

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

## **REGIONAL**

# **HEMISPHERIC ENERGY COOPERATION: AN EXAMINATION OF THE POTENTIAL CONTRIBUTION OF THE ANDEAN COMMUNITY OF NATIONS' HYDROCARBONS SECTOR**

**(ATN/SF-8483-RG app. 24 Oct. 2003)**

## **PLAN OF OPERATIONS**

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CONTRIBUTION OF THE ANDEAN COMMUNITY OF NATIONS' HYDROCARBONS SECTOR**

**(TC0210049RG)**

**EXECUTIVE SUMMARY**

<b>Requester:</b>	Bank Initiative		
<b>Beneficiaries:</b>	The Andean countries – Bolivia, Peru, Ecuador, Colombia and Venezuela		
<b>Executing agency:</b>	The Bank		
<b>Amount and source:</b>	IDB: (FSO)	US\$	500,000
	Cofinancing:	US\$	300,000
	Total:	US\$	800,000
<b>Terms:</b>	Execution Period:	20	Months
	Disbursement Period:	23	Months
<b>Objectives:</b>	The objective of the project is to assist the Andean Region in analyzing its strategic options for developing its hydrocarbons sector in a socially and environmentally acceptable manner.		
<b>Description:</b>	The project consists of three principal components.		
	<u>Studies.</u> The project will finance three background studies – an overview of the Andean hydrocarbons sector, its importance in the regional economy, and policy and institutional aspects of the sector - that, together, will provide a comprehensive overview of the Andean hydrocarbons sector. These studies will serve as the foundation for development of a series of six thematic studies – comparative advantages and market potential of the Andean Region, industry prerequisites for investment, sector governance, macroeconomic issues, environmentally and socially sustainable development, and indigenous peoples issues. The findings of the background and thematic studies will be used to develop a regional study of possible sector development scenarios for the region.		
	<u>Workshops.</u> The background studies developed in the previous component will be presented and refined in a series of preliminary		

workshops. The results of all the analytical work will then be presented in a regional workshop.

Dissemination. The results of the regional workshop, together with the studies, will be disseminated to the appropriate decision-makers in the region.

**Environmental/  
social review:**

The project profile was reviewed by the CESI/TRG at its meeting 22-03 held on June 13, 2003. Its recommendations have been included in this document.

**Benefits:**

The principal benefit of the studies produced under this technical cooperation is expected to be the provision of information to the Andean countries for making an informed decision on whether, and how much, to invest in the development of the Region's hydrocarbons sector, how to improve the policy and institutional environment for such activities, and how to do so in a socially and environmentally acceptable manner.

The project will also stimulate interest in greater hemispheric integration and cooperation in the hydrocarbons sector.

**Risks:**

The hydrocarbons sector is a very politically sensitive one and there is a potential that some countries may not be interested in taking into account the findings and recommendations of the studies. This risk is attenuated by the fact that the countries have requested the studies at a high level of priority and political visibility.

The relevance of the studies could also be affected by changing market conditions for hydrocarbons products, such as, for example, caused by increased exports from Iraq after the recent conflict. Whilst it is often not possible to predict these changes, every effort will be made to be sensitive to them in the development of the studies, and studies may be modified as warranted.

<b>The Bank's strategy:</b>	This project supports the Bank's sectoral priority of increasing the competitiveness of its borrowing member countries by providing the Andean countries with information on which to base a decision to develop the competitiveness of their respective hydrocarbons sectors in the world market. It also supports the Bank's integration strategy that promotes greater hemispheric integration and cooperation, and the Bank's Energy Strategy (see paragraph 1.18).
<b>Coordination with other Official Development Finance Institutions and Regional Organizations</b>	The details of the coordination with other official development finance institutions and regional organizations are discussed in paragraph 1.15. Coordination has been undertaken through a series of summit meetings and direct contacts with the Latin American Energy Organization (OLADE), the United Nations Conference on Trade and Development (UNCTAD), the Andean Development Corporation (CAF) and the General Secretariat of the Andean Community (SG-CAN).
<b>Special contractual conditions:</b>	None
<b>Exceptions to Bank policy:</b>	None

## **I. FRAME OF REFERENCE**

### **A. Introduction**

- 1.1 The Andean countries are important oil producers, accounting for 8% of world exports of petroleum. While output has expanded significantly over the years, the subregion has been an underachiever vis-à-vis its potential for an array of reasons ranging from the investment environment and infrastructure, to environmental and social factors. Moreover, some of the same factors have inhibited development of full potential for moving downstream into new products and hydrocarbon-related services. In an expanding, globalized economy, world demand for hydrocarbons is expected to grow significantly. By overcoming the obstacles cited above, the Andean countries would be better positioned to increase market share in this expanding world market.
- 1.2 The largest single market for petroleum is the United States, where demand is increasingly outstripping domestic supply. Given the natural pull of geography on trade, US concerns for a secure supply of hydrocarbons, as well as Western Hemisphere Heads of State Summit initiatives in Energy Cooperation and the creation of a Free Trade Area of the Americas (FTAA) by 2005, there are special opportunities for the Andean region to gain market share specifically in the US market. On that basis, this project aims to assist the Andean countries in the analysis of their strategic options for developing their hydrocarbons sectors in a socially and environmentally acceptable manner.

### **B. Background**

- 1.3 The United States is by far the world's biggest oil consumer in absolute and per capita terms, using about double the amount of oil per person as other industrialized nations. However, the country produces just 40% of the oil that it consumes and, as domestic demand has risen, US oil imports have almost quadrupled from 3 million barrels a day (MBD) in 1985 to the current level of 11 million MBD. Over the same period, the United States has become increasingly dependent on non-Western Hemisphere sources of supply: US oil imports from Canada and from Latin America and the Caribbean (LAC) doubled between 1985 and 2001, but those from extra-hemispheric sources quintupled. Currently, half of US oil imports are from beyond the Hemisphere, compared to under a third in 1985.
- 1.4 Oil is expected to be the United States' main single source of energy over the next three decades. Hence the country's growing dependence on imports raises concerns about energy security. Of note in this regard is that US supplies are increasingly taken from the Middle East, the source of all six significant oil disruptions since the Second World War: the Suez crisis in 1956, the Arab-Israeli wars of 1967 and 1973, the Iranian revolution in 1979, the outbreak of the Iran-Iraq war in 1980, and the first and second Gulf wars in 1990 and 2003

respectively. If the consumption and production trends of the past 15 years persist, US net oil imports will double in the next 20 years and will total 20 MBD in 2020. If the net supply from LAC to the United States does not increase in that period, extra-hemispheric sources – the vast bulk of which will be Middle Eastern – will account for 75% of US imports by the end of the next decade.

- 1.5 In that period the United States' growing energy gap could in principle be filled by sources in LAC, most particularly the Andean countries. Indeed, if the patterns of oil consumption and production evident in LAC over the past 15 years continue, the region could provide half of US oil imports in 2020. Since 1985, LAC oil exports to the United States have doubled; LAC oil production has increased by 65%; and LAC consumption has grown by 50%. Nevertheless, the LAC countries are still producing far below the potential offered by their abundant oil reserves. The region's proven reserves amount to 140 billion barrels, seven times greater than US reserves, and the rate of exploitation is just 2.4% a year (in the United States it is 13%). In short, LAC countries could increase oil production six-fold if the region's reserves were to be exploited at the same rate as those in the United States.
- 1.6 In LAC, the Andean countries are those best placed to increase oil production in absolute and relative terms as they have the bulk of the reserves. Continuation of the region's production and consumption patterns of the last 15 years would allow those countries to quadruple their oil exports in the next two decades, reaching a total of 9 MBD in 2020 (almost half of projected US import needs). Persistence of those trends would entail a three-fold increase in oil production and a doubling of consumption. However, a very significant effort will be required to maintain the last 15 years' 5% annual rate of production growth for the next two decades.
- 1.7 In the near future the two regions that can most significantly increase oil exports to the United States are South America, especially the Andean countries, and the Middle East. The competition between these two regions will determine their shares of the US import market. The Middle East has a natural competitive advantage, very largely because the wells in the region are more productive and production costs per barrel are therefore lower. The lower production costs and higher oil quality, however, are partially offset by the substantially lower transport costs for LAC supplies. To this should be added considerations of supply security, and the strategic risks inherent in growing dependence on sources located in a geographically concentrated region where political events historically have triggered all major oil shocks.
- 1.8 Another factor that will influence commercial flows are free trade areas. The Western Hemisphere is well advanced in creating an FTAA by 2005. The United States has recently proposed a free trade area with the Middle East, but the hemispheric process clearly has the edge in terms of timing and feasibility. The FTAA would secure market access in petroleum derivative products and services as well as enhance investment environments. The FTAA should therefore strengthen Andean participation in the hemispheric market, and North America in

particular, as well as give expression to the Hemispheric Energy Cooperation Initiative emerging out of the Hemispheric Summit Process.

- 1.9 Despite such attenuating factors and security risks, LAC has continued to lose ground to the Middle East in US oil imports as the growth of US demand and declining domestic supply have made the country more import-dependant. The main reason for that circumstance consists of institutional constraints prevailing in LAC countries. All the evidence suggests that the international and domestic investment required to increase the Andean countries' share of the US market would materialize if those constraints were eased. It has been estimated that quadrupling Andean oil exports – in order to meet half of the US import demand in 2020 – will require investment of some \$200 billion, in addition to the substantial investment needed to maintain the current production base of 6.5 MBD.
- 1.10 The constraints on such an endeavor arise from the burdensome rules and complex regulatory environments attendant on state control and state production, coupled to the inability of the states themselves to generate the domestic savings necessary for large-scale investment. The situation has been changing in recent years, notably in the Andean countries. In Ecuador and Colombia, about half of production is now in private hands. In Venezuela the proportion is about a third. Such change has been a slow process, partly because of political resistance to opening up oil sectors.
- 1.11 Another significant reason, however, is the marked absence of empirical analysis related to the potentially widespread gains of establishing an effective incentives structure that induces investment in the sector. It is likely that the current process of change would be hastened by the provision of such analysis, by facilitating contacts among Andean governments and between those governments and private operators, by fostering discussion of welfare-positive methods of opening up the sector, and by helping governments to assess their policy options with a view to developing the energy potential of the Andean region in the context of hemispheric energy security.
- 1.12 Against this background, the governments of the Andean Community asked the Inter-American Development Bank and other international organizations to undertake the activities necessary to realize the “Western Hemisphere Hydrocarbons Initiative” (WHHI). At the Andean Presidential Council in Bolivia on January 29-30, 2002, the Andean presidents asked the IDB to prepare a comprehensive examination of the region's energy potential as a strategic element of regional and hemispheric energy security.<sup>1</sup> This gave rise to two IDB projects

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<sup>1</sup> Point 29 of the Santa Cruz Declaration says: “Conscientes de la creciente importancia estratégica de la temática energética en el Hemisferio y de su interés para vigorizar la integración subregional andina, latinoamericana y hemisférica, los Presidentes acordaron solicitar a la Corporación Andina de Fomento (CAF), la Organización Latinoamericana de Energía (OLADE), el Banco Interamericano de Desarrollo (BID) y la Conferencia de las Naciones Unidas sobre Comercio y Desarrollo (UNCTAD), la preparación de un examen integrado del potencial energético de la subregión como factor estratégico para la seguridad



in 2002-2003 (ATN/SF-7707-RG and ATN/SF-8042-RG), as the first phases of the WHHI. These projects were oriented to an identification of major issues and their initial preliminary exploration, yielding several outputs since the beginning of 2002:

- The study “Towards Hemispheric Hydrocarbons Cooperation” analyzes inter-American trade in oil and energy-related goods and services; illustrates possible trends in market expansion and energy security; and assesses the role of multilateral institutions and governments in promoting greater hemispheric energy cooperation, with particular reference to the potential for resolving coordination problems, developing market instruments to reduce investment risk and offering financing and investment guarantees.
- A preliminary analysis of the current status and development potential of the hydrocarbons sector in the Andean countries, focusing on the situation of and prospects for the hydrocarbons resource base and its impact on the economy of each country.
- A preliminary assessment of how the institutional frameworks for the oil sector in the Andean countries have conditioned the performance of the sector and of national economies, including a series of recommendations as to how the frameworks could be modified in the interests of further improving national and sub regional economic performance.
- A preliminary examination of the link between oil production/exports and economic growth.
- Presentations of project outputs at the ministerial and presidential level in the Andean countries.

1.13 The request made of the IDB was reiterated in the declaration issued at the Andean Presidential Council in Ecuador on July 26, 2002, wherein the presidents noted the outputs generated to that date and asked the Bank and the Andean Development Corporation (CAF) to continue with the Initiative.<sup>2</sup> This was once more repeated in the First Meeting of Andean Community Energy Ministers in Bogotá, Colombia, on June 19, 2003, where the basis for this operation was presented. This regional technical cooperation will thus build on the preliminary explorations of the first two operations by providing a deeper, more comprehensive and specialized examination of the major issues.

1.14 The examination of the development of the hydrocarbons sector of the Andean Region on a regional basis has a number of advantages. The Andean countries are negotiating as a bloc in the FTAA process and the development of a

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energética regional y hemisférica. En ese sentido, los Mandatarios solicitaron que un primer informe sea presentado en ocasión de la IIa. Cumbre de Jefes de Estado y de Gobierno de América del Sur, a realizarse en Guayaquil, Ecuador, el 26 de julio del 2002.”

<sup>2</sup> Point 14 of the Guayaquil Declaration says that the presidents: “Toman nota del informe preliminar sobre el ‘Potencial energético de la Subregión Andina como factor estratégico para la seguridad energética regional y hemisférica’ ... [y] solicitan al BID y a la CAF que respalden los trabajos de los referidos organismos para que presenten sus resultados en el próximo Consejo Presidencial.”

coordinated regional hydrocarbons sectoral strategy could help them define their negotiating position and potentially stimulate the energy component of Hemispheric Summit Cooperation. The development of a regional strategy will also help avoid duplication of efforts between the individual countries, encourage learning from each others' experiences and contribute to a cross-fertilization of ideas and best practices. Many of the problems faced by the countries are the same, with consequently similar solutions. This technical cooperation would assist in this process.

**C. Coordination with other Official Development Finance Institutions and Regional Organizations**

- 1.15 As indicated in the above paragraphs, the governments of the Andean Community conferred a mandate on a number of international organizations to undertake activities related to the WHHI. For the meeting of July 26, 2002, the Latin American Energy Organization (OLADE) coordinated research papers and the United Nations Conference on Trade and Development (UNCTAD) produced an assessment of the impact of hydrocarbons development on the industrial base. No further role is envisaged for them at the present time. This project is now the principal operation to be undertaken by the organizations in the area and the Bank will work on it in close coordination with the CAF and the General Secretariat of the Andean Community (SG-CAN). As mandated by the Andean Presidents in the Summit of Santa Cruz de la Sierra in January 2002, the SG-CAN has incorporated energy security and integration as a top regional priority and will play a political coordinating role in the initiatives towards this end.

**D. A special consideration: the indigenous peoples issue**

- 1.16 Indigenous peoples inhabit some of the most promising areas for hydrocarbon exploration in the Andean countries, such as the Amazon basin. In the past, oil and gas activities in their territories have caused strong adverse impacts to these peoples. In addition, in international and national legal frameworks indigenous peoples have special rights over participation, land, resources and cultural heritage. Several national and private sector projects in indigenous territories have been controversial and in some cases the activities have been terminated. In other cases, investors have showed little interest in committing resources to these areas because of indigenous peoples opposition. Indigenous peoples demands not only relate to impact management but increasingly to their right to participate in the administration and revenues of oil and gas resources, as stated in Art. 15 of the ILO 169 Convention. In recent years there has been a series of efforts directed to improving the business environment between oil and gas companies, indigenous peoples and governments. Examples of these are the Harvard University PONSAC supported Oil Dialogs; the World Bank sponsored tripartite meetings on hydrocarbon operations in indigenous territories in the Andean region; the consultation for secondary legislation on hydrocarbon operations in indigenous territories in Ecuador, Peru and Bolivia, and; Colombia's efforts to include revenues rights for indigenous peoples. The issues identified through these

activities that need to be addressed in order to ensure socio-culturally acceptable hydrocarbon activities in indigenous territories are the following: (i) previous consultation; (ii) identification of exclusion areas (non contacted or isolated indigenous peoples, sacred areas, culturally sensitive); (iii) non contacted or isolated indigenous peoples special mitigation measures; (iv) land tenure regularization; (v) capacity building and technical assistance; (vi) participation in Environmental Impact Assessments (EIAs); (vii) oil and gas management participation (the Bank is supporting the Amazonia Gas initiative in Ecuador); (viii) revenue participation; (ix) relationship protocols; (x) indigenous peoples development plans ("planes de vida"), amongst others. These issues will be addressed in a separate study as part of this technical cooperation.

#### **E. The Bank's strategy**

- 1.17 This project supports the Bank's sectoral priority of increasing the competitiveness of its borrowing member countries by providing the Andean countries with information on which to base a decision to develop the competitiveness of their respective hydrocarbons sectors in the world market. It also supports the Bank's Regional Integration Strategy that promotes greater hemispheric integration and cooperation.
- 1.18 The project fits well with the Bank's Energy Strategy. This Strategy supports the restructuring and reform of the energy sector in the borrowing countries, so that these sectors can develop in a way that is economically, financially, environmentally, socially and politically sustainable. In attempting to achieve this goal, the Strategy provides support for: (i) the consolidation of structural and economic reforms; (ii) extension of modern energy options to all citizens in affordable terms; (iii) development of patterns of energy production and consumption that are efficient and at the same time environmentally friendly; (iv) mobilizing foreign and local capital to finance the sector; and (v) integration of regional energy markets. The project furthers all of these objectives.

## **II. THE PROGRAM**

#### **A. Objective**

- 2.1 The objective of the project is to assist the Andean Region in analyzing its strategic options for developing its hydrocarbons sector in a socially and environmentally acceptable manner.

#### **B. Description**

- 2.2 Of particular interest in achieving the above goal are a better understanding of: (a) how changing the policy and institutional environment regarding investment and productivity could stimulate hydrocarbon supply; (b) the macroeconomic

- consequences of increased hydrocarbon revenues and how these revenues might fit into a broader plan for the sustainable development of the Andean region, and;
- (c) how the environmental and social consequences of increased hydrocarbons extraction can be acceptably managed through changes in the design and implementation of relevant policies and through institutional strengthening.
- 2.3 The following activities are envisaged in order to achieve the above-mentioned objective.

Component I – Studies (US\$566,298)

Component IA – Regional Background Studies

- 2.4 The project will finance three background studies that, together, will provide a comprehensive overview of the Andean hydrocarbons sector. These studies are intended to examine in depth the current status of the sector in the Region and the present trends for its development, and will serve as the foundation for development of the thematic studies in Component IB.
- 2.5 Performance of the Hydrocarbons Sector in the Andean Region. This study will look at the history of the sector in the Andean Region over the last 20 years and examine possible scenarios for the coming 10 years, highlighting sectoral strengths and weaknesses. The study will examine the activity of the sector, provide an analysis of income, and investigate the economies of the public and private corporations.
- 2.6 Macroeconomic Importance of the Hydrocarbons Sector for the Regional Economy. This study will examine the relative importance of the hydrocarbons sector as a source of revenue for the economy of the Region, particularly in the fiscal and external accounts.
- 2.7 Policy and Institutional Aspects of the Hydrocarbons Sector. This study will examine in detail the policy framework and institutional arrangements of the sector in the Region. Particular attention will be paid to the legal and policy framework and institutions regulating the interactions of the sector with local communities and the environment.
- 2.8 These background studies will be presented and refined in a series of preliminary workshops.

Component IB – Thematic Studies

- 2.9 There is a perceived need for better information on the comparative advantages of hydrocarbons production in the Region versus other areas of the world, and the potential market opportunities for the Andean countries. One component of such an assessment is a lessons-learned exercise that helps decision-makers in the Region benefit from good practices elsewhere regarding governance of the sector.

Experience in other geographic areas can also provide valuable lessons regarding the short-term and long-term macroeconomic consequences of hydrocarbons development, and the management of environmental and social consequences.

- 2.10 A set of six thematic studies has been identified. These will compare and contrast the Andean Region with other world regions, identifying its comparative advantages or disadvantages in relation to them. In addition, the studies will examine the relevant theoretical aspects and identify best practices that may be applied to the Region. As indicated in Section IV B (Risks), these may be modified as dictated by changing circumstances. The topics are as follows:
- 2.11 Comparative Advantages and Market Potential will examine the competitiveness in the global market of hydrocarbons produced in the Andean Region versus those produced in other regions of the world, in particular the Persian Gulf. Factors such as relative costs of production, transport and transformation, together with the impact of international trade agreements and issues related to security will be analyzed. This will provide a basis for better judging the market potential of increased production.
- 2.12 Industry Prerequisites for Investment will describe and discuss the investment decision making process within an international oil company: the basis upon which investment decisions are made, considerations, geological and above ground risks, impediments to investments, performance expectations, etc. This is to better educate other stakeholders as to how international oil companies ultimately decide on whether or not to invest their capital.
- 2.13 Based on the analysis provided by the Regional Background Studies, Governance of the Sector will look at the roles of each of the actors in the sector – ministries, regulating entities, state enterprises, private companies, foreign investment partners, etc. – and will highlight the principal rigidities, distortions and bottlenecks present. From the available information on operating environments in other countries, examples of specific elements contained in alternative systems, regulations, legal frameworks and contract types that could address each of the identified impediments will be ascertained.
- 2.14 Macroeconomic Issues. This study will consider a number of broad macroeconomic considerations related to increasing hydrocarbons income. Included in this set of issues are: the macroeconomic consequences and management of a substantial influx of revenues in the shorter term and their volatility over time; the potential costs to the overall economy of investing in the hydrocarbons sector in terms of the possible crowding out of other non-hydrocarbons related activities, and; the longer-term problem of absorbing increased revenues from non-renewable resource extraction for supporting sustainable economic growth and development, whilst ensuring an efficient and effective management and distribution of those revenues at regional and local institutional levels.

- 2.15 Environmentally and Socially Sustainable Development. This study is one of the most important and will examine how the hydrocarbons sector can be developed in a socially and environmentally acceptable manner. Direct and indirect, short and long term, together with cumulative impacts, will be analyzed. Among the topics studied will be: mitigating adverse social and cultural effects on populations in zones of exploitation; mitigating adverse environmental effects of the production and transport of hydrocarbons; needs for institutional strengthening to promote these goals (for example, building or strengthening links among hydrocarbons development, finance, environmental and social agencies); needs for policy reform; the use of proactive social and environmental policies to develop comparative advantages for the export of goods and services, and; procedures for adequate public involvement in decisions. The potential positive social effects of hydrocarbons development will be noted here and will be part of the assessment of how revenues can be used for long-term sustainable growth and development. Lessons learned and “best practices” from the Andean Region experience and other world regions will be emphasized, and how they can be applied throughout the Andean Region will be incorporated into this study. This study will be closely coordinated with the following specific study on indigenous peoples’ issues.
- 2.16 Indigenous peoples issues. This study will assess amongst other topics: (i) special mitigation measures to assure ethnic, territorial and cultural integrity of indigenous peoples impacted by hydrocarbon operations; (ii) alternatives to comply with indigenous peoples participation in resource management and revenues as stated in Art. 15 of ILO 169 Convention; (iii) recommendations to exclude cultural sensitive areas from oil block biddings, and; (iv) alternatives to deal with non-contacted and isolated peoples impact management.

#### Component IC – Regional Scenarios Study

- 2.17 The findings of the background and thematic studies will be used to develop a series of possible sector development scenarios for the Region as a whole for the coming ten years, which will serve to promote discussion in the regional workshop in the following component. Particular attention will be paid to the added value of developing the hydrocarbons sector in an integrated regional manner rather than at individual country level.

#### Component II – Workshops (US\$137,475)

- 2.18 Each of the Background Studies will be presented and refined in a series of preliminary workshops in each of the five Andean Community countries. The hosting of these national preliminary workshops will be provided as an in-kind contribution by each country.
- 2.19 The results of all the analytical work developed in Component I (Background, Thematic and Regional Scenarios Studies) will be presented in a regional workshop, which is tentatively scheduled to be held at the General Secretariat of

the Andean Community in Lima, Peru, in the first semester of 2005. The aim of this regional workshop is to establish and further a constructive dialog between Governments and national oil companies, the international oil companies that are capable of providing the investment capital, skills and management expertise for the efficient and socially and environmentally acceptable development of the region's energy resources, and other stakeholders. Discussion of the studies will be moderated by invited specialists with direct experience in the topic. For certain topics of particular importance and interest, additional presenters of renown may also be invited to present complementary viewpoints. Representatives of government, regulating entities, public and private operating companies, civil society and international experts will be invited to attend. The objective of the regional workshop is to provide a space for the participants to learn from the studies undertaken, to exchange experiences and to discuss and evaluate possible scenarios for the development of the sector in a socially and environmentally acceptable manner in the Andean region as a whole. The results of this workshop will be also used to refine the studies undertaken.

#### Component III – Dissemination (US\$31,000)

- 2.20 The proceedings of the regional workshop, together with the studies, will be edited, published and distributed to the appropriate decision-makers in the region. These proceedings will also be incorporated into the websites of the Bank and the CAF.

#### Component IV – Evaluation (US\$20,952)

- 2.21 Six months after the completion of the project, an independent consultant will be contracted to evaluate the usefulness of the studies and the workshops to the appropriate decision-makers and the extent to which they have influenced the decision to develop the hydrocarbons sector in the region.

#### Expected Results

- 2.22 At the end of the project, it is expected that the appropriate decision-makers in the Andean Region will have the necessary elements for making a decision on the development of the Region's hydrocarbons sector.

### **C. Cost and financing**

- 2.23 The project has a total cost of US\$800,000. The Bank's contribution will be US\$500,000 from the net income of the Fund for Special Operations (FSO), provided in convertible currency on a non-reimbursable basis. The CAF will cooperate with the sum of US\$300,000, and each of the Andean countries will contribute in-kind by hosting and covering the organizational costs of a national preliminary workshop. The following table presents the estimated costs and financing proposed (a Detailed Budget is available in the technical archives of the project).

Description	IDB (US\$)	CAF (US\$)	Total (US\$)
<b>Component I – Studies</b>	<b>446,672</b>	<b>119,426</b>	<b>566,298</b>
Common to Components 1A, 1B and 1C:	231,880	69,946	301,826
Principal Consultant (330 days) • Honoraria + Travel Research Assistant (330 days) • Honoraria + Travel	231,880	69,946	
Component 1A – Regional Background Studies	130,552		130,552
Environment Consultants • Honoraria + Travel Social Consultants • Honoraria + Travel	65,276 65,276		
Component 1B – Thematic Studies	60,740	49,480	110,220
Consultants (6 studies) • Honoraria + Travel	60,740	49,480	
Component 1C – Regional Study	23,700		23,700
Environment Consultants • Honoraria + Travel Social Consultants • Honoraria + Travel	11,850 11,850		
<b>Component II – Workshops</b>	<b>7,110</b>	<b>130,365</b>	<b>137,475</b>
Component II A – Preliminary Workshops (5)			In-kind
Component II B – Regional Workshop	7,110	130,365	137,475
Presenters Travel Participants (sponsorship for 25 civil society participants) Location Rental Organization and Logistics (local transport, communications, etc) Special Events (lunches, dinners, etc.)	7,110	16,590 52,175 15,000 25,000 21,600	
<b>Component III – Dissemination</b>	<b>1,000</b>	<b>30,000</b>	<b>31,000</b>
Editing, Translation, Publication and Distribution Website	1,000	29,000 1,000	
<b>Component IV – Evaluation</b>	<b>20,952</b>		<b>20,952</b>
Honoraria + Travel	20,952		
<b>Contingencies</b>	<b>24,066</b>	<b>20,209</b>	<b>44,275</b>
<b>TOTAL</b>	<b>500,000</b>	<b>300,000</b>	<b>800,000</b>

- 2.24 The Banks contribution will finance: (i) part of the consultant honoraria and travel costs related to the development of the studies; (ii) part of the travel costs of presenters at the regional workshop; (iii) part of the dissemination costs, and; (iv) the consultant honoraria and travel costs related to the project evaluation. The Bank will be responsible for the procurement that makes use of its resources dedicated to this project. All procurement will be closely coordinated with the CAF.
- 2.25 The contribution of the CAF will finance: (i) part of the consultant honoraria and travel costs for the development of the studies; (ii) the costs of the regional workshop, and; (iii) part of the dissemination costs. The CAF will be responsible



for procurement of consulting services, etc. made with its contribution, and this procurement will be done in close coordination with the Bank.

- 2.26 Each of the countries will contribute in-kind by hosting and covering the organizational costs of a preliminary workshop.

### **III. PROGRAM EXECUTION**

#### **A. Program execution and administration**

- 3.1 The project will be executed directly by the Bank with INT/ITD having the principal responsibility for overseeing the project, including the technical aspects, and INT/RTC the responsibility for disbursements and basic administration. With regards to the technical aspects, INT/ITD will consult, as necessary, with other relevant units of the Bank.
- 3.2 The contracting of consulting services will be carried out in accordance with the Bank's policies and procedures in this area. It is requested that the consultant who has served as principal consultant on the first two technical cooperations related to the WHHI (ATN/SF-7707-RG and ATN/SF-8042-RG), and who is a renowned expert in hydrocarbons in Latin America, be contracted directly for the position of principal consultant in this operation. In the two previous operations, he has shown that he has the specialized knowledge necessary for the studies required under this operation and the Bank has considered his final reports to be of high quality.
- 3.3 The principal consultant will be responsible for the overall coordination of the studies. In addition, and with support from social and environmental consultants, he will produce the three background studies and the final Regional Scenarios Study of Component I. The thematic studies will be undertaken by consultants with relevant experience in the topic. The principal consultant will have the responsibility of coordinating them.
- 3.4 In addition, a research assistant will be contracted to assist the principal consultant in the preparation of the studies as well as the general preparation and coordination of the preliminary and regional workshops. (The Terms of Reference are available in the technical archives of the project).

#### **B. Execution and disbursement schedule**

- 3.5 The project will be executed over a period of 20 months with a period of disbursement of 23 months. The projected execution schedule is the following:

Component	Month																							
Component I – Studies																								
• 1A – Regional Background Studies																								
• 1B – Thematic Studies																								
• 1C – Regional Study																								
Component II – Workshops																								
• IIA – Preliminary Workshops																								
• IIB – Regional Workshop																								
Component III – Dissemination																								

#### IV. VIABILITY AND RISKS

##### A. Benefits

- 4.1 The principal benefit of the studies produced under this technical cooperation is expected to be the provision of information to the Andean countries for making an informed decision on whether, and how much, to invest in the development of the Region's hydrocarbons sector, how to improve the policy and institutional environment for such activities, and how to do so in a socially and environmentally acceptable manner.
- 4.2 The project will also stimulate interest in greater hemispheric integration and cooperation in the hydrocarbons sector.

##### B. Risks

- 4.3 The hydrocarbons sector is a very politically sensitive one and there is a potential that some countries may not be interested in taking into account the findings and recommendations of the studies. This risk is attenuated by the fact that the countries have requested the studies at a high level of priority and political visibility.
- 4.4 The relevance of the studies could also be affected by changing market conditions for hydrocarbons products, such as, for example, caused by increased exports from Iraq after the recent conflict. Whilst it is often not possible to predict these changes, every effort will be made to be sensitive to them in the development of the studies, and studies may be modified as warranted.

**C. Environmental and social impact**

- 4.5 The production of the studies under this technical cooperation will not entail any direct social or environmental impacts. In terms of indirect effects, if the governments of the Andean countries should decide to develop the Region's hydrocarbons sector, this project will have provided them information on potential consequences and on how to minimize adverse social, cultural and environmental effects.

## **TERMS OF REFERENCE**

### **PRINCIPAL CONSULTANT**

#### **Project: Hemispheric Energy Cooperation: An Examination of the Potential Contribution of the Andean Community of Nations' Hydrocarbons Sector**

#### **I. AIM OF THE CONSULTANCY**

- 1.1 The overall aim of the consultancy is to assist the Andean countries to analyze their strategic policy options, for the purpose of developing the energy potential of the Andean region in a socially and environmentally sustainable manner, in the context of hemispheric energy security. The assistance will consist in providing specific analyses as regards the policy options that affect the performance of the oil sector. Diverse policy scenarios will be developed, which will be used to illustrate the performance of the oil sector and the implications within the macroeconomic sphere. Thematic information is to be supplied on different aspects of oil activity on the basis of comparisons among countries.
- 1.2 Therefore, over the next 20 months the consultancy will unfold in two directions: Firstly, a detailed knowledge of the Oil Sector in the Andean countries will be developed. Secondly, detailed studies will be carried out of a series of issues common to the oil sector of the Andean countries. In other words, in-depth vertical studies of each one of the countries and transversal studies of issues common to the diverse countries. On the basis of this knowledge and diagnosis, scenarios under different policy options will be developed.
- 1.3 No study exists that would allow the evaluation of strategic options for the development of the hydrocarbons sector in the Andean region. This study must analyze the impact of different options under the same methodology in the different countries of the subregion in such a way as to make the aggregation of the impacts possible. A systematic knowledge of the hydrocarbons sectors in the different countries has a high added value in itself, in that it can lead to policy decisions that entail a very high generation of wealth.

#### **II. ACTIVITIES**

- 2.1 The first activity is to carry out background studies, for the Andean countries, of the following three aspects: Performance of the Sector; Importance, and Institutional Aspects. The studies will be carried out for the last twenty years as a minimum and will include scenarios for the next ten.

- 2.2 The second activity consists in coordinating six studies at the topmost level to contrast diverse aspects related to hydrocarbons, among the Andean countries and between the latter and others outside the region. The six thematic studies are: comparative advantages and potential market; industry prerequisites for investing; governance of the sector; macroeconomic aspects; sustainable environmental and social development, and issues of the indigenous peoples.
- 2.3 The studies of the first and second activity will be coordinated in such a way as to generate feedback between the findings made in the general studies on the hydrocarbons sector in the different countries and in the more detailed comparative thematic studies.
- 2.4 The third activity consists in preparing a study of medium-term regional scenarios in the Andean capitals, with the assistance of the representatives of the Andean governments and of the oil companies that operate in the region. The results of the background and thematic studies will be employed to develop a series of possible scenarios for the regions as a whole for the next ten years. Crucial attention will be paid to the added value of developing the hydrocarbons activity as an integrated regional activity rather than at an individual country level.
- 2.5 The fourth activity will consist in coordinating the preliminary national workshops, at which the background studies will be validated, and the regional workshop at the General Secretariat of the Andean Community in Lima, Peru, where the background, thematic and regional scenarios' studies will be presented. This workshop will be carried out as a culmination to the project and will include the presence of representatives of governments, regulatory entities and civil society that are involved in hydrocarbons production activities in the Andean region as well as representatives of production companies from both within and outside the region.
- 2.6 The fifth activity will consist in coordinating and contributing to the dissemination of the findings of the project in the countries of the region so as to assist the authorities and the other actors in the hydrocarbons sector in their strategic decisions related to the development of the hydrocarbons sector. Additionally, the project's findings will be disseminated among the operating companies so as to enjoy their backing in the implantation of the strategic options chosen by the authorities.

### **First Activity: Carrying Out Background Regional Studies**

- 2.7 The first goal of the consultancy is to carry out, on the basis of factual information, a Study that describes the evolution of the hydrocarbons sector for the region as a whole, illustrating the interrelation among the following three areas: performance, macroeconomic importance and institutional framework. Each one of these three parts of the Study is described below.

## **A. Performance of the Hydrocarbons Sector in the Andean Region**

- 2.8 The purpose of the first part of the Study is to describe the Performance of the Hydrocarbons Sector. This first part is divided into three sections: Activity, Income, and Economy. Throughout the analysis, the operation of the government corporation will be distinguished from that of private companies.
- 2.9 For the description of the Activity of the Sector, the following areas will be analyzed: Production, Reserves, Exports, Refining and Domestic Market. Activity of the oil and gas sector will be assessed in the context of the government policies and regulations that governed at the time, isolating the volatile energy sector policy swings experienced over the past 20 years. Production and reserves analysis will distinguish between types and quality of crude produced, in order to identify marketing constraints and resulting impact on price differentials (Example: Ecuador Oriente (non Central Fields) crude quality limiting the number of refineries that can process the crude, resulting in investment in refinery upgrading in Chile in order to provide an alternative to the large differentials of the US west coast refiners. Example: Venezuelan Orinoco heavy crudes exported to dedicated refineries in the US Gulf Coast). This is necessary in order to get at the central issue of compatibility with US refining capacity, and hence marketability to the US.
- 2.10 The analysis of Income will distinguish, firstly, that of the Operators, afterwards that of the Public Sector and lastly that of the Government. A comparative analysis of fiscal terms and contract types across the five jurisdictions, including a discussion of the evolution of contract terms will be performed. This will be followed by an international comparative analysis of fiscal terms and contract types in the Andean countries.
- 2.11 The third sector will analyze the Economies of the Public Corporation and of the Private Corporations.

## **B. Macroeconomic Importance of the Hydrocarbons Sector for the Regional Economy**

- 2.12 The second study is oriented at measuring the importance of the Hydrocarbons Sector in the economy of each of the countries and in the region. The importance is to be measured in three areas of the economy: External, Fiscal and Real.
- 2.13 The privatization and deregulation initiatives introduced in the 1990s were economy-wide, and driven significantly by the “Washington Consensus” and concerted pressure from multilateral lending agencies and foreign debt holders to open these economies and to capitalize the universe of state-owned entities, in exchange for restructuring of extremely burdensome external debt obligations. The oil and gas sector opening will be analyzed in this context to ensure coverage of the broader global “aperture” playing out and the region-wide challenges.

- 2.14 The analysis of the importance of hydrocarbons in the External Sector will be carried out firstly as regards the importance of net oil exports in the commercial and current accounts.
- 2.15 Afterwards, the overall current account will be analyzed, public and private flows will be distinguished, and the insufficiency of foreign public savings will be discussed as a possible cause of the opening of the hydrocarbons sector to foreign private investment. In this regard, when analyzing the private current flow it will be necessary to take into account foreign investments' remittances of earnings on investment.
- 2.16 Once the dynamics of the current account have been described and analyzed, an analysis will be carried out of the direct foreign investment entered into the capital account. This will allow the analysis of the total external flow associated with the hydrocarbons sector.
- 2.17 In the analysis of the fiscal sphere, a step-by-step approach will be employed and the importance of oil income will be analyzed in public accounts and then in fiscal accounts.
- 2.18 As in the external analysis, the insufficiency of public savings will be investigated as one of the determining causes of the opening of the sector to private investment.
- 2.19 For the analysis of the importance of the hydrocarbons sector in real activity an estimate will be made of its direct and indirect demand for goods and services and thereby of the direct and indirect job generation.
- 2.20 Afterwards the aggregate value in the oil and related sector will be contrasted with the total GDP, and the same for jobs, i.e. those in the sector and in the related sector with regard to each country's total employment.

### **C. Political and Institutional Aspects of the Hydrocarbons Sector**

- 2.21 The Legal and Regulatory Framework of three basic aspects of the Hydrocarbons Sector will be studied: Ownership of the Reserves and Access to the Activity; Governability of the Sector and Distribution of the Income from Hydrocarbons Sales.
- 2.22 As regards the Ownership of the Reserves, it will be specified which legal section governs their reservation for the State and to which entity within the State their administration has been allocated.
- 2.23 Secondly, it will be analyzed if access to the diverse segments of hydrocarbons activity is free or whether the monopoly on some of the segments is reserved for State corporations.

- 2.24 Regarding the structure of Governability of the Hydrocarbons Sector, the roles of, and relationships among, the following will be studied: The Ministry; the State Company; the Regulating Entity, and the Private Companies.
- 2.25 The diverse types of Contracts by which Private Companies gain access to the reserves will be studied. In particular, contractual stability and the levels at which disputes are handled will be studied.
- 2.26 For each mode of operation the parameters will be studied that govern the distribution of the operational surplus: royalties, taxes or contractually established share. The legal features of each.
- 2.27 In developing the study, the following considerations will be taken into account:
- An important element for this section will be the identification of the government-mandated strategy for the National Oil Companies (NOC) in each of the jurisdictions, and the maturity/sophistication, capabilities, and skill set of the NOC itself. These in turn illuminate and, to some extent, dictate the role available for the International Oil Companies (IOC) in the respective energy sector (competitive participant, financier, technology source, consultant, service provider, etc.). The evolution of the mandated strategy is an important determinant of how the NOC has managed and realized foreign investment in the energy sector.
  - Attention will be paid to the processes for foreign IOC's gaining access to land/licenses, which vary considerably across the jurisdictions (most open in Peru, most onerous in Venezuela).
  - The evolution of the State hydrocarbon entities in Peru and Bolivia in the mid-1990s, and the more recent changes impacting PDVSA and Ecopetrol will be captured.
  - International, National, Provincial and Municipal taxation and legislation, if any, governing hydrocarbon activities will be itemized.
  - Differences, if any, in pricing between domestic and foreign markets will be isolated. Procedures for marketing of royalty and equity/IOC crude and products will be isolated.
  - Attention will be directed to the domestic/indigenous upstream and service companies operating in the hydrocarbon sector.
    - Is the domestic sector given preference in any manner; does it compete on a level playing field with the state entity; is there local content legislation in place; do IOC's have a partnering or joint venture option available when entering the country.
    - Does the Government have policies in place encouraging development of a domestic upstream sector; if so, to what elements of the value chain does this apply (often crude oil E&P is excluded).
- 2.28 There will be a description of the legislation and institutions that regulate the relations of the Sector with the Communities in which it operates and with the natural Environment.



- 2.29 The last and perhaps most important part will study the relationship between the changes in the institutional and regulatory framework and the performance of the Hydrocarbons Sector over the course of time.

### **Products**

- 2.30 Three Studies will be produced, one per subject: Performance of the Hydrocarbons Sector in the Andean Region, Macroeconomic Importance of the Hydrocarbons Sector for the Regional Economy, and Political and Institutional Aspects of the Hydrocarbons Sector.

### **Second Activity: Coordinating the Thematic Studies of the Oil Sector**

- 2.31 No comparative studies exist among the countries of the Andean region and between the latter and the rest of the world on aspects such as governability, comparative advantages, contracting, sustainable development and other aspects related to hydrocarbons activities.
- 2.32 The studies will cover the following subjects, all of them in the Hydrocarbons area: Comparative Advantages and Market Potential; Industry Prerequisites for Investment; Governance of the Sector; Macroeconomic Aspects; Sustainable Environmental and Social Development, and Issues Regarding Indigenous Peoples. The terms of these studies are succinctly described below.
- 2.33 The added value of the second activity is the identification of strengths and weaknesses in the institutional framework of the Andean countries' oil sector by contrasting it with the best international practices. This will make it possible to propose changes in the institutional framework and in policies, leading to improvements in the performance of the hydrocarbons sector in the Andean countries.
- 2.34 Each one of the thematic studies will have the following five parts as a minimum: (i) review of the subject's relevant bibliography; (ii) theoretical model that will guide the empirical analysis; (iii) empirical evidence in each of the Andean countries and in the countries selected in other regions; (iv) comparison of the empirical evidence among the Andean countries and with the best international practices, on the basis of which it will be possible to extract (v) conclusions and recommendations.
- 2.35 The principal consultant will coordinate the work of the consultants contracted to carry out these studies and will ensure their quality.

### **A. Comparative Advantages and Market Potential:**

- 2.36 This study will discuss the competitiveness of Latin American and Caribbean hydrocarbons in the United States market with regard to hydrocarbons from other regions of the world, the Persian Gulf in particular. It will take into account such factors as production, transport, transformation and marketing costs and the costs associated with the security of supply. On the basis of these costs it will derive the maximum yield to which the owner States can aspire for hydrocarbons extraction in their respective territories. In addition, in the context of the evolution of world demand for hydrocarbons it will be stated whether a market exists for the potential expansion of hydrocarbons in the Andean region.
- 2.37 For the analysis of the comparative advantages and of hydrocarbons production economies at least three types of costs will be taken into account, as a minimum: (i) exploration, production, transformation and transport costs; (ii) transaction costs: the costs of carrying out the contracts and enforcing compliance with them, and (iii) the physical security costs in such a way as to maintain the proper conditions for the operations, or, otherwise stated, the costs of political instability.
- 2.38 Regarding production, transformation and transport costs and a number of factors that are specific to the Andean basin crudes will be taken into account among others: Quality of the Oriente Basin heavy crudes in Ecuador relative to the ability of the US refiners to process. Price differentials impacting the region's heavy crudes, and resulting impact on both exploitation economics and the types of incentives that make sense for these resources. Constraints on the exploitation of the Orinoco extra heavy crudes in Venezuela.
- 2.39 The above costs for the five Andean countries will be compared cif on the United States market with those for other countries and regions. In particular they will be compared with those for hydrocarbons originating in Mexico and Canada and for those originating in the Persian Gulf, North Africa, the Caspian Sea and Russia.
- 2.40 It is important to stress the geopolitical security aspect and the costs of maintaining the peace and costs of creating the conditions for producing hydrocarbons when comparing the cif costs on the United States market of hydrocarbons originating, in particular, from the Persian Gulf and the Andean region.
- 2.41 As a minimum, three scenarios for world hydrocarbons supply and demand will be developed, and an analysis performed of the market space for the incremental production of the Andean countries. In particular, three scenarios for hydrocarbons supply and demand in the western hemisphere will be developed, and a detailed analysis carried out of the market space for Andean incremental production in its natural markets.

## **B. Industry Prerequisites for Investing:**

- 2.42 The investment decision-making process within an upstream company will be described and discussed: the basis upon which investment decisions are made, considerations, geological risking above ground risking, hurdles, performance expectations, etc.
- 2.43 The investment decision framework developed for an upstream company will be contrasted with the institutional and physical conditions in each of the Andean countries and conclusions reached with regards to the factors that explain the usually low level of private investment and what needs to be done to foster investment.
- 2.44 The above analysis should lead to a ranking of desirable changes within the institutional framework regulating investment in the oil sector in the Andean region countries.

## **C. Governance of the Sector:**

- 2.45 From the analysis provided in the Background Regional Studies, this study will look at the roles of each of the actors in the sector – ministries, regulating entities, state enterprises, private companies, foreign investment partners, etc. – and will highlight the principal rigidities, distortions and bottlenecks present. From the available information on operating environments in other countries, examples of specific elements contained in alternative systems, regulations, legal frameworks and contract types that could address each of the identified impediments will be ascertained. The resulting “shopping list” of alternative actions and directions forms the beginning of the dialog for change.

## **D. Macroeconomic Aspects:**

- 2.46 The following three macroeconomic issues will be studied in their theoretical aspects and practical consequences in different countries: handling of the volatility and high variation in oil-sector income over time; absorption of resources and displacement of other activities, and sustainable economic development in countries with income based on non-renewable resources. The study will also discuss the historical and current use of funds from hydrocarbons extraction.
- 2.47 Regarding the issue of the volatility of oil income, the experience of different countries in terms of exchange rate management, external competitiveness of the economy, and the use of stabilization and savings funds and their applicability to the Andean countries will be discussed. Policies will be recommended for the handling of volatility in such a way as to prepare the countries to face this phenomenon.

- 2.48 With regards to the absorptive capacity of the economy and economic displacement, the following issues will be considered: (i) a discussion of forward and backward linkages of the hydrocarbon sector within the economy; (ii) the absorptive capacity of the economy with respect to revenue flows (this deals with the implications for domestic inflation, exchange rate movement, money supply, etc. of an inability of domestic capital investments and goods and services activity to absorb the flow of hydrocarbons revenue. Examples of insulation policies will be taken from other jurisdictions); and (iii) the issue of “crowding out” of both domestic investment capital (which may be drawn to the higher returns of the hydrocarbon sector and away from other domestic uses), and domestic skilled and unskilled labor, which may be drawn to the higher-paying hydrocarbon sector and away from alternative productive uses in the domestic economy. This is a particular challenge for the public sector (energy ministry, regulatory agency), where personnel with energy sector-relevant skills may be drawn to the private sector, leaving the public sector unable to effectively guide and regulate the industry
- 2.49 As regards the countries’ specialization in hydrocarbons production, it will be analyzed how far the Sector is integrated, in Andean countries, with the rest of the economy, and therefore what is the potential drag effect of hydrocarbons activities. At the same time, emphasis will be placed on the recommendation of policies to add value along the hydrocarbons chains with a view to making the transition from economies based on raw materials to economies based on know-how.
- 2.50 An overall system for sustainable economic development will be designed for the countries of the region having as one of its pillars the exploitation of hydrocarbons and of natural resources in general. Particular attention will be paid to economic diversification goals. The successful experiences of developed countries that export raw materials, such as Finland, Norway, Canada and Australia, particularly at a provincial/state level, will be studied.

#### **E. Environmentally and Socially Sustainable Development:**

- 2.51 Among the aspects to be studied are how it may be possible to mitigate adverse social and cultural effects on the populations in the production areas; the need to reinforce institutions to promote these goals, and the means towards an adequate public participation in the decisions on the exploitation of natural resources. The potential positive effects of the development of hydrocarbons will be noted in these studies and will be part of the evaluation of how the income derived from the production of hydrocarbons can be employed for long-term sustainable development.

#### **F. Indigenous Peoples Issues:**

- 2.52 This study will, among other aspects, evaluate special measures to ensure the ethnic, territorial and cultural integrity of the indigenous peoples affected by the production

of hydrocarbons; options for complying with the participation of indigenous peoples in the exploitation of natural resources in accordance with international treaties, and options for handling contacts with isolated peoples.

### **Products**

- 2.53** Six studies will be produced in a span of fifteen months, on each of the subjects described.

### **Third Activity: Creation of Regional Scenarios for the Development of the Hydrocarbons Sector**

- 2.54 Once having described and studied the historical relationship among the institutional framework, performance and macroeconomic impact of the hydrocarbons sector in the Andean countries, diverse medium-term scenarios will be created. To this end, different policy and institutional frameworks will be assumed and, on these assumptions, diverse trajectories will be designed for the performance of the hydrocarbons sector and for its macroeconomic impact. These scenarios will be the basis for the policy options that will be discussed with the governments and other actors in the hydrocarbons sector in the Andean countries.
- 2.55 In addition to, volume projections and macroeconomic implications the regional analysis will contain a summary of country-specific discussion of the rigidities, barriers and hurdles to resource exploration and exploitation, and avenues to mitigate same, that are unique to each jurisdiction
- 2.56 The added value of this activity resides in the fact that for none of the Andean countries does a study exist that analyzes the historical relationship among the performance of the hydrocarbons sector, its macroeconomic impact, and the institutional framework and policies that condition its development, and that makes it possible, on the basis of the historical experience, to establish scenarios for its possible evolution.

### **Products**

- 2.57 A study on regional scenarios will be produced which will be presented at a Regional Workshop. Based on the recommendations and conclusions of the Workshop, the consultant will fine-tune this study.

#### **Fourth Activity: Coordinating the Workshops for the Presentation of the Results**

- 2.58 The principal consultant will be responsible for organizing both the national workshops for validation of the background studies, and the regional workshop at which the results will be presented upon the culmination of the Project.
- 2.59 The consultancy in general, and the final workshop in particular, will be used to establish and/or further a constructive dialogue between the Governments/NOC's of the Andean countries, the international oil companies that are capable of providing the investment capital, skills, and management expertise necessary for efficient exploitation of the region's energy resources, and other stakeholders.
- 2.60 The participants in the workshops, in addition to the diverse consultants, will be: representatives of the Governments, Regulatory Entities and Civil Society that are directly concerned with hydrocarbons production in Andean countries; representatives of production companies and of corporations related to the hydrocarbons sector, both national and international, and; representatives of entities devoted to integration, and to supporting the development of the region, that are concerned with hydrocarbons activities.
- 2.61 These regional workshop will be held at the General Secretariat of the Andean Community in Lima, Peru, in the second half of the second year of implementation of the project.

#### **Fifth Activity: Coordinating and Contributing to the Dissemination of the Results of the Project**

- 2.62 The principal consultant will be responsible for coordinating and contributing to the dissemination of the results of the project in the countries of the region and internationally. In the countries of the region, in coordination with the different actors linked to hydrocarbons activities, the results will be presented as they are obtained, with the aim of obtaining feedback from the parties involved. Afterwards, the results of the project will be presented at diverse pertinent forums and venues. Internationally, at the pertinent forums, the results will be presented that make it possible to illustrate the advantages of the Andean region's hydrocarbons sector.

### **III. QUALIFICATIONS, DURATION AND WORKING LOCATION OF THE PRINCIPAL CONSULTANT**

#### **Qualifications of the Principal Consultant**

- 3.1 The principal consultant must meet the following minimum requirements: (i) extensive professional experience (a minimum of fifteen years) in the Hydrocarbons

Industry or Sector in one of the Andean countries, including senior posts; (ii) the professional experience must be in areas that link the oil industry or sector with the rest of the economy and the public sector, such as planning or corporate finances; (iii) he or she must possess applied knowledge in oil finances and in the macroeconomic accounts of the oil and public sectors; (iv) he or she must possess theoretical knowledge and practical experience of the determining factors of private investment in the oil sector in developing economies; (v) he or she must have an advanced academic degree in economics, with extensive analytical work in areas related to hydrocarbons; (vi) he or she must have theoretical and applied knowledge in areas such as macroeconomy, institutions, governability and contracting vis-à-vis natural resources; (vii) he or she must be fluent in the English and Spanish languages.

### **Duration, Working Location and Other Considerations**

- 3.2 The initial contract will be financed by the funds from the project TC0210049RG “Hemispheric Energy Cooperation: an Examination of the Potential Contribution of the Andean Community of Nations’ Hydrocarbons Sector”, and will have a duration of 190 days in a period of 1 year, in accordance with the Bank’s policy for consultants. The principal consultant’s working location will be at IDB headquarters in Washington.
- 3.3 The total duration of the consultancy required by the project is estimated to be 330 days. This consultancy will be financed by both the IDB and the CAF, each covering separate periods that do not overlap. It is estimated that the IDB will cover approximately 240 days and that the CAF will cover approximately 90 days.

## **TERMS OF REFERENCE**

### **ASSISTANT CONSULTANT**

#### **Project: Hemispheric Energy Cooperation: An Examination of the Potential Contribution of the Andean Community of Nations' Hydrocarbons Sector**

### **I. AIM OF THE CONSULTANCY**

- 1.1 The assistant consultant will aid the principal consultant in all the activities of the program. This will include, but not be limited to: gathering and processing information; helping organize the workshops, and; assisting with the contracting and coordination of other consultants.

### **II. QUALIFICATIONS AND DURATION OF THE CONSULTANCY**

#### **Qualifications of the Assistant Consultant**

- 2.1 The assistant consultant must meet the following minimum requirements: (i) professional experience (a minimum of five years) in the Hydrocarbons Sector, either in Industry or in Government; the professional experience must be in areas linked to the planning and/or design of policies that regulate the performance of the sector; (iii) he or she must be familiar with links between the hydrocarbons sector and the rest of the economy; (iv) he or she must be able to read the account books of the Andean countries' public sector; (v) preferably, he or she will have a post-graduate degree (Master's or equivalent) in a relevant area from an accredited University.

#### **Duration**

- 2.2 The consultancy will have a duration of 330 days in a period of 20 months.



## **TERMS OF REFERENCE**

### **CONSULTANT ON ISSUES OF COMPARATIVE ADVANTAGES AND MARKET POTENTIAL**

#### **Project: Hemispheric Energy Cooperation: An Examination of the Potential Contribution of the Andean Community of Nations' Hydrocarbons Sector**

#### **I. AIM OF THE CONSULTANCY**

- 1.1 The consultant will carry out a study that analyzes the competitiveness of Latin American and Caribbean hydrocarbons in the United States market compared to hydrocarbons from other regions of the world, particularly the Persian Gulf, taking such factors into account as production, transport and transformation costs and costs associated with security of supply. On the basis of these costs the maximum yield will be derived that the owner States can aspire to from the extraction of hydrocarbons in their respective territories. In addition, in the context of the evolution of world supply and demand for hydrocarbons it will be stated whether a market exists for the potential expansion of hydrocarbons in the Andean region.
- 1.2 For the analysis of comparative advantages and of hydrocarbons production economies, at least three types of costs will be taken into account: (i) exploration, production, transformation and transport costs; (ii) transaction costs: the costs of carrying out and enforcing the contracts, and (iii) costs of physical security in such a manner as to preserve the proper conditions for operations.
- 1.3 Regarding production, transformation and transport costs and a number of factors that are specific to the Andean basin crudes will be taken into account among others: Quality of the Oriente Basin heavy crudes in Ecuador relative to the ability of the US refiners to process. Price differentials impacting the region's heavy crudes, and resulting impact on both exploitation economics and the types of incentives that make sense for these resources. Constraints on the exploitation of the Orinoco extra heavy crudes in Venezuela.
- 1.4 It is important to stress the geopolitical security aspect and the costs of preserving peace and costs of creating the conditions for producing hydrocarbons, when comparing the cif costs on the United States market of hydrocarbons originating, in particular, from the Persian Gulf and from the Andean Region.
- 1.5 The above costs for the five Andean countries will be compared cif on the United States market with those of other countries and regions. In particular they will be

compared with those of hydrocarbons originating in Mexico and Canada and with those originating in the Persian Gulf, North Africa, the Caspian Sea and Russia.

- 1.6 A minimum of three scenarios will be developed for the world supply and demand for hydrocarbons and the market space will be analyzed for the incremental production of the Andean countries. In particular, three scenarios for hydrocarbons supply and demand in the western hemisphere will be developed, and there will be a detailed analysis of the market space for the incremental Andean production in its natural markets.

### **Products**

- 1.7 A report will be produced which will present the results of the Study on Comparative Advantages and Market Potential. This report will be presented at the Seminar where the results will be discussed of the diverse Technical Cooperation projects, in the second half of the second year of implementation. On the basis of that discussion the results of the present Study will be fine-tuned and final report produced.

## **II. QUALIFICATIONS AND DURATION OF THE CONSULTANCY**

### **Qualifications of the Consultant**

- 2.1 The consultant or consultants for the study of Comparative Advantages and Market Potential for the production of hydrocarbons in the Andean countries must meet the following minimum requirements: (i) wide experience (a minimum of fifteen years) in the analysis of hydrocarbons production, transport and marketing costs; (ii) experience in the analysis and measurement of transactional costs and the costs of preserving the operational conditions; (iii) experience in the operational conditions in diverse regions of the world; (iv) wide experience in the comparison of economies among regions producing hydrocarbons; (vi) a high level of academic training (Master's or Ph.D. degree or equivalent).

### **Duration**

- 2.2 The consultancy on issues of comparative advantages and market potential will have a duration of 20 days. Travel to present the study at the regional workshop will be required

## **TERMS OF REFERENCE**

### **CONSULTANT IN INDUSTRY PREREQUISITES FOR INVESTMENT**

#### **Project: Hemispheric Energy Cooperation: An Examination of the Potential Contribution of the Andean Community of Nations' Hydrocarbons Sector**

#### **I. AIM OF THE CONSULTANCY**

- 1.1 The investment decision-making process within an upstream company will be described and discussed: the basis upon which investment decisions are made, considerations, geological risking above ground risking, hurdles, performance expectations, etc.
- 1.2 The investment decision framework developed for an upstream company will be contrasted with the institutional and physical conditions in each of the Andean countries and conclusions reached with regards to the factors that explain the usually low level of private investment and what needs to be done to foster investment.
- 1.3 The above analysis should lead to a ranking of desirable changes within the institutional framework regulating investment in the oil sector in the Andean region countries.

#### **Products**

- 1.4 A report will be produced which will present the result of the Study on Industry Prerequisites for Investment. This will be presented at the Seminar which will discuss the results of the various Technical Cooperation projects, in the second half of the second year of implementation. On the basis of that discussion, the results of the Study in question will be fine-tuned and a final report produced.

#### **II. QUALIFICATIONS AND DURATION OF THE CONSULTANCY**

##### **Qualifications of the Consultant**

- 2.1 The consultant or consultants on the study on Industry Prerequisites for Investment must comply with the following requirements, as a minimum: (i) theoretical and applied knowledge of the hydrocarbons industry, especially the operations of

international oil companies; (ii) knowledge of the institutional and physical conditions in each of the Andean countries; (iii) relevant post-graduate degree.

**Duration**

- 2.2 The consultancy will have a duration of 20 days. Travel to present the study at the regional workshop will be required

## **TERMS OF REFERENCE**

### **CONSULTANT IN MATTERS OF GOVERNANCE**

#### **Project: Hemispheric Energy Cooperation: An Examination of the Potential Contribution of the Andean Community of Nations' Hydrocarbons Sector**

#### **I. AIM OF THE CONSULTANCY**

- 1.1 From the analysis provided in the Background Regional Studies, this study will look at the roles of each of the actors in the sector – ministries, regulating entities, state enterprises, private companies, foreign investment partners, etc. – and will highlight the principal rigidities, distortions and bottlenecks present. From the available information on operating environments in other countries, examples of specific elements contained in alternative systems, regulations, legal frameworks and contract types that could address each of the identified impediments will be ascertained. The resulting “shopping list” of alternative actions and directions forms the beginning of the dialog for change.

#### **Products**

- 1.2 A report will be produced which will present the result of the Study on Governance of the Sector. This will be presented at the regional workshop in the second half of the second year of implementation. On the basis of that discussion, the results of the Study in question will be fine-tuned and a final report produced.

#### **II. QUALIFICATIONS, DURATION AND WORKING LOCATION**

##### **Qualifications of the Consultant**

- 2.1 The consultant or consultants on the study on Governability and Contracting in the Hydrocarbons Sector of the Andean countries must comply with the following requirements, as a minimum: (i) theoretical and applied knowledge of the economy of institutions; (ii) knowledge of the system of governability of the hydrocarbons Sector in different countries; (iii) thorough knowledge of the system of governability of the hydrocarbons Sector in the Andean countries, if possible through job experience; (iv) thorough theoretical and practical international experience in contracting for hydrocarbons production; (v) thorough knowledge of

contractual features in the hydrocarbons Sector of the Andean countries; (vi) post-graduate degree in economy of institutions.

**Duration and Working Location**

- 2.2 The consultancy on issues of governability and contracting will have a duration of 20 days and the working location may be any Western Hemisphere capital. Travel to present the study at the regional workshop will be required

## **TERMS OF REFERENCE**

### **CONSULTANT ON MACROECONOMIC ISSUES**

#### **Project: Hemispheric Energy Cooperation: An Examination of the Potential Contribution of the Andean Community of Nations' Hydrocarbons Sector**

##### **I. AIM OF THE CONSULTANCY**

- 1.1 The consultant must carry out a study, in its theoretical aspects and practical consequences for the Andean countries, of the following three macroeconomic subjects: management of the volatility and high variation of oil income over time; absorption of resources and displacement of other activities, and sustainable economic development in countries with income derived from non-renewable resources.
- 1.2 The added value of the consultancy in macroeconomic subjects is to identify strengths and weaknesses in the macroeconomic handling of the oil sector in the Andean countries when contrasting them with the best international practices. This will make it possible to propose changes in institutions and macroeconomic policies, aimed at improving the performance of the hydrocarbons sector in the Andean countries.
- 1.3 The study on macroeconomic issues will have the following five parts, as a minimum: (i) review of the pertinent bibliography on the subject; (ii) theoretical model that will guide the empirical analysis; (iii) empirical evidence for each of the Andean countries and for the selected countries in other regions; (iv) comparison of the empirical evidence among the Andean countries and with the best international practices, on the basis of which it will be possible to extract (v) conclusions and recommendations. It will discuss the historical and current use of funds from hydrocarbon extraction.
- 1.4 Regarding the subject of the volatility of oil income, the experience will be discussed of different countries with stabilization and savings funds and their pertinence for the Andean countries will be analyzed. Policies will be recommended for the handling of the volatility so as to empower the countries to face this phenomenon.

- 1.5 With regards to the absorptive capacity of the economy and economic displacement, the following issues will be considered: (i) a discussion of forward and backward linkages of the hydrocarbon sector within the economy; (ii) the absorptive capacity of the economy with respect to revenue flows (this deals with the implications for domestic inflation, exchange rate movement, money supply, etc. of an inability of domestic capital investments and goods and services activity to absorb the flow of hydrocarbons revenue. Examples of insulation policies will be taken from other jurisdictions); and (iii) the issue of “crowding out” of both domestic investment capital (which may be drawn to the higher returns of the hydrocarbon sector and away from other domestic uses), and domestic skilled and unskilled labor, which may be drawn to the higher-paying hydrocarbon sector and away from alternative productive uses in the domestic economy. This is a particular challenge for the public sector (energy ministry, regulatory agency), where personnel with energy sector-relevant skills may be drawn to the private sector, leaving the public sector unable to effectively guide and regulate the industry
- 1.6 With regard to the country’s specialization in hydrocarbons production, the analysis will be carried out, for the Andean countries, of how integrated the Sector is with the rest of the economy and therefore what is the potential drag effect of hydrocarbons activities. At the same time, emphasis will be placed on the recommendation of policies to provide added value along the hydrocarbons chains with a view to effecting the transition from economies based on raw materials to economies based on know-how. The successful experiences in the region will be studied, such as the PDVSA case.
- 1.7 An overall model of sustainable economic development will be designed for the countries of the region having, as one of its pillars, the exploitation of hydrocarbons and of natural resources in general.

## **Products**

- 1.8 A report will be produced that will present the results of the Study on Macroeconomic Issues. This report will be presented at the Seminar at which the results of the different Technical Cooperation projects will be discussed, in the second half of the second year of implementation. On the basis of that discussion the results of the present Study will be fine-tuned and a final report produced.

## **II. QUALIFICATIONS AND DURATION OF THE CONSULTANCY**

### **Qualifications of the Consultant**

- 2.1 The consultant or consultants on the study on Macroeconomic Aspects of the performance of the Hydrocarbons Sector in the Andean countries must comply with the following requirements, as a minimum: (i) highest-level academic qualifications



(Ph.D. degree or equivalent) in macroeconomy; (ii) wide experience in the macroeconomy of countries that export raw materials and especially of those that export hydrocarbons; (iii) theoretical knowledge and practical experience in macroeconomic stabilization mechanisms in economies that export raw materials; (iv) theoretical knowledge and practical experience in the developmental issues of economies that export raw materials; (v) familiarity with the literature on the development of international competitive advantages on the basis of the comparative advantages due to endowment with natural resources.

### **Duration**

- 2.2 The consultancy on macroeconomic subjects will have a duration of 60 days. Travel to present the study at the regional workshop will be required

## **TERMS OF REFERENCE**

### **CONSULTANTS ON ENVIRONMENTALLY AND SOCIALLY SUSTAINABLE DEVELOPMENT**

#### **Project: Hemispheric Energy Cooperation: An Examination of the Potential Contribution of the Andean Community of Nations' Hydrocarbons Sector**

#### **I. AIM OF THE CONSULTANCY**

- 1.1 Without exception, continued hydrocarbon exploration and exploitation within the Andean countries will involve upstream activity in increasingly remote and environmentally fragile locations. The activity will affect not only the physical environment, but also the economic, social and cultural environment for those communities and peoples living in proximity to this activity. In some particularly sensitive locales, a moratorium on upstream activity is the only socially acceptable option; however, in the vast majority of cases, a compromise can be reached that accommodates both the desire for energy sector development and the desire to protect and preserve the environment (physical and social) that will be affected by that activity. This research element will examine two complementary themes:

(a) Environmental Sustainability

- 1.2 The international energy sector has made considerable strides over the past decade in remote location “best practices”, reducing both the size of the activity footprint and the degree of environmental disturbance accompanying exploration and extraction activities. This has been driven by (i) increasing awareness of environmental degradation issues within the industry, (ii) the concerted efforts of NGOs and international agencies (World Bank, IADB, UN) to raise the profile of environmental sustainability, to develop guidelines for best practices, and to effectively “internalize the externalities” for the oil companies, and (iii) increased environmental awareness among the shareholders of the IOCs and demands for environmental compliance in foreign jurisdictions no less strict than that imposed in their home country.

Outline:

1. Introduction and Issues Identification
  - Identification of key issues and concerns
  - Review of environmental legislation governing oil sector operations in the 5 countries

## 2. International Best Practices

- Review of World Bank Guidelines for environmental best practices, as the industry standard globally
- Identification of alternative Guidelines (e.g., Canadian CAPP standards)
- Role of the Local and International NGOs
- Community consultation best practices, with examples from the 5 countries
- Issues in application to the Andean countries
- NOTE: Focus here on both minimizing impact and reclamation following activity

## 3. Cost of Compliance

- Discussion and estimation of incremental cost of compliance to resource extraction in the interior basins resulting from adherence to best practices
- Include discussion of new upstream operating practices and technologies aimed at mitigating environmental impact. Focus onto what can and can't be done, in terms of areas of operation, barriers and constraints remote operations, etc.
- Implications for competitiveness in product and commodity markets
- Implications for foreign upstream investment

## 4. Institutional Strengthening and Policy Reform

- Discussion and identification of inadequacies in the environmental regulations and guidelines governing resource extraction in the 5 countries
- Identification of compliance and enforcement issues, with mitigation options
- Identification of policy shortcomings, with mitigation options

## 5. Domestic Industry Opportunities

- Identification of commercial opportunities stemming from application of environmental best practices; services, EIA work, reclamation, etc.

## 6. Conclusions and Recommendations

- Action and Discussion items stemming from this research

### (b) Socially Sustainable Development:

- 1.3 The movement of upstream resource activity into increasingly remote locales will have both direct and indirect impacts on the indigenous people's of the region. Two little recognized or understood realities of upstream activity—that it is temporary, and that it is not labor-intensive—combined with often inflated expectations regarding wealth generation and revenue sharing, tend to confuse the dialogue around social impacts. How these impacts are lessened or mitigated is necessarily a combination of industry practices and government policies towards socially sustainable development.

### Outline:

1. Introduction and Issues Identification
    - Identification of key issues and concerns
  2. Direct Impacts
    - Indigenous people's issues
    - Colonos and impact on the social infrastructure
  3. Indirect Impacts
    - Public finance burden; provincial/state and municipal expenditure impacts (infrastructure, increased population)
    - Revenue sharing issues
  4. International Best Practices
    - Review of international best practices regarding community consultation, industry obligations, etc.
  5. Institutional Strengthening and Fiscal Reform
    - Review of current practices and guidelines of the 5 governments regarding municipal taxation, energy sector revenue sharing, public sector expenditures in the hinterland regions, social program delivery, etc.
    - Identification of policy and implementation shortcomings, with mitigation options
  6. Conclusions and Recommendations
    - Action and Discussion items stemming from this research
- (c) Case Studies:
- Consultation Practices and the OCP
  - Exploration and Exploitation in the Rainforest: Oriente Basin
  - Petroleum Revenue Management Program: Chad-Cameroon
  - Changing Past Practices: Lake Maracaibo
  - Others
- A1: Environmental legislation governing Resource Extraction in the Andean Countries: Current Practices, Deficiencies, and Recommended Changes

## **II. QUALIFICATIONS AND DURATION OF THE CONSULTANCY**

### **Qualifications of the Consultant**

- 2.1 The consultants on the study on Environmentally and Socially Sustainable Development must comply with the following requirements, as a minimum: (i) highest-level academic qualifications (Ph.D. degree or equivalent) in environmental or social sciences; (ii) wide experience in the environmental and social impacts of countries that export raw materials and especially of those that export hydrocarbons.

### **Duration**

- 2.2 The consultancy will have a duration of ninety days. Travel to present the study at the regional workshop will be required

## **TERMS OF REFERENCE**

### **CONSULTANT ON INDIGENOUS PEOPLES ISSUES**

#### **Project: Hemispheric Energy Cooperation: An Examination of the Potential Contribution of the Andean Community of Nations' Hydrocarbons Sector**

##### **I. BACKGROUND**

- 1.1 Indigenous peoples inhabit some of the most promising areas for hydrocarbon exploration such as the Amazon basin. In the past, oil and gas activities in their territories have caused strong adverse impacts to these peoples. In addition, in international and national legal frameworks indigenous peoples have special rights over participation (previous consultation), land, resources and cultural heritage. Several national and private sector projects in indigenous territories have turned out contemptuous and in some cases the activities have been stopped. In other cases, investors have showed little interest to commit resources to these areas because of indigenous peoples opposition. Indigenous peoples demands not only relate to impact management but increasingly to their right to participate in the administration and revenues of oil and gas resources, as stated in Art. 15 of ILO 169 Convention.
- 1.2 In the last years there has been a series of efforts directed to better the business environment among oil and gas companies, indigenous peoples and governments, such as the Harvard University PONSAC supported Oil Dialogs and OLADE/World Bank sponsored tripartite meetings on hydrocarbon operation in indigenous territories in the Andean region; the consultation for secondary legislation on hydrocarbon operations in indigenous territories in Ecuador, Peru and Bolivia, Colombia's efforts to include revenues rights for indigenous peoples and Ecuador's ongoing oil policy for indigenous Amazonian nationalities dialogue .
- 1.3 The issues identified through these activities, that need to be addressed in order to ensure socio-cultural adequate hydrocarbon activities in indigenous territories are the following: (i) previous consultation; (ii) identification of exclusion areas (non contacted or isolated indigenous peoples, sacred areas, culturally sensitive); (iii) non contacted or isolated indigenous peoples especial mitigation measures; (iv) land tenure regularization; (v) capacity building and technical assistance; (vi) participation in EIAs; (vii) oil and gas management participation (the Bank is supporting Amazonia Gas initiative in Ecuador); (viii) revenues participation; (ix) relationship protocols; (x) indigenous peoples development plans ("planes de vida").

## II. AIM OF THE CONSULTANCY

- 2.1 The Consultant must carry out a study, in its theoretical aspects and practical consequences for the Andean countries, of the following subjects: (i) special mitigation measures to assure ethnic, territorial and cultural integrity of indigenous peoples impacted by hydrocarbon operations; (ii) alternatives to comply with indigenous peoples participation in resource management and revenues as stated in Art. 15 of ILO 169 Convention; (iii) recommendations to exclude cultural sensitive areas from oil block biddings; (iv) alternatives to deal with non-contacted and isolated peoples impact management.
- 2.2 The added value of the consultancy in indigenous peoples issues is to identify strengths and weaknesses in the oil sector handling of indigenous rights, negative impacts and complains in the Andean countries when contrasting them with the best international practices. This will make it possible to propose changes in oil blocks biddings, legal background and policies, aimed at improving the investment environment and to assure indigenous peoples rights compliance and their participation in the management and revenues of the hydrocarbons sector in the Andean countries.
- 2.3 The study on special mitigation measures to assure ethnic, territorial and cultural integrity of indigenous peoples impacted by hydrocarbon operations will include: (i) review of the pertinent bibliography on the subject; (ii) identification of impact models on ethnic survival, indigenous territories and cultural land use management, traditional economies, indigenous health and social organization; (iii) empirical evidence for each impact topic in the Andean countries and *cross cultural* evidence in selected countries in other regions; (iv) empirical evidence for the mitigation measures adopted for impact topic in the Andean countries and in the selected countries in other regions; (v) comparison of mitigation measures uses among the Andean countries and with the best international practices, on the basis of which it will be possible to extract: (v) conclusions and recommendations.
- 2.4 The study on alternatives to comply with indigenous peoples participation in resource management and revenues as stated in Art. 15 of ILO 169 Convention will include: (i) a legal background review of paragraph one (management) and two (revenues) of article 15 of ILO 169 Convention regarding Andean nations reglamentation; (ii) a review of proposals to develop legal reglamentation of the article as in the Indigenous Peoples Development Law draft in Bolivia; Ecuador's indigenous collective rights dialogue between Confenaie and Energy and Mining Ministry; Olade's tripartite meetings on Hydrocarbon operations; and Colombia's indigenous oil revenues participation (law 200 of 2001 draft); (iii) a review of Ecuador's Amazonia Gas and Amazonia Energy experience as a way to comply with paragraph one of Art. 15 of ILO 169 Convention; (v) a review of Ecuador's Amazonia Gas and Amazonia Energy discussion on trust funds to manage revenues; and (iv) conclusions and recommendations for the Andean countries in order to

develop legal instruments and policies to comply with Art. 15 of ILO 169 Convention.

- 2.5 Regarding the recommendations to exclude cultural sensitive areas from oil block biddings, the consultant should analyze Olade's tripartite discussion on the topic, Colombia's u'wa and nukak-maku cases, Ecuador's "areas intangibles" legislation and discussion, Peru's Camisea case, and SDS/IND paper on Concept Paper for Bank Support to Pre-Qualification of Oil and Gas Exploration/Production Blocks Andean/Amazon Basin Countries at <http://www.iadb.org/sds/doc/IND%2DMDonahueOile.pdf>, and produce a comprehensive set of recommendations for the Andean countries in order to assure that an oil blocks environmental and socio-cultural sensitive areas segregation policy can be adopted to improve the region's hydrocarbon investment environment and at the same time to protect the rights and assure the survival of sensitive indigenous peoples such as Amazon hunter gatherers and Chibcha's religious societies (u'wa).
- 2.6 With regard to the alternatives to deal with non-contacted and isolated peoples impact management the consultant should build upon Peru's Camisea case and Colombia's nukak-maku case in order to develop a series of recommendations for the Andean counties to assure the survival of these peoples on a Hydrocarbon operation environment. Among others, the consultant should tackle the issues of: (i) territories regularization; (ii) territories protection; (iii) representation and indemnification management; (iv) non-contact protocols: and, specially, (v) epidemiology plans.
- 2.7 In order to advance its study, the consultant should consult with the Andean countries hydrocarbon authorities, indigenous peoples organizations (specially Amazonian) and relevant ONGs. The consultant should also contact SDS/IND specialists.

## **Products**

- 2.8 A report will be produced that will present the results of the Study on Indigenous Peoples Issues including a set of recommendations for the Andean Countries aimed at improving the hydrocarbon investment environment and to assure indigenous peoples rights compliance and their participation in the management and revenues of the hydrocarbons sector in the Andean countries.
- 2.9 This report will be presented at the regional workshop in the second half of the second year of implementation. On the basis of that discussion the results of the present Study will be fine-tuned and a final report produced.
- 2.10 The results of the study will be widely disseminated and analyzed in each of the countries of the Andean subregion.



### **III. QUALIFICATIONS AND DURATION OF THE CONSULTANCY**

#### **Qualifications of the Consultant**

- 3.1 The consultant or consultants on Hydrocarbon operation indigenous peoples issues: (i) high level academic qualifications in any social specialization, including law; (ii) wide experience working with indigenous peoples of countries that export hydrocarbons; (iii) theoretical knowledge and practical experience in indigenous peoples legislation, especially on hydrocarbon legislation related to indigenous peoples; (iv) theoretical knowledge and practical experience in hydrocarbon's socio-cultural impact management; (v) familiarity with the literature and discussions on indigenous peoples issues regarding hydrocarbon operations.

#### **Duration**

- 3.2 The consultancy on macroeconomic subjects will have a duration of 70 days. Travel to present the study at the regional workshop will be required