

The Camisea Project

The Camisea Fields

During the period 1981–1987, Royal Dutch Shell conducted exploratory works in a 2 million hectares block in the Ucayali Basin through the execution of 3,000 kilometers of seismic lines and the drilling of 5 exploration wells. This work allowed the discovery of two non-associated natural gas fields in the Camisea area. These fields were named San Martín and Cashiriari and are located approximately 500 kilometers east of Lima in a rain forest region know as Bajo Urubamba, in the province of La Convención, department of Cuzco. During a second exploration campaign conducted during 1996-1998 by a Shell/Mobil consortium, three evaluation wells were drilled.

The original gas in place in the Camisea Fields, expressed in Tcf (trillion cubic feet) for the natural gas and in MMbbl (millions of barrels) for gas liquids is as follows:

Field/Area	Proved Original Gas and Liquids in Place		Probable Original Gas in Place (Tcf)
	Gas in Tcf	Liquids in MMbbl	
San Martín	3.3	215	
Cashiriari	5.4	330	2.3
Total	8.7	545	2.3

Source: DeGolyer & MacNaughton, March 1999

The production plan contemplates the production of approximately 1.75 Tcf of the natural gas reserves and approximately 173.1 MMbbl of the liquids reserve until 2016. After that production plan is completed at the end of the license term, a reserve tail of 6.95 Tcf for natural gas and 371.9 MMbbl for the liquids would be available for further development.

Upstream

In December 2000, pursuant to an international public bid process conducted by the Peruvian Government's Special Committee for the Camisea Project ("CECAM"); the government granted the license for the exploitation of Block 88 in the Camisea basin (the "Upstream Project") to Pluspetrol Peru Corporation (the "Field Operator"), Hunt Oil Company of Peru LLC, Sucursal del Peru, SK Corporation Sucursal Peruana and Tecpetrol del Peru S.A.C. (together the "Upstream Consortium" and each individually, a "Producer").

The Upstream Consortium offered the most attractive royalty payments to the government, 37.24% versus 35.5% offered by TotalFinaElf, the second best offer. The following table summarizes the ownership structure:

Pluspetrol	36.0%
Hunt Oil	36.0%
SK Corporation	18.0%
Tecpetrol	10.0%
Total	100.0%

The Upstream Project consists of a 40-year license for the extraction of natural gas and liquids from Block 88, which has proved original gas and liquids in place of 8.7 Tcf and 545 MMbbl, respectively. Under the license contract, the Field Operator is required to drill 4 wells to produce a minimum of 450 MMcfd by 2008 and to construct a liquids separation unit at the field and a fractionation and distillation plant at the end-point of the liquids pipeline, on the coast of Peru. At the fractionation plant liquids will be separated into commercial quality products (LPG and Distillates from Condensates) and then delivered to the market by tankers (exports) and tank trucks (domestic consumption). The Upstream Consortium estimates that an investment of approximately US\$605 million will be required during the construction period to develop the Upstream Project.

The Producers will have unrestricted rights to export liquids. Natural gas exports are allowed subject to the requirement that domestic demand projected for a 20-year horizon is satisfied. Prior to the upstream bid, the Peruvian Government negotiated back-to-back off-take contracts with industrial users, totaling 15 MMcfd at a price of US\$1.44 per MMBtu for 10 years starting in year 2003. After the upstream license was awarded, the Peruvian government entered into a 70 MMcfd take-or-pay off-take contract with Electroperú for power generation at a wellhead price of US\$0.89 per MMBtu for 15 years.

Upstream Capital Expenditures and Financing

The Upstream Consortium's financing plan contemplates the establishment of trade finance facilities provided by the Export-Import Bank of the United States ("US Exim") to each Producer in order to support the expected level of imported capital cost from the United States on a pro-rata basis. Under such facilities, the obligations of each Producer will be supported by their corresponding corporate parent guaranty.

Financing of the Upstream Project will be completed with direct equity infusions as shown

below:

Uses	US\$ Million	Sources	US\$ Million
CAPEX		Credit Facilities	
Cryogenic Plant	\$86.8	ECA Facilities (Exim & SACE)	\$220.0
Compressor Plant	\$72.7	<i>Total Credit Facilities</i>	\$220.0
Flow lines	\$88.1	Equity Contributions	
Fractionation Plant	\$30.9	Pluspetrol	\$138.7
Storage Plant	\$29.7	Hunt Oil	\$138.7
Marine Terminal	\$7.7	SK Corp.	\$69.5
Drilling costs	\$112.6	Tecpetrol	\$38.5
Seismic costs	\$35.3	<i>Total Equity</i>	\$385.4
Other	\$15.4		
Contingencies	\$23.5		
Pre-Opex & Working Capital	\$54.6		
IGV Tax	\$6.6		
<i>Total CAPEX</i>	<i>\$563.9</i>		
DSRA	\$11.6		
IDC & Financing Expenses	\$29.9		
<i>Total Financing Costs</i>	<i>\$41.5</i>		
Total Uses	\$605.4	Total Sources	\$605.4

Downstream

Transportadora de Gas del Perú S.A. (“TGP”) is a special-purpose company formed by a consortium led by Tecgas N.V. with the participation of Pluspetrol Resources Corporation, Hunt Oil Company, SK Corporation, Sonatrach Petroleum Corporation B.V.I., and Graña y Montero S.A. (the “Sponsors”) specifically for the development of a pipeline for natural gas from the Camisea fields to Lima and a pipeline for natural gas liquids from the Camisea fields to the Pisco area (together, the “Project” or the “Pipeline”).

The Downstream Project consists of the construction and operation of two pipelines, one for natural gas (714 km) and one for natural gas liquids (“NGLs”) (540 km) under two 33-year concessions. The two pipelines will run parallel from the Camisea field (located in the Ucayali Basin, 431 km east of Lima) to the Pisco area (200 km south of Lima) where the NGL pipeline will finish at a fractionation plant. From Pisco area, the natural gas pipeline will turn to the north and run along the coastline to the Lima city gate. The natural gas pipeline will have a diameter of 32”, 24”, & 18” and will be designed for the initial transportation of 285 million cubic feet per day (“MMcfd”). The NGL pipeline will have a diameter of 14” & 10” and will be designed for the initial transportation of 50,000 barrels per day (“bpd”). The total cost of the Project is estimated at US\$818.5 million that includes financing costs and funding of reserve accounts. Commercial operation must start no later than August 2004 per the concession agreements, and is targeted for June 2004.

Under the gas transportation Build Own Operate and Transfer (BOOT) Contract, during the initial 10 years of commercial operations, TGP has the obligation to exclusively transport gas delivered by the Producers after which term the pipeline will be open access to other gas producers. However after the initial 10 years, referred to above, the Producers will have priority to transport natural gas up to 450 MMcfd until the end of the concession. The NGL pipeline will be open access for available capacity until the end of the concession.

The following table shows the current equity interests of the Sponsors in Downstream:

Tecgas	23.41%
Pluspetrol	22.20%
Hunt Oil	22.20%
SK Corporation	11.10%
Sonatrach	11.09%
Tractebel	8.00%
Graña y Montero	<u>2.0%</u>
Total	100.0%

Total financing sources and the Downstream Project costs are summarized in the following table:

(US\$ millions, totals may not sum due to rounding)

Sources		Uses	
Senior Debt Facilities		Construction Costs	
IDB and CAF A-Loans	125.0	EPC	583.4
B-Loans	323.0	Other Construction Related Costs	61.7
MLA Loans	125.0	TGP Costs	
<i>Total Senior Debt</i>	<i>573.0</i>	Pre-operative expenses	34.3
		Line Pack	5.3
		VAT & Other taxes	16.6
		<i>Total Construction Costs</i>	<i>701.4</i>
Shareholder Funds		Financing Expenses	
Paid in Capital	210.0	Interest During Construction	43.4
Shareholders Sub-Loan	35.6	Debt Service Reserve Account	44.4
<i>Total Shareholder Funds</i>	<i>245.6</i>	Financial & Legal fees	26.8
		<i>Total Financing Expenses</i>	<i>114.6</i>
		Subtotal	816.0
		<i>Excess Cash Balance</i>	<i>2.5</i>
Total Financing Sources	818.5	Total Project Costs	818.5

Benefits to the U. S.

In addition to being directly involved in the development and production of one of the most important gas field in South America and one of the largest in the world; suppliers of equipment and services to the petroleum industry have already or will receive contracts potentially amounting up to \$ 200 million for the Upstream Project. The current beneficiaries of exports to Peru are as follows:

Parker Drilling and their subsidiary Creek International

Schlumberger

Howe Baker

Weatherford International

BJ Services

Cameron Corporation

Brandt

Solar Division of Caterpillar

American Cargo Transport

Rust

Paragon Engineering

Texas Systems

Contracts with the above companies will involve the employment of US nationals (primarily from Parker Drilling) over a period of many years. These US personnel will come from Texas, Oklahoma, Utah, Louisiana and Arizona.

Benefits to Peru

Strategic Benefits

Camisea is a project of national interest to Peru and one of the most significant capital investment programs affecting the national economy in the country's history. As such, the Government's interest in, and support of, the Camisea development is unparalleled. Camisea's benefits will be felt nationwide, especially in the department of Cuzco where the Camisea field is located and where the regional government will receive substantial revenues under an income tax and royalty sharing scheme with the central government.

The development of Camisea is a central component of the Government's energy strategy. By tapping a stable, low-cost source of energy, Camisea will provide direct benefits to electricity end-users and improve the competitiveness of Peruvian industry, raising Peru's standard of living. The use of natural gas instead of other fossil fuels, by power generators and industrial users, will have environmental benefits. Moreover, the Government expects Camisea to have a number of other important economic benefits including new employment opportunities, significant foreign investment inflows, the development of a gas-based petrochemical industry and other globally competitive industries, and a substantial fiscal increase in revenues at the national and regional levels.

The Camisea natural gas reserves are ten times greater than all of Peru's other existing natural gas reserves. The Pipeline will make available natural gas and NGL's for domestic consumption and for export. Natural gas will be transported to the main consumption center in Lima, where it will be used for residential and industrial uses and to generate electricity. This will be distributed nationwide through Peru's existing electricity transmission infrastructure. Liquids will supply the domestic LPG market and will also be a significant source of foreign currency earnings. Peru's balance of payments is expected to improve significantly as a result of liquids exports and reduced imports of same.

Camisea is key to the achievement of the Government's plan to promote and support the development of a gas industry in Peru. The Government believes that the development of an efficient gas sector in Peru can best be achieved by fostering a long-term competitive structure for the industry. As a result of this Peru has established a policy framework to foster the exploration and development of new fields. To date, however, there have been no significant findings of a scale and at a stage of development comparable to those of Camisea.

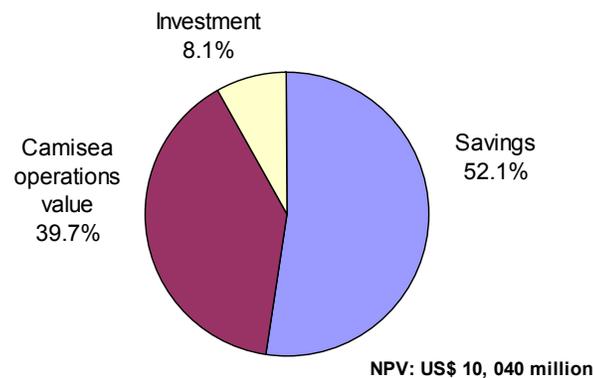
Peru is one of the few countries that does not currently have a developed gas industry despite having significant natural gas reserves. Prior to the discovery of Camisea, there were no non-associated gas discoveries large enough to warrant the development of a gas transport network to supply the more developed coastal region.

The table below summarizes the main economic benefits for Peru during the construction and operation phases of Camisea, considering both the Upstream and the Downstream projects:

Short Term Impact: Construction Phase (2001-2003)	
Total Investment Flow	US\$1,234 million
Tax Duties	US\$55 million
Net Foreign Currency Inflow*	US\$536 million
Direct Employment	1,700 annual average headcount
Indirect Employment	6,000 annual average headcount
Long Term Impact: Operations Phase (2004-2033)	
Production value*	US\$3,990 million
Total savings*	US\$5,235 million
Fiscal income*	US\$2,003 million
Hydrocarbon trade balance	up to 70% reduction in deficit

* In net present value for the period, at a 12% discount rate
 Source: Macroconsult Report, October 2001; TGP.

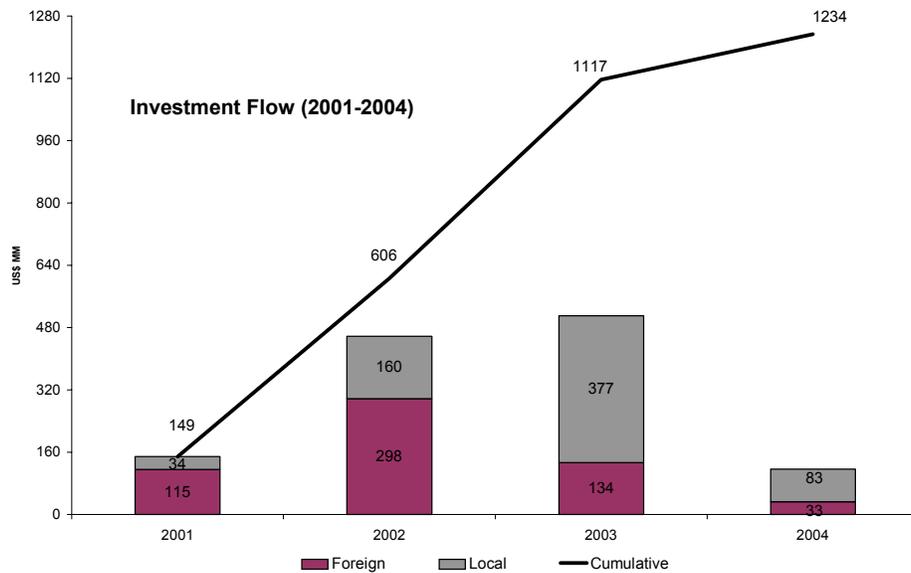
Overall, during the life of the concession, total benefits from the project to Peru are estimated to have a net present value of US\$10 billion. These estimates take into account the impact on economic growth; the savings generated in different sectors and the value of the operations, and are summarized below.



Benefits During the Construction Phase

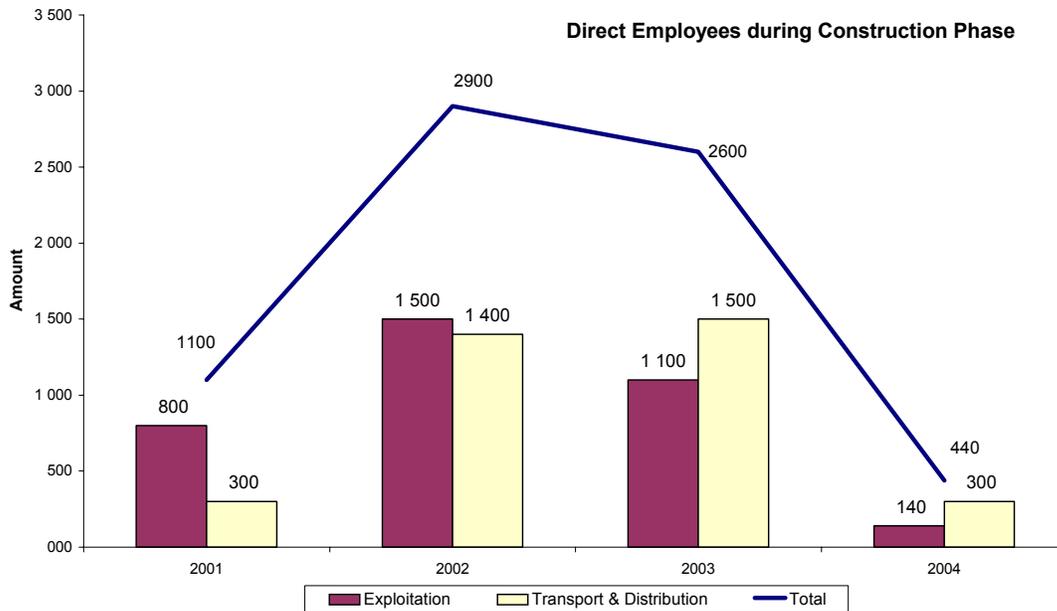
Foreign Investment Flow

The investment required for the development of the Camisea Upstream and Downstream projects will amount to approximately US\$1.2 billion. Approximately 80% of this amount will be spent in years 2002-2003. It is expected that the two consortiums will purchase goods and services from Peruvian suppliers in excess of US\$654 million during these years, thereby adding approximately 0.6% to Peruvian annual GDP during construction, exclusive of any indirect or multiplier effects.



Employment in Peru

During the construction period, the Camisea Upstream and Downstream Projects will employ an average of 1,700 people (2,900 people at the peak). Considering contractors and subcontractors, indirect employment will average 6,000 people, with a peak of 10,000 people in 2003. Various suppliers are also expected to increase their work forces to fill procurement orders from the Camisea Upstream and Downstream projects.



Taxation

During the construction period, the Government will receive a total of US\$55 million in duties on imported equipment and consumables. The impact on tax revenues from development of the Project is expected to exceed the above amount due to income taxes paid by employees contractors as well as taxes on the earnings of Peruvian suppliers.

Balance of Payments

Equity contributions from international sponsors and foreign debt funding for the development of Camisea will total approximately US\$1,400 million. This will contribute, net of imports of goods and services, an inflow of approximately US\$536 million to Peru's balance of payments during the construction period, or approximately 1.0% of GDP. This will help to reduce Peru's current account deficit (estimated at 3.0% of GDP in 2000).

Benefits During the Operations Phase

Energy Cost Savings

Peru generates approximately 19,000 GWh of electricity per year. Total installed capacity amounted to 6,070 MW at the end of 2000, 53% of which was provided by thermal units. The substitution of natural gas for more expensive fuels like diesel and residual oil is expected to reduce system wide marginal generation costs by 16%, resulting in annual average savings of approximately US\$365 million for electricity users. Also, the availability of low-cost natural-gas fired units will partially protect consumers against fluctuations in annual rainfall and help stabilize electricity prices. Projected savings, for industrial users converting to natural gas, are US\$250 million annually mainly in energy-intensive industries such as cement and steel. The conversion of automobile engines from gasoline fuel to compressed natural gas may result in additional US\$120 million in savings by reducing energy costs by the end of the operations phase in 2033. As indicated in the table below, the present value of energy costs savings is estimated at US\$5.2 billion, or approximately 10% of Peru's 2001 GDP.

(U.S. \$ in millions, In net present value for the 2004-2033 period, at a 12% discount rate)

Total savings	5,235
Energy savings for Customers	2,765
Energy savings for Industries	1,685
Transport Savings	785

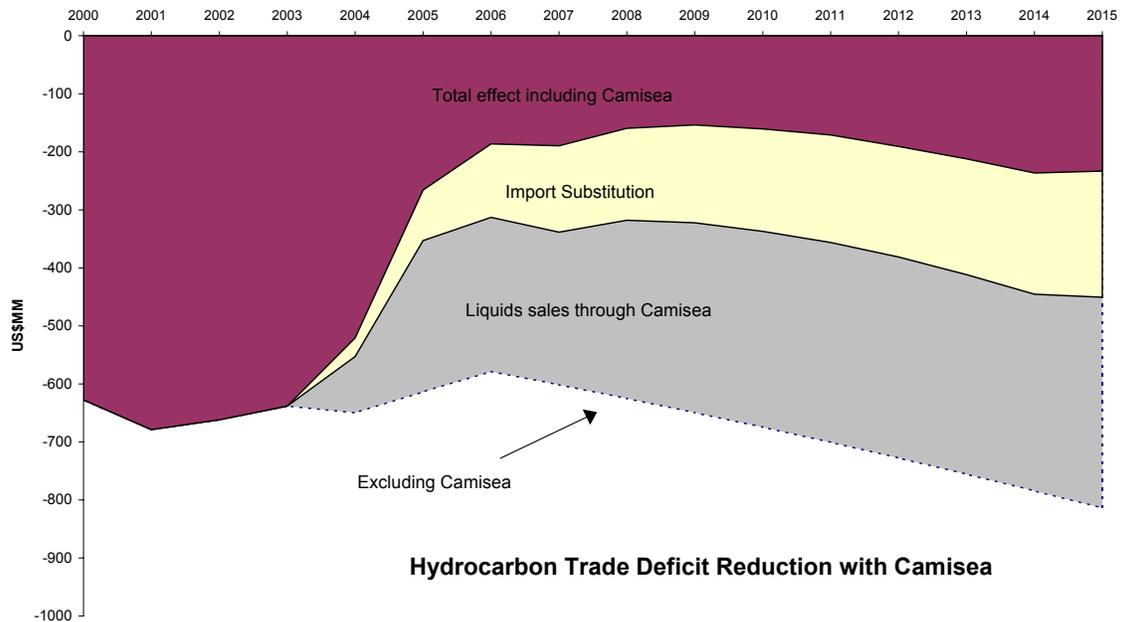
Economic Growth

Estimates indicate that the development of the Camisea Project will increase output by approximately US\$4.0 billion in net present value during the operations phase, which represents 7.5% of Peruvian GDP. Moreover, the estimated revenue flow represents approximately an additional average annual increase in GDP of 0.8% for the operations period. Furthermore, by making a low-cost source of energy readily available, Camisea will be an important engine for growth and will have major implications on energy use. Development of Peru's domestic gas reserves secures, for the country, a less expensive and stable source of energy.

Hydrocarbon Trade Balance

Since 1995, Peru has experienced continuous deterioration in its hydrocarbon trade balance, with a maximum deficit of approximately US\$700 million in 2000. The continuing decrease in Peruvian hydrocarbon production, as a result of insufficient investments and lack of commercially viable exploration, could worsen this deficit in future years. However, the development of Camisea, by reducing the need to import diesel for electricity generation and expanding the supply of hydrocarbon products for export, is expected to reduce the size of the deficit by approximately 70%. Camisea will thus strengthen Peru's balance of payments in the medium and long term.

Peru's hydrocarbon trade balance is expected to improve significantly as a result of liquids exports and reduced imports as described in the chart below.



Taxation and Royalties

Camisea will generate direct fiscal benefits for the Government through corporate income tax and royalties. The government will receive royalties equivalent to 37.24% of gross revenues from exports and from domestic sales generated by the Upstream Project. Annual royalty income is estimated to be US\$68.2 million by 2005, with an annual average of \$105.7 from 2005 through 2015. This is a significant amount when compared to the Government's 2002 annual budget of US\$9.8 billion. The table below quantifies these benefits:

Fiscal income	2,003
Royalties	1,432
Income Tax	571

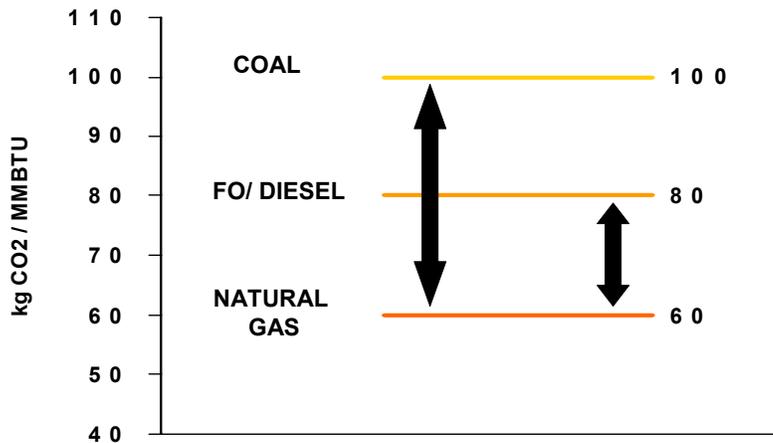
(in US\$ millions, in net present value for the 2004-2033 period, at a 12% discount rate)

Regional Benefits

Approximately 50% of the income tax from exploitation and royalties generated by Camisea is expected to be transferred to the Cuzco regional government as canon payments, a Peruvian revenue-sharing scheme intended to benefit the regions where natural resources are produced. Thus the Cuzco region where Camisea is located, one of the most important historically and in terms of population, is expected to receive annual canon payments of US\$190 million. This represents a 60% increase in the regional government annual budget. The net present value of canon income for Cuzco is estimated at US\$870 million.

Environmental Impact

The substitution of natural gas for diesel oil, fuel oils and coal will improve local air quality through lower emissions of harmful gasses such as sulfur dioxide and nitrous oxide. Additionally, there are global benefits from the production of less carbon dioxide, a contributor to the “greenhouse effect”. The illustration below shows the extent carbon dioxide is reduced when consumption of natural gas replaces that of coal, fuel oil and diesel. Camisea gas will essentially displace these dirty fuels in power generation and in the industrial sector of Peru. This also will partially replace low quality gasoline and diesel used by the vehicle fleet in Lima with compressed natural gas. In this way, Camisea will substantially reduce the harmful environmental effects of fuel oil consumption, thereby improving the Lima air shed and ambient air conditions.



Source Emission Factors EPA1985

Environmental and Social Impact

The Project will extend over a large and environmentally sensitive area. An Environmental and Social Impact Assessment (the “EIA”) has been prepared to assess the potential impact of the Project on the environment and lifestyle of the area, and to devise adequate prevention and mitigation plans. The EIA, for the Upstream, was approved by Peru’s Ministry of Energy and Mines in December 2001 and in March 2002 for the Downstream. The Sponsors are committed to carrying out the Project in compliance with Peruvian regulations and internationally accepted standards.

The EIA has been prepared in compliance with the requirements of the Environmental Protection Regulations for the Hydrocarbon Sector (Supreme Decree 046-93-EM). The EIA is based on an extensive consultation process with the potentially affected populations and a survey of the area of influence of the Project. The EIA serves as the basis for the environmental management plan for the construction and operation of the Project in accordance with best international practices. This, as well as the design and construction of the pipeline transportation system, will comply with current national and international standards and guidelines (e.g., ASME, ASTM, World Bank, ILO Convention 169 for the Protection of Indigenous and Tribal Peoples).

Other Investments

The availability of gas from Camisea Fields will encourage significant investment in Peru. Industrial development will be fostered through the availability of lower-cost energy and of natural gas as feedstock for other industries such as petrochemicals. Industries and other businesses may also be established to provide goods and services for the Project's construction and operation. Moreover, the affirmation of investor confidence provided by the implementation of Camisea may give rise to other investments in Peru in unrelated sectors.

Sponsor company information (Upstream)

Pluspetrol

Pluspetrol Peru Corporation (the "Field Operator") has a 36.0% equity interest in the Upstream Project. Pluspetrol is an international energy group engaged in oil and gas exploration and production and in electricity generation. Pluspetrol was established in 1976 in Argentina and has subsequently expanded to Peru, Bolivia and Venezuela. Currently, Pluspetrol is Argentina's third-largest natural gas producer and Peru's largest crude oil producer. As of December 31, 2001 Pluspetrol's total consolidated assets and net worth are US\$1.2 billion and US\$663 million respectively. The corporation's current interest in the Downstream operation is 22.2%.

Hunt

Hunt Oil Company of Peru, L.L.C. currently holds 36.0% of the equity of the Upstream Project. Hunt is a wholly-owned Peruvian subsidiary of Hunt Oil Company ("Hunt"). Incorporated in 1934, Hunt is one of the largest privately-held independent oil and gas companies in the United States. Hunt's production and development operations are mainly located in the United States, Canada, Yemen and Peru. It also has exploration licenses in Argentina, Ghana, Madagascar, Niger, Oman, Peru and Togo. Hunt Oil Company's unsecured debt is rated A - and A3 by Standard & Poor's and Moody's Investors Service, respectively. Hunt's interest in the Downstream activity is 22.2%.

SK Corporation

SK Corporation Sucursal Peruana currently has an 18.0% equity interest in the Upstream Project. SK Corporation is a member of the SK Group, a South Korean business conglomerate with interests in the energy, chemicals and telecommunications sectors, among others. SK Corporation operates refinery complexes with average crude oil throughput of 810,000 barrels per day. SK Corporation is actively engaged in oil and gas exploration worldwide, and currently participates in 24 projects in 12 countries, including stakes in three liquefied natural gas (“LNG”) projects in Yemen, Qatar and Oman. SK Corporation is rated BBB- and Baa3 by Standard & Poor’s and Moody’s Investors Service, respectively. SK’s interest in the Downstream is 11.1%.

Tecpetrol

Tecpetrol del Peru S.A.C. is an Argentine oil and gas exploration and production company 100% owned by the Techint Group; an industrial conglomerate based in Argentina and Italy. Tecpetrol currently has operations in Argentina, Venezuela, Ecuador, Bolivia, Brazil, Columbia and Peru. They have a 10% interest in the Upstream Project. The parent company has international operations in the energy and power sectors, steel production and infrastructure construction with annual sales of US\$5.0 billion. Its sister company Tecgas N.V. is the operator of the Downstream Project. Tecpetrol’s sister company, Tecgas, is the operator of the Downstream project and holds a 23.41% interest.