratified by means of Law 1257 of July 11, 1991.

#### **Article 16: Counterparts**

For consultation purposes, settlement of conflicts and establishment of agreements, the Principal's counterparts shall be the community authorities and RIO representatives.

#### **Article 17: Principal's Staff**

- a. The Principal and its contractors must take the necessary actions to guarantee that any and all non-indigenous peoples workers hired to work within the IPCT shall leave that area as soon as they have completed their contract.
- b. It is the Principal's obligation to keep its staff informed about the sociocultural characteristics of the indigenous peoples and/or communities in the IPCT concerned.
- c. It is the Principal's obligation to enforce the code of conduct drawn up within the framework of the SEAC, which regulates the behavior of the Principal's staff and/or contractors, establishing specific bans on certain activities (hunting, fishing, prostitution, interference in the internal affairs of the RIO) for the hired staff while they remain in the IPCT. This code shall be discussed with the affected communities and the Principal's staff and/or contractors prior to the commencement of the project's activities.
- d. The Principal shall ensure the enforcement of this code of conduct.

#### **Article 18: Information and consultation**

I. The Principal and its environmental contractors, in coordination with the respective RIO, are under the obligation to keep the affected indigenous peoples and/or communities informed of the hydrocarbon activities taking place within the IPCT and to make this information known.

II. It is the Principal's obligation to consult with the indigenous peoples and/or communities concerned, in coordination with the respective RIO, regarding matters identified while the SEAC was being drafted.

#### **Article 19: Prevention and Mitigation**

Through the SEAC, the Principal must anticipate and reduce possible negative social-environmental, social, economic, and cultural impacts and enhance positive impacts.

#### **Article 20: Monitoring**

I. As a representative of the indigenous peoples and/or communities living in the affected area, the RIO itself can monitor the project to ensure the application of measures to prevent and reduce social-environmental, socioeconomic and cultural impacts, in accordance with current environmental regulations.

II. During this social-environmental monitoring process, the RIO shall communicate with the OSC and the CEA, requesting the Principal to apply the corresponding measures, corrective actions or adjustments.

#### **Article 21: Monitoring report**

The Principal of a hydrocarbon activity in a IPCT must include in its project/works/activity monitoring reports the chapter concerning the implementation of measures to prevent and reduce social-environmental, socioeconomic and cultural impacts, the identification of unforeseen impacts and the social-environmental prevention and control measures already implemented. The chapter of the monitoring report corresponding to the SEAC must be sent to the OSC, who will issue a copy of the report, at the request of the national indigenous peoples unit.

#### **Article 22: Job Opportunities**

Together with the RNO and whenever relevant, the Principal shall design a program of job opportunities, establishing the preference to hire members of the IPCT, within the framework of current labor laws and in accordance with qualifications and requirements.

#### **Article 23: Report on social-environmental activities**

Pursuant to the provisions set forth in the ERHS, Article 7, the Principal must submit, by March 31 each year, a report on the environmental activities implemented the previous year, including social-environmental activities.

#### **Article 24: Settlement of conflicts**

In the event a conflict between the Principal and the indigenous peoples and/or communities concerned is not settled within the framework of the provisions set forth in Article 13 hereinabove, the Principal may appeal to the conciliation unit prescribed in Title VII of these Regulations.

### **CHAPTER III RIGHTS AND OBLIGATIONS OF INDIGENOUS PEOPLES AND/OR COMMUNITIES**

#### **Article 25: Respect for the Principal's rights**

The indigenous peoples and/or communities concerned shall respect the rights vested to the Principal in current laws and regulations and in the Environmental Permit, so that it can carry out its activities efficiently and uninterruptedly.

**Article 26: Information**

Through their RIO and during the information and consultation stage, the indigenous peoples and/or communities shall keep the Principal informed about the projects implemented or to be implemented within the IPCT to be affected by the hydrocarbon activity.

**Article 27: No Interference**

Through their RIO, the indigenous peoples and/or communities shall not interfere in the Principal's hydrocarbon activities. They may submit their observations, suggestions and claims to the Principal, through the OSC and/or the CEA and, if relevant, proceed in accordance with the provisions referred to herein.

**Article 28: Complaints**

Any and all complaints filed through the RIO by the indigenous peoples and/or community concerned regarding any possible damage that the hydrocarbon activities may have caused to the environment, shall be governed by the procedures set forth in Title VII, Chapter V of the General Environmental Management Regulations.

**Article 29: Settlement of Conflicts**

In the event a conflict between the Principal and the indigenous peoples and/or communities concerned is not resolved within the framework of the provisions set forth in Article 13 hereinabove, the RIO may appeal to the conciliation unit contemplated in these Regulations, Title VII.

**TITLE V  
COMPENSATION**

**CHAPTER I  
GENERAL PROVISIONS**

**Article 30: Purpose**

The purpose is to compensate the indigenous peoples and/or communities directly affected by negative social-environmental impacts caused by hydrocarbon activities that could not be mitigated. This compensation shall be aimed at promoting productive and social activities in the respective NCT.

**Article 31: Procedure**

The compensation shall be applicable when it is recommended in the SEAC pertaining to the project, works or activity; to this effect, the adequate amount and the procedure to be followed by the Principal in order to grant the compensation shall be recommended in the SEAC.

**TITLE VI  
HYDROCARBON ACTIVITIES IN PROTECTED AREAS**

**CHAPTER I  
PROCEDURE**

**Article 32: Double NCT/PA Classification**

When hydrocarbon activities take place in a IPCT that is also a Protected Area, it shall also be governed by the General Regulations for Protected Areas.

**TITLE VII  
SETTLEMENT OF CONFLICTS**

**CHAPTER I  
GENERAL PRINCIPLES**

**Article 33: Scope**

Disagreements between the parties regarding the application and/or interpretation of the provisions established in the SEAC within the framework of these Regulations, shall be solved in accordance with the Regulations Governing the Settlement of Conflicts established under this Title.

**Article 34: Conflict-Resolution Procedures**

The following are conflict-resolution procedures:

*I. First: Agreement Between The Parties*

The parties shall try to settle possible conflicts or disputes within the framework of the SEAC. Minutes of these agreements must be recorded. Should the parties fail to reach an agreement, they can resort to the second procedure.

*II. Second: Adoption of Concerted Action*

When a conflict related to the SEAC arises, either party may request the participation of the CEA, who will call a meeting with the RIO and Principal concerned and the MACPIO and VMEH, and subsequently issue a technical opinion.

**Article 38: The Company's Activities**

In the event an agreement is not reached regarding the amount and form of compensation during the concerted action stage set forth in the CEA, Article 34, Item 2, shall issue an environmental permit compelling the parties to reach an agreement.

## CHAPTER II FUNDING

### Article 39: Funding

The financial resources required to resort to the conciliation procedure shall be provided by each of the parties concerned.

## TITLE VIII VIOLATIONS AND SANCTIONS

### Article 40: Procedure Regarding Violations And Sanctions

Failure to comply with the provisions set forth in the EIAS shall be considered an administrative violation that the CEA shall sanction in accordance with the provisions set forth in Title IX, Chapter I of the General Environmental Management Law.

## TITLE IX TRANSITORY AND FINAL PROVISIONS

### Article 41: Transitory Provision

Once the guidelines and manuals for the social-environmental assessment have been designed, these shall form part an integral part of these Regulations.

## APPENDIX 1 INITIALS AND DEFINITIONS

The following will be used for the purpose of these Regulations:

#### *a. Initials:*

<b>CEA</b>	:	competent environmental authority (VMARNDF)
<b>CIDOB</b>	:	Bolivian Confederation of Indigenous Peoples
<b>CSO</b>	:	competent sector organization (VMEH)
<b>EIS</b>	:	environmental impact statement
<b>EIAS</b>	:	environmental impact assessment study
<b>ERHS</b>	:	Environmental Regulations for the Hydrocarbon Sector
<b>ER</b>	:	environmental record
<b>EM</b>	:	environmental manifest
<b>GRPA</b>	:	General Regulations for Protected Areas
<b>ILO</b>	:	International Labor Organization
<b>IPCT</b>	:	indigenous peoples' communal territory
<b>LNO</b>	:	local indigenous organization
<b>MACPIO</b>	:	Ministry of Peasant and Indigenous Peoples Community Affairs
<b>MDE</b>	:	Economic Development Ministry
<b>MDSP</b>	:	Sustainable Development and Planning Ministry
<b>PA</b>	:	protected area

<b>RIO</b>	:	Regional Indigenous Organization
<b>SEIAS</b>	:	Social-Environmental Impact Assessment Study
<b>SERNAP</b>	:	National Service for Protected Areas
<b>VMARNDF</b>	:	Vice Ministry of the Environment, Natural Resources and Forestry Development
<b>VMEH</b>	:	Vice-Ministry of Energy and Hydrocarbons

*b. Definitions:*

**PUBLIC CONSULTATION:** Process of information whereby the people consulted are given the opportunity to express their points of view regarding the activity/works/project to be implemented in their territories.

During the Public Consultation Act, the legal representative or a delegate of the company responsible for the project/works/activity, through the media (press or radio) must call a meeting with representatives of the communities and other local authorities of the area in which the company intends to carry out its activities, indicating the place, date and time of the meeting.

**PEOPLE CONSULTED:** The indigenous peoples or communities who are the owners (if a deed exists) or who have staked their claims (in encumbered areas or those areas subject to an official claim) of an IPCT in which a hydrocarbon project, works or activity will be carried out.

**COMPENSATION:** Balances of negative effects. A social-environmental compensation is applicable when no steps have been taken to prevent or reduce an identified impact. This compensation is determined in time and can be in cash or in kind. It entails providing resources, facilities or opportunities to compensate the impacts on the property rights of third parties, to make up for the factors that will be lost or altered by the project.

**DAMAGE:** Any and all material or moral damages caused to individuals or assets by another's actions.

**INDEMNITY:** Financial compensation for damages, duly confirmed by the pertinent authorities, in compliance with the legal provisions in force.

**ENVIRONMENTAL IMPACT:** Any effect on the natural, social and cultural values in a specific area and time, which may be positive or negative.

**SOCIAL-ENVIRONMENTAL IMPACT:** The positive or negative effect of a specific activity, works or project on the natural and/or social environment.

**SOCIOECONOMIC IMPACT:** The positive or negative effect of a specific activity, works or project on certain aspects of a community's social life (culture, economy, policies, health, education, etc.)

**HYDROCARBONS LAW:** Law 1689 of April 30, 1996

**ENVIRONMENTAL LAW:** Law 1333 of April 27, 1992

**NATIONAL AGRARIAN REFORM SERVICE LAW:** Law 1715 of October 18, 1996

**ARBITRATION AND CONCILIATION LAW:** Law 1770

**MITIGATION MEASURE:** The application of any policy, strategy, works or action aimed at eliminating or reducing to a minimum the possible adverse impacts of certain stages of a project.

**INDIGENOUS PEOPLES' COMMUNAL TERRITORIES (IPCTs):** Geographical areas [*tierras comunitarias de origen*] that comprise the original and traditional habitat of indigenous peoples and communities who have developed their own forms of economic, social and cultural organization to ensure their survival and development. These territories are inalienable, irreversible, collective, non-prescribing areas that cannot be seized or encumbered, inhabited by indigenous peoples communities and associations. The term *indigenous peoples' communal territories* comprises the indigenous peoples territory concept, in accordance with the definition established in the ILO Convention No. 169, Part II, ratified by Law 1257 of July 11, 1991.

**PRINCIPAL:** The local or foreign individual or company signing joint risk, operating and/or partnership agreements or obtaining a license or concession to carry out hydrocarbon-related activities or operations with oil or natural gas by-products in Bolivian territory.





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Joint UNDP/World Bank  
**ENERGY SECTOR MANAGEMENT ASSISTANCE PROGRAMME (ESMAP)**

**LIST OF REPORTS ON COMPLETED ACTIVITIES**

<i>Region/Country</i>	<i>Activity/Report Title</i>	<i>Date</i>	<i>Number</i>
<b>SUB-SAHARAN AFRICA (AFR)</b>			
Africa Regional	Anglophone Africa Household Energy Workshop (English)	07/88	085/88
	Regional Power Seminar on Reducing Electric Power System Losses in Africa (English)	08/88	087/88
	Institutional Evaluation of EGL (English)	02/89	098/89
	Biomass Mapping Regional Workshops (English)	05/89	--
	Francophone Household Energy Workshop (French)	08/89	--
	Interafrican Electrical Engineering College: Proposals for Short- and Long-Term Development (English)	03/90	112/90
	Biomass Assessment and Mapping (English)	03/90	--
	Symposium on Power Sector Reform and Efficiency Improvement in Sub-Saharan Africa (English)	06/96	182/96
	Commercialization of Marginal Gas Fields (English)	12/97	201/97
	Commercializing Natural Gas: Lessons from the Seminar in Nairobi for Sub-Saharan Africa and Beyond	01/00	225/00
	Africa Gas Initiative – Main Report: Volume I	02/01	240/01
	Angola		
	Energy Assessment (English and Portuguese)	05/89	4708-ANG
	Power Rehabilitation and Technical Assistance (English)	10/91	142/91
Benin	Africa Gas Initiative – Angola: Volume II	02/01	240/01
	Energy Assessment (English and French)	06/85	5222-BEN
Botswana	Energy Assessment (English)	09/84	4998-BT
	Pump Electrification Prefeasibility Study (English)	01/86	047/86
	Review of Electricity Service Connection Policy (English)	07/87	071/87
	Tuli Block Farms Electrification Study (English)	07/87	072/87
	Household Energy Issues Study (English)	02/88	--
	Urban Household Energy Strategy Study (English)	05/91	132/91
	Burkina Faso		
	Energy Assessment (English and French)	01/86	5730-BUR
Burundi	Technical Assistance Program (English)	03/86	052/86
	Urban Household Energy Strategy Study (English and French)	06/91	134/91
	Energy Assessment (English)	06/82	3778-BU
	Petroleum Supply Management (English)	01/84	012/84
	Status Report (English and French)	02/84	011/84
	Presentation of Energy Projects for the Fourth Five-Year Plan (1983-1987) (English and French)	05/85	036/85
	Improved Charcoal Cookstove Strategy (English and French)	09/85	042/85
	Peat Utilization Project (English)	11/85	046/85
	Energy Assessment (English and French)	01/92	9215-BU
	Cameroon		
Cape Verde	Africa Gas Initiative – Cameroon: Volume III	02/01	240/01
	Energy Assessment (English and Portuguese)	08/84	5073-CV
Central African Republic	Household Energy Strategy Study (English)	02/90	110/90
	Energy Assessment (French)	08/92	9898-CAR
Chad	Elements of Strategy for Urban Household Energy		
	The Case of N'djamena (French)	12/93	160/94
Comoros	Energy Assessment (English and French)	01/88	7104-COM
	In Search of Better Ways to Develop Solar Markets: The Case of Comoros	05/00	230/00
Congo	Energy Assessment (English)	01/88	6420-COB

<i>Region/Country</i>	<i>Activity/Report Title</i>	<i>Date</i>	<i>Number</i>
Congo	Power Development Plan (English and French)	03/90	106/90
	Africa Gas Initiative – Congo: Volume IV	02/01	240/01
Côte d'Ivoire	Energy Assessment (English and French)	04/85	5250-IVC
	Improved Biomass Utilization (English and French)	04/87	069/87
	Power System Efficiency Study (English)	12/87	--
	Power Sector Efficiency Study (French)	02/92	140/91
	Project of Energy Efficiency in Buildings (English)	09/95	175/95
	Africa Gas Initiative – Côte d'Ivoire: Volume V	02/01	240/01
Ethiopia	Energy Assessment (English)	07/84	4741-ET
	Power System Efficiency Study (English)	10/85	045/85
	Agricultural Residue Briquetting Pilot Project (English)	12/86	062/86
	Bagasse Study (English)	12/86	063/86
	Cooking Efficiency Project (English)	12/87	--
	Energy Assessment (English)	02/96	179/96
Gabon	Energy Assessment (English)	07/88	6915-GA
	Africa Gas Initiative – Gabon: Volume VI	02/01	240/01
The Gambia	Energy Assessment (English)	11/83	4743-GM
	Solar Water Heating Retrofit Project (English)	02/85	030/85
	Solar Photovoltaic Applications (English)	03/85	032/85
	Petroleum Supply Management Assistance (English)	04/85	035/85
Ghana	Energy Assessment (English)	11/86	6234-GH
	Energy Rationalization in the Industrial Sector (English)	06/88	084/88
	Sawmill Residues Utilization Study (English)	11/88	074/87
	Industrial Energy Efficiency (English)	11/92	148/92
Guinea	Energy Assessment (English)	11/86	6137-GUI
	Household Energy Strategy (English and French)	01/94	163/94
Guinea-Bissau	Energy Assessment (English and Portuguese)	08/84	5083-GUB
	Recommended Technical Assistance Projects (English & Portuguese)	04/85	033/85
	Management Options for the Electric Power and Water Supply Subsectors (English)	02/90	100/90
	Power and Water Institutional Restructuring (French)	04/91	118/91
Kenya	Energy Assessment (English)	05/82	3800-KE
	Power System Efficiency Study (English)	03/84	014/84
	Status Report (English)	05/84	016/84
	Coal Conversion Action Plan (English)	02/87	--
	Solar Water Heating Study (English)	02/87	066/87
	Peri-Urban Woodfuel Development (English)	10/87	076/87
	Power Master Plan (English)	11/87	--
	Power Loss Reduction Study (English)	09/96	186/96
	Implementation Manual: Financing Mechanisms for Solar Electric Equipment	07/00	231/00
Lesotho	Energy Assessment (English)	01/84	4676-LSO
Liberia	Energy Assessment (English)	12/84	5279-LBR
	Recommended Technical Assistance Projects (English)	06/85	038/85
	Power System Efficiency Study (English)	12/87	081/87
Madagascar	Energy Assessment (English)	01/87	5700-MAG
	Power System Efficiency Study (English and French)	12/87	075/87
	Environmental Impact of Woodfuels (French)	10/95	176/95
Malawi	Energy Assessment (English)	08/82	3903-MAL
	Technical Assistance to Improve the Efficiency of Fuelwood Use in the Tobacco Industry (English)	11/83	009/83

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Malawi	Status Report (English)	01/84	013/84
Mali	Energy Assessment (English and French)	11/91	8423-MLI
	Household Energy Strategy (English and French)	03/92	147/92
Islamic Republic of Mauritania	Energy Assessment (English and French)	04/85	5224-MAU
	Household Energy Strategy Study (English and French)	07/90	123/90
Mauritius	Energy Assessment (English)	12/81	3510-MAS
	Status Report (English)	10/83	008/83
	Power System Efficiency Audit (English)	05/87	070/87
	Bagasse Power Potential (English)	10/87	077/87
	Energy Sector Review (English)	12/94	3643-MAS
Mozambique	Energy Assessment (English)	01/87	6128-MOZ
	Household Electricity Utilization Study (English)	03/90	113/90
	Electricity Tariffs Study (English)	06/96	181/96
	Sample Survey of Low Voltage Electricity Customers	06/97	195/97
Namibia	Energy Assessment (English)	03/93	11320-NAM
Niger	Energy Assessment (French)	05/84	4642-NIR
	Status Report (English and French)	02/86	051/86
	Improved Stoves Project (English and French)	12/87	080/87
	Household Energy Conservation and Substitution (English and French)	01/88	082/88
Nigeria	Energy Assessment (English)	08/83	4440-UNI
	Energy Assessment (English)	07/93	11672-UNI
Rwanda	Energy Assessment (English)	06/82	3779-RW
	Status Report (English and French)	05/84	017/84
	Improved Charcoal Cookstove Strategy (English and French)	08/86	059/86
	Improved Charcoal Production Techniques (English and French)	02/87	065/87
	Energy Assessment (English and French)	07/91	8017-RW
	Commercialization of Improved Charcoal Stoves and Carbonization Techniques Mid-Term Progress Report (English and French)	12/91	141/91
SADC	SADC Regional Power Interconnection Study, Vols. I-IV (English)	12/93	--
SADCC	SADCC Regional Sector: Regional Capacity-Building Program for Energy Surveys and Policy Analysis (English)	11/91	--
Sao Tome and Principe	Energy Assessment (English)	10/85	5803-STP
Senegal	Energy Assessment (English)	07/83	4182-SE
	Status Report (English and French)	10/84	025/84
	Industrial Energy Conservation Study (English)	05/85	037/85
	Preparatory Assistance for Donor Meeting (English and French)	04/86	056/86
	Urban Household Energy Strategy (English)	02/89	096/89
	Industrial Energy Conservation Program (English)	05/94	165/94
Seychelles	Energy Assessment (English)	01/84	4693-SEY
	Electric Power System Efficiency Study (English)	08/84	021/84
Sierra Leone	Energy Assessment (English)	10/87	6597-SL
Somalia	Energy Assessment (English)	12/85	5796-SO
Republic of South Africa	Options for the Structure and Regulation of Natural Gas Industry (English)	05/95	172/95
Sudan	Management Assistance to the Ministry of Energy and Mining	05/83	003/83
	Energy Assessment (English)	07/83	4511-SU
	Power System Efficiency Study (English)	06/84	018/84
	Status Report (English)	11/84	026/84

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Sudan	Wood Energy/Forestry Feasibility (English)	07/87	073/87
Swaziland	Energy Assessment (English)	02/87	6262-SW
	Household Energy Strategy Study	10/97	198/97
Tanzania	Energy Assessment (English)	11/84	4969-TA
	Peri-Urban Woodfuels Feasibility Study (English)	08/88	086/88
	Tobacco Curing Efficiency Study (English)	05/89	102/89
	Remote Sensing and Mapping of Woodlands (English)	06/90	--
	Industrial Energy Efficiency Technical Assistance (English)	08/90	122/90
	Power Loss Reduction Volume 1: Transmission and Distribution System Technical Loss Reduction and Network Development (English)	06/98	204A/98
	Power Loss Reduction Volume 2: Reduction of Non-Technical Losses (English)	06/98	204B/98
Togo	Energy Assessment (English)	06/85	5221-TO
	Wood Recovery in the Nangbeto Lake (English and French)	04/86	055/86
	Power Efficiency Improvement (English and French)	12/87	078/87
Uganda	Energy Assessment (English)	07/83	4453-UG
	Status Report (English)	08/84	020/84
	Institutional Review of the Energy Sector (English)	01/85	029/85
	Energy Efficiency in Tobacco Curing Industry (English)	02/86	049/86
	Fuelwood/Forestry Feasibility Study (English)	03/86	053/86
	Power System Efficiency Study (English)	12/88	092/88
	Energy Efficiency Improvement in the Brick and Tile Industry (English)	02/89	097/89
	Tobacco Curing Pilot Project (English)	03/89	UNDP Terminal Report
	Energy Assessment (English)	12/96	193/96
	Rural Electrification Strategy Study	09/99	221/99
Zaire	Energy Assessment (English)	05/86	5837-ZR
Zambia	Energy Assessment (English)	01/83	4110-ZA
	Status Report (English)	08/85	039/85
	Energy Sector Institutional Review (English)	11/86	060/86
	Power Subsector Efficiency Study (English)	02/89	093/88
	Energy Strategy Study (English)	02/89	094/88
	Urban Household Energy Strategy Study (English)	08/90	121/90
Zimbabwe	Energy Assessment (English)	06/82	3765-ZIM
	Power System Efficiency Study (English)	06/83	005/83
	Status Report (English)	08/84	019/84
	Power Sector Management Assistance Project (English)	04/85	034/85
	Power Sector Management Institution Building (English)	09/89	--
	Petroleum Management Assistance (English)	12/89	109/89
	Charcoal Utilization Prefeasibility Study (English)	06/90	119/90
	Integrated Energy Strategy Evaluation (English)	01/92	8768-ZIM
	Energy Efficiency Technical Assistance Project: Strategic Framework for a National Energy Efficiency Improvement Program (English)	04/94	--
	Capacity Building for the National Energy Efficiency Improvement Programme (NEEIP) (English)	12/94	--
	Rural Electrification Study	03/00	228/00

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<b>EAST ASIA AND PACIFIC (EAP)</b>			
Asia Regional	Pacific Household and Rural Energy Seminar (English)	11/90	--
China	County-Level Rural Energy Assessments (English)	05/89	101/89
	Fuelwood Forestry Preinvestment Study (English)	12/89	105/89
	Strategic Options for Power Sector Reform in China (English)	07/93	156/93
	Energy Efficiency and Pollution Control in Township and Village Enterprises (TVE) Industry (English)	11/94	168/94
	Energy for Rural Development in China: An Assessment Based on a Joint Chinese/ESMAP Study in Six Counties (English)	06/96	183/96
	Improving the Technical Efficiency of Decentralized Power Companies	09/99	222/999
Fiji	Energy Assessment (English)	06/83	4462-FIJ
Indonesia	Energy Assessment (English)	11/81	3543-IND
	Status Report (English)	09/84	022/84
	Power Generation Efficiency Study (English)	02/86	050/86
	Energy Efficiency in the Brick, Tile and Lime Industries (English)	04/87	067/87
	Diesel Generating Plant Efficiency Study (English)	12/88	095/88
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	Biomass Gasifier Preinvestment Study Vols. I & II (English)	12/90	124/90
	Prospects for Biomass Power Generation with Emphasis on Palm Oil, Sugar, Rubberwood and Plywood Residues (English)	11/94	167/94
Lao PDR	Urban Electricity Demand Assessment Study (English)	03/93	154/93
	Institutional Development for Off-Grid Electrification	06/99	215/99
Malaysia	Sabah Power System Efficiency Study (English)	03/87	068/87
	Gas Utilization Study (English)	09/91	9645-MA
Myanmar	Energy Assessment (English)	06/85	5416-BA
Papua New Guinea	Energy Assessment (English)	06/82	3882-PNG
	Status Report (English)	07/83	006/83
	Energy Strategy Paper (English)	--	--
	Institutional Review in the Energy Sector (English)	10/84	023/84
	Power Tariff Study (English)	10/84	024/84
Philippines	Commercial Potential for Power Production from Agricultural Residues (English)	12/93	157/93
	Energy Conservation Study (English)	08/94	--
	Strengthening the Non-Conventional and Rural Energy Development Program in the Philippines: A Policy Framework and Action Plan	08/01	243/01
Solomon Islands	Energy Assessment (English)	06/83	4404-SOL
	Energy Assessment (English)	01/92	979-SOL
South Pacific	Petroleum Transport in the South Pacific (English)	05/86	--
Thailand	Energy Assessment (English)	09/85	5793-TH
	Rural Energy Issues and Options (English)	09/85	044/85
	Accelerated Dissemination of Improved Stoves and Charcoal Kilns (English)	09/87	079/87
	Northeast Region Village Forestry and Woodfuels Preinvestment Study (English)	02/88	083/88
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	Coal Development and Utilization Study (English)	10/89	--
Tonga	Energy Assessment (English)	06/85	5498-TON

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Vanuatu	Energy Assessment (English)	06/85	5577-VA
Vietnam	Rural and Household Energy-Issues and Options (English)	01/94	161/94
	Power Sector Reform and Restructuring in Vietnam: Final Report to the Steering Committee (English and Vietnamese)	09/95	174/95
	Household Energy Technical Assistance: Improved Coal Briquetting and Commercialized Dissemination of Higher Efficiency Biomass and Coal Stoves (English)	01/96	178/96
	Petroleum Fiscal Issues and Policies for Fluctuating Oil Prices In Vietnam	02/01	236/01
Western Samoa	Energy Assessment (English)	06/85	5497-WSO
<b>SOUTH ASIA (SAS)</b>			
Bangladesh	Energy Assessment (English)	10/82	3873-BD
	Priority Investment Program (English)	05/83	002/83
	Status Report (English)	04/84	015/84
	Power System Efficiency Study (English)	02/85	031/85
	Small Scale Uses of Gas Prefeasibility Study (English)	12/88	--
India	Opportunities for Commercialization of Nonconventional Energy Systems (English)	11/88	091/88
	Maharashtra Bagasse Energy Efficiency Project (English)	07/90	120/90
	Mini-Hydro Development on Irrigation Dams and Canal Drops Vols. I, II and III (English)	07/91	139/91
	WindFarm Pre-Investment Study (English)	12/92	150/92
	Power Sector Reform Seminar (English)	04/94	166/94
	Environmental Issues in the Power Sector (English)	06/98	205/98
	Environmental Issues in the Power Sector: Manual for Environmental Decision Making (English)	06/99	213/99
	Household Energy Strategies for Urban India: The Case of Hyderabad	06/99	214/99
	Greenhouse Gas Mitigation In the Power Sector: Case Studies From India	02/01	237/01
Nepal	Energy Assessment (English)	08/83	4474-NEP
	Status Report (English)	01/85	028/84
	Energy Efficiency & Fuel Substitution in Industries (English)	06/93	158/93
Pakistan	Household Energy Assessment (English)	05/88	--
	Assessment of Photovoltaic Programs, Applications, and Markets (English)	10/89	103/89
	National Household Energy Survey and Strategy Formulation Study: Project Terminal Report (English)	03/94	--
	Managing the Energy Transition (English)	10/94	--
	Lighting Efficiency Improvement Program Phase 1: Commercial Buildings Five Year Plan (English)	10/94	--
Sri Lanka	Energy Assessment (English)	05/82	3792-CE
	Power System Loss Reduction Study (English)	07/83	007/83
	Status Report (English)	01/84	010/84
	Industrial Energy Conservation Study (English)	03/86	054/86
<b>EUROPE AND CENTRAL ASIA (ECA)</b>			
Bulgaria	Natural Gas Policies and Issues (English)	10/96	188/96



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Central Asia and The Caucasus	Cleaner Transport Fuels in Central Asia and the Caucasus	08/01	242/01
Central and Eastern Europe	Power Sector Reform in Selected Countries	07/97	196/97
	Increasing the Efficiency of Heating Systems in Central and Eastern Europe and the Former Soviet Union	08/00	234/00
	The Future of Natural Gas in Eastern Europe (English)	08/92	149/92
Kazakhstan	Natural Gas Investment Study, Volumes 1, 2 & 3	12/97	199/97
Kazakhstan & Kyrgyzstan	Opportunities for Renewable Energy Development	11/97	16855-KAZ
Poland	Energy Sector Restructuring Program Vols. I-V (English)	01/93	153/93
	Natural Gas Upstream Policy (English and Polish)	08/98	206/98
	Energy Sector Restructuring Program: Establishing the Energy Regulation Authority	10/98	208/98
Portugal	Energy Assessment (English)	04/84	4824-PO
Romania	Natural Gas Development Strategy (English)	12/96	192/96
Slovenia	Workshop on Private Participation in the Power Sector (English)	02/99	211/99
Turkey	Energy Assessment (English)	03/83	3877-TU
	Energy and the Environment: Issues and Options Paper	04/00	229/00

#### MIDDLE EAST AND NORTH AFRICA (MNA)

Arab Republic of Egypt	Energy Assessment (English)	10/96	189/96
	Energy Assessment (English and French)	03/84	4157-MOR
	Status Report (English and French)	01/86	048/86
Morocco	Energy Sector Institutional Development Study (English and French)	07/95	173/95
	Natural Gas Pricing Study (French)	10/98	209/98
	Gas Development Plan Phase II (French)	02/99	210/99
Syria	Energy Assessment (English)	05/86	5822-SYR
	Electric Power Efficiency Study (English)	09/88	089/88
	Energy Efficiency Improvement in the Cement Sector (English)	04/89	099/89
	Energy Efficiency Improvement in the Fertilizer Sector (English)	06/90	115/90
Tunisia	Fuel Substitution (English and French)	03/90	--
	Power Efficiency Study (English and French)	02/92	136/91
	Energy Management Strategy in the Residential and Tertiary Sectors (English)	04/92	146/92
	Renewable Energy Strategy Study, Volume I (French)	11/96	190A/96
	Renewable Energy Strategy Study, Volume II (French)	11/96	190B/96
Yemen	Energy Assessment (English)	12/84	4892-YAR
	Energy Investment Priorities (English)	02/87	6376-YAR
	Household Energy Strategy Study Phase I (English)	03/91	126/91

#### LATIN AMERICA AND THE CARIBBEAN (LAC)

LAC Regional	Regional Seminar on Electric Power System Loss Reduction in the Caribbean (English)	07/89	--
	Elimination of Lead in Gasoline in Latin America and the Caribbean (English and Spanish)	04/97	194/97

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LAC Regional	Elimination of Lead in Gasoline in Latin America and the Caribbean - Status Report (English and Spanish)	12/97	200/97
	Harmonization of Fuels Specifications in Latin America and the Caribbean (English and Spanish)	06/98	203/98
Bolivia	Energy Assessment (English)	04/83	4213-BO
	National Energy Plan (English)	12/87	--
	La Paz Private Power Technical Assistance (English)	11/90	111/90
	Prefeasibility Evaluation Rural Electrification and Demand Assessment (English and Spanish)	04/91	129/91
	National Energy Plan (Spanish)	08/91	131/91
	Private Power Generation and Transmission (English)	01/92	137/91
	Natural Gas Distribution: Economics and Regulation (English)	03/92	125/92
	Natural Gas Sector Policies and Issues (English and Spanish)	12/93	164/93
	Household Rural Energy Strategy (English and Spanish)	01/94	162/94
	Preparation of Capitalization of the Hydrocarbon Sector	12/96	191/96
	Introducing Competition into the Electricity Supply Industry in Developing Countries: Lessons from Bolivia	08/00	233/00
	Final Report on Operational Activities Rural Energy and Energy Efficiency	08/00	235/00
	Oil Industry Training for Indigenous People: The Bolivian Experience	09/01	244/01
Brazil	Energy Efficiency & Conservation: Strategic Partnership for Energy Efficiency in Brazil (English)	01/95	170/95
	Hydro and Thermal Power Sector Study	09/97	197/97
	Rural Electrification with Renewable Energy Systems in the Northeast: A Preinvestment Study	07/00	232/00
Chile	Energy Sector Review (English)	08/88	7129-CH
Colombia	Energy Strategy Paper (English)	12/86	--
	Power Sector Restructuring (English)	11/94	169/94
	Energy Efficiency Report for the Commercial and Public Sector (English)	06/96	184/96
Costa Rica	Energy Assessment (English and Spanish)	01/84	4655-CR
	Recommended Technical Assistance Projects (English)	11/84	027/84
	Forest Residues Utilization Study (English and Spanish)	02/90	108/90
Dominican Republic	Energy Assessment (English)	05/91	8234-DO
Ecuador	Energy Assessment (Spanish)	12/85	5865-EC
	Energy Strategy Phase I (Spanish)	07/88	--
	Energy Strategy (English)	04/91	--
	Private Minihydropower Development Study (English)	11/92	--
	Energy Pricing Subsidies and Interfuel Substitution (English)	08/94	11798-EC
	Energy Pricing, Poverty and Social Mitigation (English)	08/94	12831-EC
Guatemala	Issues and Options in the Energy Sector (English)	09/93	12160-GU
Haiti	Energy Assessment (English and French)	06/82	3672-HA
	Status Report (English and French)	08/85	041/85
	Household Energy Strategy (English and French)	12/91	143/91
Honduras	Energy Assessment (English)	08/87	6476-HO
	Petroleum Supply Management (English)	03/91	128/91
Jamaica	Energy Assessment (English)	04/85	5466-JM
	Petroleum Procurement, Refining, and Distribution Study (English)	11/86	061/86
	Energy Efficiency Building Code Phase I (English)	03/88	--

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Jamaica	Energy Efficiency Standards and Labels Phase I (English )	03/88	--
	Management Information System Phase I (English)	03/88	--
	Charcoal Production Project (English)	09/88	090/88
	FIDCO Sawmill Residues Utilization Study (English)	09/88	088/88
	Energy Sector Strategy and Investment Planning Study (English)	07/92	135/92
Mexico	Improved Charcoal Production Within Forest Management for the State of Veracruz (English and Spanish)	08/91	138/91
	Energy Efficiency Management Technical Assistance to the Comision Nacional para el Ahorro de Energia (CONAE) (English)	04/96	180/96
	Energy Environment Review	05/01	241/01
Panama	Power System Efficiency Study (English)	06/83	004/83
Paraguay	Energy Assessment (English)	10/84	5145-PA
	Recommended Technical Assistance Projects (English)	09/85	--
	Status Report (English and Spanish)	09/85	043/85
Peru	Energy Assessment (English)	01/84	4677-PE
	Status Report (English)	08/85	040/85
	Proposal for a Stove Dissemination Program in the Sierra (English and Spanish)	02/87	064/87
	Energy Strategy (English and Spanish)	12/90	--
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	Rural Electrification	02/01	238/01
Saint Lucia	Energy Assessment (English)	09/84	5111-SLU
St. Vincent and the Grenadines	Energy Assessment (English)	09/84	5103-STV
Sub Andean	Environmental and Social Regulation of Oil and Gas Operations in Sensitive Areas of the Sub-Andean Basin (English and Spanish)	07/99	217/99
Trinidad and Tobago	Energy Assessment (English)	12/85	5930-TR
<b>GLOBAL</b>			
	Energy End Use Efficiency: Research and Strategy (English)	11/89	--
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	The International Network: Policies and Experience (English)	04/90	--
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	Assessment of Personal Computer Models for Energy Planning in Developing Countries (English)	10/91	--
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	A Synopsis of the Third Annual Roundtable on Independent Power Projects: Rhetoric and Reality (English)	08/96	187/96

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Global	Rural Energy and Development Roundtable (English)	05/98	202/98
	A Synopsis of the Second Roundtable on Energy Efficiency: Institutional and Financial Delivery Mechanisms (English)	09/98	207/98
	The Effect of a Shadow Price on Carbon Emission in the Energy Portfolio of the World Bank: A Carbon Backcasting Exercise (English)	02/99	212/99
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	Energy, Transportation and Environment: Policy Options for Environmental Improvement	12/99	224/99
	Privatization, Competition and Regulation in the British Electricity Industry, With Implications for Developing Countries	02/00	226/00
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	Undeveloped Oil and Gas Fields in the Industrializing World	02/01	239/01

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