COLOMBIAN REFINERY SECTOR BUSINESS BRIEFING

JUNE 25, 2002
HOUSTON, TX

SPONSORED BY:
U.S. TRADE AND DEVELOPMENT AGENCY

PREPARED BY:
PRINCETON ENERGY RESOURCES INTERNATIONAL (PERI)
1700 ROCKVILLE PIKE, SUITE 550
ROCKVILLE, MD 20852
TELEPHONE: 301-881-0650 • FACSIMILE: 301-230-1232

ISSUE DATE: JUNE 20, 2002

This report was funded by the U.S. Trade and Development Agency (TDA), an export promotion agency of the United States Government. The opinions, findings, conclusions, or recommendations expressed in this document are those of the author(s) and do not necessarily represent the official policies of U.S. TDA.

1621 North Kent Street, Suite 200, Arlington, VA 22209
Phone 703-875-4357 • FAX 703-875-4009 • Web site: www.tda.gov • email: info@tda.gov

The U.S. Trade and Development Agency

The U.S. Trade and Development Agency (TDA) promotes American private sector participation in developing and middle-income countries, with special emphasis on economic sectors that represent significant U.S. export potential. Through the funding of feasibility studies, orientation visits, specialized training grants, business workshops, and various forms of technical assistance, we help U.S. businesses compete for infrastructure projects in emerging markets. We assist in building mutually beneficial partnerships between American companies and overseas project sponsors, which result in increased U.S. exports and jobs, and the completion of high quality, successful projects in host countries.

1621 North Kent Street, Suite 200, Arlington, VA 22209
Phone 703-875-4357 • FAX 703-875-4009 • Web site: www.tda.gov • email: info@tda.gov

Table of Contents

Preliminary Agenda

Colombia Refinery Sector Business Briefing
Tuesday – June 25, 2002
Houston, Texas

8:30 a.m. - 9:00 a.m.	Registration
9:00 a.m. - 9:15 a.m.	Welcome, Introductions and Working with U.S. TDA, Albert W. Angulo, Regional Director, Latin America and the Caribbean, U.S. TDA
9:15 a.m. - 9:30 a.m.	Colombia and Ecopetrol, Dr. Carlos Alberto Sandoval Reyes, Financial, Vice President, Ecopetrol
9:30 a.m. – 9:50 a.m.	Colombia Refinery Market Overview Dr. José Luis Saavedra Vanegas, Refining and Marketing Vice President, Ecopetrol
9:50 a.m. – 10:10 a.m.	Fuel Quality Standards and Environmental Regulations Ms. Maria del Pilar Florez Forero, Director, Corporate Planning, Ecopetrol
10:10 a.m. – 10:30 a.m.	Cartagena Refinery Expansion and Modernization Master Plan, (PMD) Mr. Ramon Benavides Zarate Engineer, Cartagena Master Development Plan, Ecopetrol
10:30 a.m. – 10:50 a.m.	Questions and Answers
10:50 a.m. – 11:00 a.m.	Coffee Break
11:00 a.m. – 12:00 p.m.	Sebastopol Refinery – A Project Update Mr. Fernando Casas, President and Mr. Ben Malek, Executive Vice President, Sebastopol Refinery
12:00 p.m. – 12:20 p.m.	Questions and Answers
12:30 p.m. – 2:00 p.m.	Luncheon
2:00 p.m. – 5:30 p.m.	One-on-One Meetings

U.S. Trade and Development Agency

The mission of the U.S. Trade and Development Agency (TDA) is to promote American private sector participation in developing and middle-income countries by helping U.S. companies pursue overseas business opportunities. Through the funding of feasibility studies, orientation visits, training grants, conferences, and various forms of technical assistance, U.S. TDA enables American businesses to become involved in the planning stages of infrastructure and industrial projects in middle income and developing countries. Through these programs, U.S. TDA provides American firms with market entry, exposure, and information, thus helping them establish a position in markets that are otherwise difficult to penetrate. U.S. TDA aims to assist U.S. companies in creating jobs here at home while simultaneously promoting economic growth in developing and middle income countries. U.S. TDA works closely with government officials and industry leaders in the host countries to ensure that U.S. TDA funded projects are of a high development priority for the countries where the projects are located.

Since the U.S. Trade and Development Agency's inception in 1981, U.S. TDA has been associated with approximately $16.8 billion in exports – or nearly $40 in exports for every dollar invested in U.S. TDA activities. In Fiscal Year 2000, U.S. TDA obligated $51.7 million for U.S firms in more than 63 strategically targeted developing and middle-income countries in the following regions: Africa/Middle East; Asia/Pacific; Central and Eastern Europe; Latin America and the Caribbean; and Eurasia. U.S. TDA is primarily involved in the following sectors: agriculture; energy; environment; health care; information technology manufacturing; mining and minerals development; telecommunications; transportation; and water resources.

U.S. TDA's success is often achieved through the cooperation and assistance of colleagues throughout the U.S. Government. U.S. TDA works closely with the Department of State, the Department of Commerce, the Agency for International Development, the Department of Transportation's Federal Aviation Administration and Federal Railroad Administration, the Department of Energy and, most recently, the Federal Emergency Management Agency. U.S. TDA also works closely with the U.S. Export-Import Bank, and the Overseas Private Investment Corporation.

U.S. TDA funds project planning activities that directly influence the procurement decisions related to major industrial or infrastructure projects in developing and middle-income countries - projects that typically represent millions of dollars in U.S. export potential. From radar for airports in Asia to process controls for refineries in Latin America, hundreds of goods and services are required to implement a project. U.S. TDA works to ensure that the services and products provided by U.S. firms receive "equal access."

For more information, visit U.S. TDA's website at www.tda.gov.

List of Delegates

Delegates Sponsored by U.S. TDA

Name	Title	Affiliation
Dr. Carlos Alberto Sandoval Reyes	Financial Vice President	Ecopetrol
Dr. José Luis Saavedra Vanegas	Refining and Marketing Vice President	Ecopetrol
Ms. Maria del Pilar Florez Forero	Engineer, Corporate Planning, Directorate	Ecopetrol
Mr. Ramon Benavides Zarate	Engineer, Cartagena Master Development Plan	Ecopetrol
Mr. Fernando Casas	President	Sebastopol Refinery
Mr. Darryl Neider	Finance Director	Sebastopol Refinery

Delegates Not Sponsored by U.S. TDA

Mr. Ben Malek	Executive Vice President	Sebastopol Refinery
Mr. German Ortiz	LPG Marketing Director	Sebastopol Refinery
Mr. José Luis Leaño	V.P. Administration	Sebastopol Refinery
Mr. Augusto Ramirez	Executive Director	Sebastopol Refinery
Mr. Luis Hincapie	Project Director	GIA International

Dr. Carlos Alberto Sandoval Reyes
Financial Vice President
Ecopetrol

Dr. José Luis Saavedra Vanegas
Refining and Marketing Vice President
Ecopetrol

Ms. Maria del Pilar Florez Forero
Engineer, Corporate Planning, Directorate
Ecopetrol

Mr. Ramon Benavides Zarate
Engineer, Cartagena Master Development Plan
Ecopetrol

Mr. Fernando Casas
President
Sebastopol Refinery

Mr. Casas is a native of Colombia and was raised in the United States where he attended the University of Northern Illinois and DePaul University where he studied accounting and business management. Mr. Casas attended Northern Illinois University on a football scholarship and became a member of Delta Upsilon Fraternity. After college he began his professional career with Great Lakes International, a company specializing in the construction and dredging of marine ports. While working at Great Lakes, he received training in the field of civil engineering, project development and project management. Mr. Casas's first assignment was as part of the on-site engineering team in Colombia that constructed the coal port in the US$50 million Cerrejon Project. After five years with Great Lakes, Mr. Casas formed several businesses related to international trade, as well as holding a position as floor trader and partner of a brokerage firm at the Chicago Mercantile Exchange in the futures markets. In the early 90´s he began promoting exploration projects and other petroleum industry-related projects in Colombia and the United States. Mr. Casas is CEO, President and Legal Representative of the Sebastopol Refinery.

Ben L. Malek, P.E.
Executive Vice-President,
Sebastopol Refinery

CURRENT REPSONSIBILITIES:
Exec. Vice President, Lauren Engineers and Constructors, Inc. - Administrative management, management consulting and related engineering design.

38 Years Experience

PREVIOUS EXPERIENCE:
Mr. Malek has personally conducted, and/or been in direct responsible charge of, more than 750 client assignments in the following categories of petroleum and petrochemical activities:

- **Management Consulting** to plant owners, investors, bankers, government agencies, attorneys, and insurers
- **Economic and capital cost appraisals** of a wide variety of processing plants, terminals, and pipeline systems.
- **Market and raw material surveys** for the petroleum, petrochemical, and gas industries.
- **Industrial insurance loss surveys** for energy and petrochemical industries.
- **Development and application of computerized programs** to optimize operations of refining and petrochemical complexes, correlate and predict product yields and properties of process units in refining, petrochemicals, and gas processing, and predict unsteady state behavior of hot-oil pipelines for cross-country transportation systems.
- **Development and commercialization of** (1) a patented cryogenic process for the recovery of liquid products from refinery process off-gases, (2) gasoline truck vapor emission recovery, (3) catalytic reforming of naphtha.
- **Process engineering design** of more than one hundred process units involving over numerous different types of processes and reaction systems.
- **Project Management, definitive engineering, and material procurement** for over thirty major process construction projects, the largest of which was a refining complex with a capital cost of $180 million.

PERSONAL PROJECT EXPERIENCE:
Lauren Engineers & Constructors, Inc. –
PCI Engineers, Inc., The Pace Company, Dow Chemical Company

- Crude Oil Distillation
- Catalytic Reforming
- Ethylene Manufacture
- Propylene Fractionation
- Gas Oil Hydrocracking
- Naphtha/Distillate Hydrotreating
- Gas Oil Hydrotreating
- Cryogenic Recovery of LPG
- Liquid/Gas Pipeline
- Thermal Visbreaking
- Delayed Coking
- Chlorinated Solvent Recovery
- Oil & Gas Production Facilities
- Synthetic Natural Gas

- Fluid Catalytic Cracking
- Sulfuric and HF Alkylation
- Ethyl Alcohol via Fermentation
- Lube Oil Manufacture
- Aromatics Recovery
- Hydrogen Manufacture
- Ammonia/Methanol Manufacture
- Sulfur Recovery
- MTBE Manufacture

EDUCATION:
University of Texas, Austin, TX – B.S. in Chemical Engineering

REGISTRATION/SOCIETIES:
Registered Professional Engineers – Texas
Member – A.I.Ch.E

Mr. Darryl Neider
Finance Director
Sebastopol Refinery

COLOMBIA REFINERY SECTOR BUSINESS BRIEFING

June 25, 2002

Country Profile

GDP, (in US$billion):	81.3
GDP Growth: (est.)	-2.4%
GPD Per Capita, (US$):	1,860
Population, (Million):	43.7

Source: Inter-American Development Bank, 2001.

Executive Summary

Although hard hit by a recession and political instability in 1999 and 2000, Colombia is beginning to recover. Increasing prices for oil and coffee, the country's two largest exports, is providing an influx of income to Colombia.

In order to continue to recover and to further strengthen the oil production and refining sector, the Government of Colombia is proposing new regulations that decrease the mandatory involvement of Ecopetrol, the state oil company, from 50% to 30% and decreases the royalties paid to the national and local governments. The Government has also stated that it does not intend to construct any new refineries that are wholly owned by the state[1] and that it is relying on the private sector to take the lead in expanding Colombia's refining capacity.

Colombia views U.S. products favorably and the U.S. is Colombia's primary trading partner with the lead in both exports and imports to and from Colombia. U.S. oil companies such as ExxonMobil and Santa Fe Energy have played key roles in the development of Colombia's current oil production and refining capacity

[1] Colombia Country Analysis Brief, Energy Information Administration, U.S. Department of Energy, May 2002

Political and Economic Climate

Colombia is currently facing difficult political and economic conditions. However, improving U.S. and Latin American economic outlooks indicate that better times are ahead for Colombia in the second half of 2002. A primary reason for a positive future outlook for the Colombia is increasing world oil prices, which will add a considerable boost to Colombia's export earnings.

Politically, Colombia is faced with significant challenges in the next few years partly due to the fact that rebel groups control large parts of Colombian territory. However, the independent Mr. Alvaro Uribe won 53% of the vote in Colombia's Presidential Election on May 26, 2002.

The Colombian economy shrank by an estimated 2.4% in 2001 due to the political instability in the nation as well as poor regional and global economic conditions. The year-end inflation was 8.1%, down from 8.7% the year before and continuing a decreasing trend over the past several years.

Investment Climate

In 2000, Colombia had direct foreign investment (FDI) of US$ 2.2 billion. Since 2001, the government of Colombia has taken measures to make the investment climate friendlier to foreign oil companies. There are several proposals currently being discussed in the Colombian Senate and House including proposals for:

- Reducing Ecopetrol's mandatory shares in joint ventures from 50% to 30%.
- Restructuring Ecopetrol's royalties from 20% to a 5% to 20% range, with production field size as the rate-determining factor.

The hydrocarbon production sector, as well as well as the mining and telecommunications sectors all saw growth in 1999, while the banking, tourism, manufacturing, transportation, and agricultural sectors which shrank in 1999. However, it is expected that the economic recovery seen in 2000 should promote recovery in the poor-performing sectors.

As of mid-2000, public foreign debt was approximately US$ 19.7 billion, almost entirely long-term; private foreign debt was just over US$ 14.7 billion. Therefore, total foreign debt is approximately 40% of Colombia's GDP. Major international credit rating firms currently consider Colombia sovereign debt to be below investment grade.

Colombia receives most of its imports from the U.S., with a 42% share of imports; Colombia primarily imports capital goods, industrial inputs, and consumer goods. The U.S. is responsible for most of Colombia's exports, with a 48% share; Colombia primarily exports petroleum, coal, and coffee. The E.U., Japan, and Venezuela are other significant trading partners with Colombia.

Refinery Sector Overview

Colombia’s hydrocarbon reserves are owned by the Government and are administered by the state oil company Empresa Colombiana de Petroleos (Ecopetrol) and by the Energy and Mines Ministry. Ecopetrol was required to hold a 50% share in joint ventures with private companies, but that is being reduced to 30%.

There are currently four major oil and/or gas producing fields in Colombia: Cusiana, Cupiagua, Cano Limón, and Chuchupa-Ballenas. Cusiana and Cupiagua are thought to have reached peak production while Cano Limón, the largest producing field, nearing depletion. A joint venture between Ecopetrol and Petrobras-Nexen is expected to significantly increase production at the Magdalena Valley, one the country’s largest new fields. Overall, the Government hopes that the new regulations being put into place will encourage more exploration and production in the country and predict that oil production could exceed 850,000 bpd in 2010.

Colombia also possesses two major refineries at Barrancabermeja and Cartagena; there are also small refineries located at Tibu, Orito, and Apiay. The current capacity of these refineries is 285,850 bpd. These refineries are all owned and operated by Ecopetrol, but the Government has stated that it will not construct any new refineries and that any new contraction must be undertaken by the private sector. In February 2002, Ecopetrol announced that the private sector could proceed with plans to build a new refinery at Sebastopol, in Cimitarra.

Colombia has five oil pipelines, four of which connect the oil fields to the Caribbean port of Covenas. These pipelines include: Ocensa, from Cusiana/Cupiagua to Covenas; and Cano Limón, from the same named field to Covenas.

Foreign oil companies have played a significant role in exploration and production activities in Colombia. Some of these companies are: ExxonMobil, Chevron, BPAmoco, Arco, Oxy, Maxus, Nomeco, Conoco, L.L.&E., Santa Fe Energy, Triton, Harken, Shell, Elf Aquitaine, Total, Repsol, Lasmo, PetroCanada, Canadian Petroleum, Sipetrol, Petrobras, San Jorge, Teikoku, and Ampolex.

Colombia has rich bio-diversity and the nation prides itself on being a responsible steward of its environment. Colombia is a party to a number of treaties and conventions including the Antarctic, Biodiversity, Climate Change, Endangered Species, Hazardous Wastes, Marine Life Conservation, Nuclear Test Ban, Ozone Layer Protection, and Ship Pollution. Colombian environmental regulations are usually stricter than corresponding World Bank environmental guidelines.

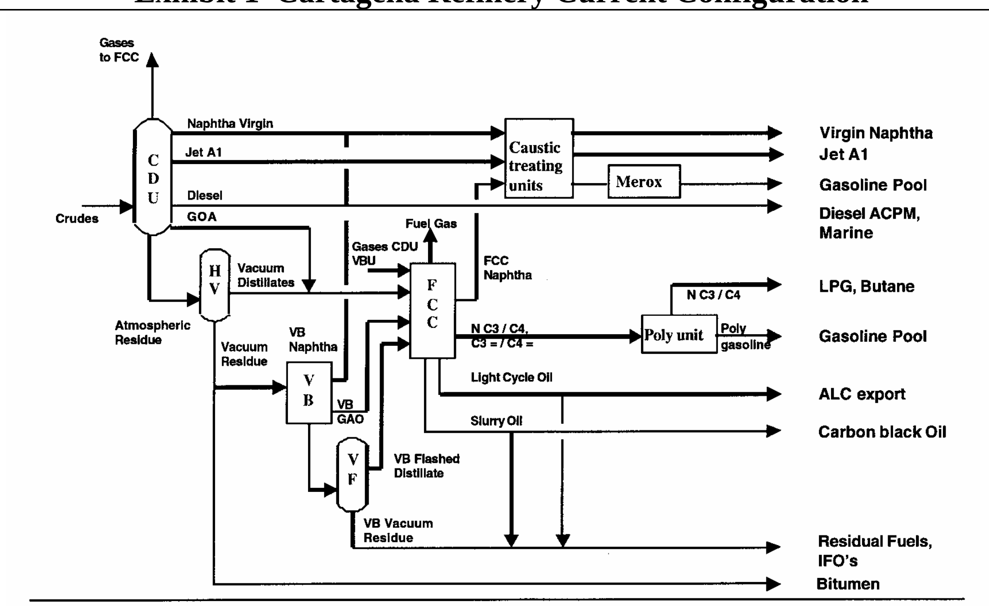
Cartagena Refinery

The Cartagena Refinery, owned by Ecopetrol (the government owned Colombian petroleum company), is a 75,000 barrel per day (bpd) refinery located west of the city of Cartagena. The refinery first began operation in 1956 and has been expanded and modernized periodically to increase output, to adjust to changing crude slates, and to meet market needs and demands. The Cartagena Refinery is located in the Mamonal industrial Zone, 30 minutes west of the city of Cartagena, on Colombia's northern coast. The refinery has well-established infrastructure including port and terminal facilities and piers for receiving tankers of up to 85,000 tons. In 2000, the Refinery exported approximately 42,800 bpd of products accounting for 47.2% of the refinery's total revenue of $875 million.

Exhibit 1 shows the current configuration of the Cartagena Refinery. In the 1990's, Ecopetrol began evaluating options for expanding and modernizing the refinery in order to improve its competitiveness and to enter new markets. Ecopetrol's objectives for expanding and modernizing the refinery included:

- Meeting a growing domestic demand for motor fuels
- Meeting clean fuel standards
- Meeting new environmental requirements
- Maximize the refinery's efficiency and reliability
- Improving the refinery's energy efficiency
- Improving the refinery's long-term competitiveness and profitability

Exhibit 1 Cartagena Refinery Current Configuration



Source: Plan Maestro de Desarrollo de la Refinería de Cartagena, Bogotá D.C., November 2001, Empresa Colombiana de Petroleos – Ecopetrol.

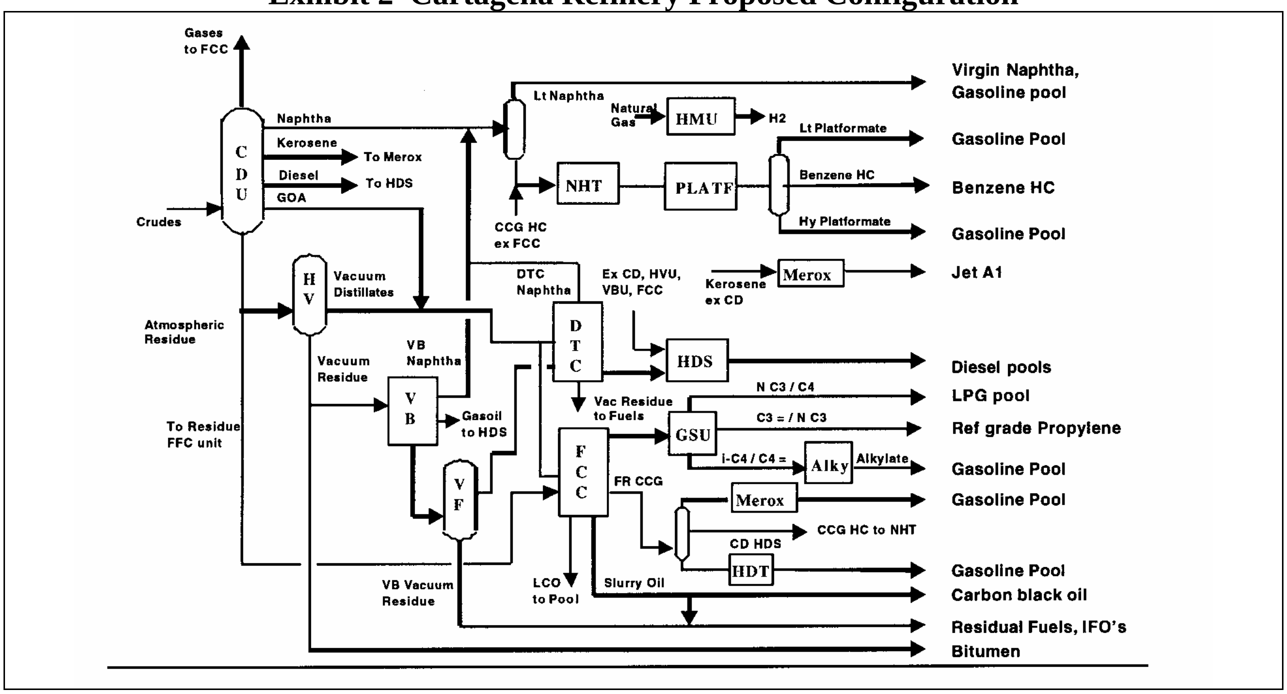
In 1996 MW Kellogg, with support from the U.S. TDA, developed a proposed Master Plan for expanding the refinery from 75,000 bpd to 140,000 bpd and modernizing the refinery to the product standards and environmental requirements of Ecopetrol. In 2000, Ecopetrol commissioned a study to update the proposed Master Plan to comply with the anticipated 2005 Fuel Product Quality legislation and with projections of future product demands and prices of crude and products. The new study demonstrated that from technical, economic, operational and strategic points of view the proposed expansion and modernization plan is feasible.

The new study also recommended that:

- Ecopetrol operate the expanded refinery on behalf of shareholders;
- utility (e.g., power, steam, hydrogen, air, and water) plants be located outside of the refinery fence;
- new product treating and environmental plants be located inside of the refinery fence;
- the refinery expansion and modernization be implemented as one integrated project without phasing.

Exhibit 2 shows the proposed configuration for expansion and modernization of the Cartagena Refinery.

Exhibit 2 Cartagena Refinery Proposed Configuration



Source: Plan Maestro de Desarrollo de la Refinería de Cartagena, Bogotá D.C., November 2001, Empresa Colombiana de Petroleos – Ecopetrol.

Annex A includes a copy of a Preliminary Information Memorandum (PIM) issued by Ecopetrol in November 2001 describing the Cartagena Refinery expansion and modernization Master Plan.

This PIM indicates that the estimated total capital cost for the proposed expansion and modernization project is about $630 million, including $500 million for expanding and modernizing the refinery and $130 million for the utility facilities.

Sebastopol Refinery[2]

Sebastopol Refinery (the "Company"), a Colombian corporation, was established in 1997 with the goal of developing Colombia's first private sector refinery. This new refinery (Figure 1) will be designed to process 30,000 bpd of Cusiana and/or Cupiagua crude to premium gasoline, LPG, and industrial fuels for the domestic market (Figure 2). A 75 MW cogeneration plant will provide the required utilities (power, steam, and compressed air) to the refinery (Figure 3). The Refinery will be located in the mid-Magdalena river valley (Figure 4), Medellín region, northwest of Santafé de Bogotá, within three miles of Colombia's main crude pipeline and will be adjacent to Ecopetrol's Sebastopol product tank farm (Figures 5 and 6).

The Company is negotiating a 12-year off-take contact with Ecopetrol for 100% of the premium gasoline product. Ecopetrol will also supply the crude under a 12-year supply contract. Other products will be sold through one or more local distribution companies.

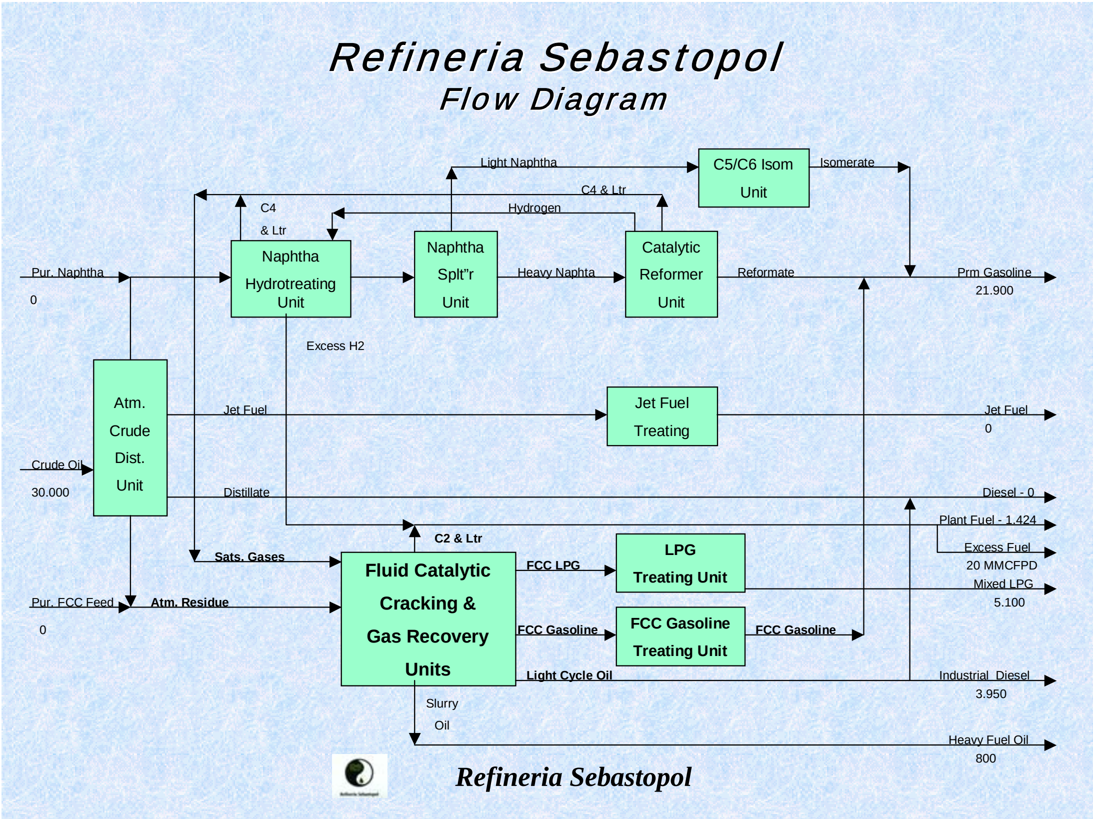
Total project cost is estimated to be approximately $400 million -- $315 million debt and $85 million equity. A large portion of equity will be financed and sourced from Colombian capital market (pension funds). The Company is structuring a zero coupon bond for $65 million for a 12-year term. The Company has also executed an agreement with GIA International LTD. of Medford, Oregon, to become a project co-sponsor and to invest $20 million in the project. The debt will be arranged from the international financial market. The company has been in discussions with the U.S. Export-Import Bank (Ex-Im) and anticipates Ex-Im supported project financing for a substantial portion of the debt.

GIA International LTD. has also agreed to fully finance the co-generation power plant for $65 million. Selection for Owners Engineer, Basic Engineering, Technology, EPC contractor will begin in the 3rd quarter of 2002.

The Company has also engaged the Shaw Group Inc., U.S.A., as its principal EPC contractor for the project. Shaw Group will perform or cause to perform all engineering, fabrication, and construction work. Shaw Group also will provide a 100% completion guarantee for the project. The Company has also signed a Letter of Intent (LOI) with UOP for providing operation and maintenance services for the refinery.

All governmental licenses and permits, including environmental permits, for the project have been obtained.

[2] Source: Sebastopol Refinery



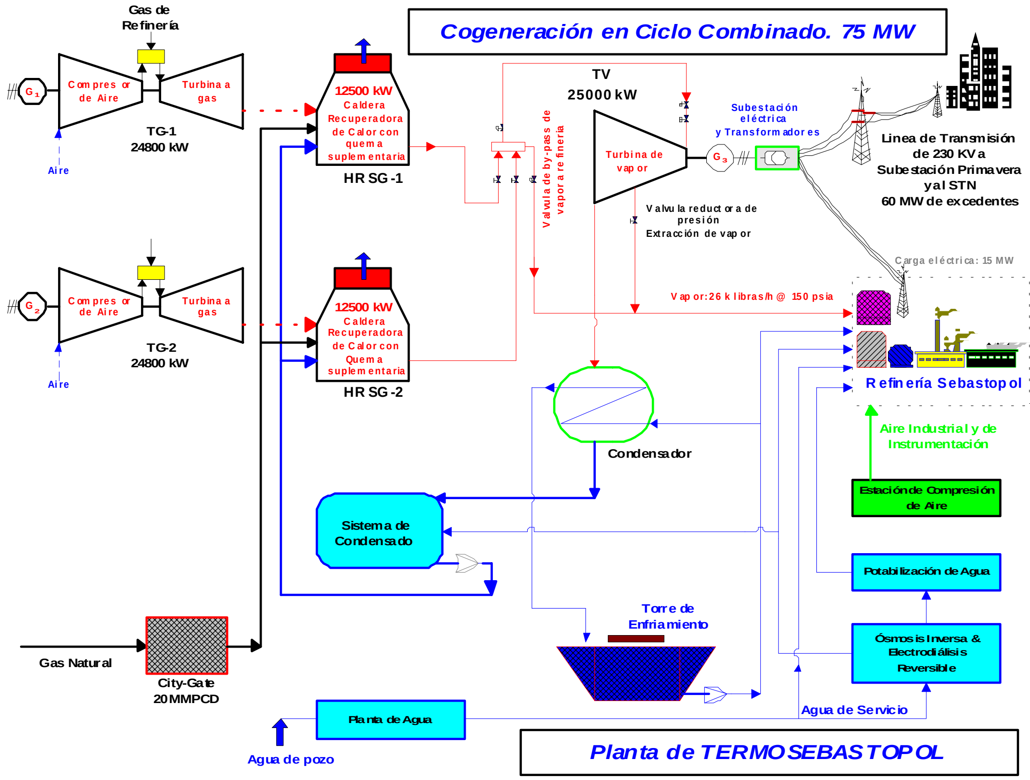
Sebastopol´s Technical Specifications

- Capacity 30,000 BPD
- 30,000 BPD Crude Unit
- 11,000 BPD Naptha Hydrotreater
- 11,000 BPD CCR
- 20,000 BPD FCC/Gas Plant
- 12,000 BPD FCC
- 9,000 BPD LPG Treaters
- 8,000 BPD FCC C3/C4 Amine Contractor
- Tank Farm and Interconnects, Paving and Buildings
- Caustic System
- Truck Racks

PRODUCTION:

- 21,900 BPD GASOLINE (RON 94)
- 3,950 BPD DIESEL
- 5,100 BPD LPG
- 800 BPD FUEL OIL

CONSTRUCTION TIME: 30Mo.



Colombian Refineries

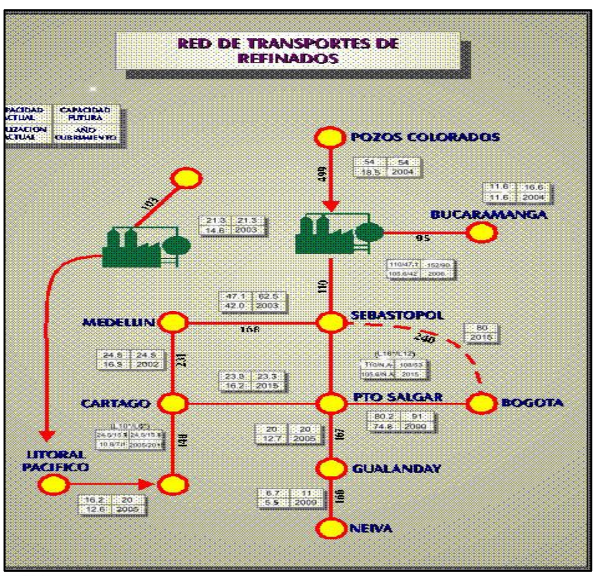
Refineria Sebastopol

National Crude Pipelines

OCENSA PIPELINE WILL BE USED TO DELIVER CUSIANA & CUPIAGUA CRUDE

Refineria Sebastopol

National Products Pipelines. Sebastopol´s Strategic Distibution Location



Refineria Sebastopol

Presentations

Ecopetrol Presentations

Colombia and Ecopetrol Remarks
Colombia Refinery Market Overview
Fuel Quality Standards and Environmental Regulations
Cartagena Refinery Expansion and Modernization Master Plan, (PMD)

Sebastopol Refinery Presentation

Sebastopol Refinery – A Project Update

Ecopetrol Presentations

Sebastopol Refinery – A Project Update

Mr. Fernando Casas, President
Mr. Ben Malek, Executive Vice President
Sebastopol Refinery

Co-Sponsors

ExxonMobil Refining & Supply
Warren Dold
Baytown Refinery
2800 Decker Drive
Baytown, Texas 77521
Phone: 281-834-3333

Jacobs Consultancy
Mr. Bill Schlesing,
Phone: 832-351-7812
Mr. Simon Russo
Phone: 832-351-7829
5995 Rogerdale Road
Houston, Texas 77072

Foster Wheeler International
Mr. Rene Mathieu
2020 Dairy Ashford Rd
Houston, Texas 77077
Phone: 281-752-3773
Fax: 281-597-3259
Email: rene_Mathieu@fwc.com

ABB Lummus Global
Mr. Gunner Nilsson
3010 Briarpark Drive
Houston, Texas 77042
Phone: 731-821-4731
Email: tgummer.nilsson@us.abb.com

Stone & Webster, Inc.
Mr. Roberto Ortiz
1430 Enclave Parkway
Houston, Texas 77077
Phone: 281-368-4120
Fax: 281-368-4228
Email: jim.Monteaux@shawgrp.com

GE Aero Energy Products
Mr. Greg West
Phone: 713-803-0939 (office)
713-906-7508 (cell)
Office Address:
2707 Northrop West, Suite 900
Houston, Texas 77008
Manufacturing Facility:
16415 Jacintoport Blvd.
Houston, Texas 77015

Parsons Energy & Chemicals Group Inc.
Mr. Juan Llovet
5 Greenway Plaza
Houston, Texas 77277
Phone: 713-407-5053
Fax: 713-407-5088
Email: juan.llovet@parsons.com

Princeton Energy Resources International (PERI)/Global Management Partners (GMP)
Mr. A. John Rezaiyan
1700 Rockville Pike, Suite 550
Rockville, MD 20852
Phone: 301-468-8430
Fax: 301-230-1232
Email: jrezaiyan@perihq.com

InterAmerican Chamber of Commerce
Ms. Fan Dorman
11999 Katy Freeway, Suite 330
Houston, Texas 77079
Phone: 281-584-9009
Fax: 281-584-9555

ExxonMobil Refinery

ExxonMobil Refinery
Baytown Refinery
2800 Decker Drive, Baytown, Texas 77521

FACT SHEET

FACILITY:	Founded in 1919, ExxonMobil's Refinery in Baytown, Texas is located on approximately 2,400 acres along the Houston Ship Channel, about 25 miles east of Houston. The majority of crude oil is supplied by tanker from Saudi Arabia, Texas, Venezuela, Kuwait, Mexico, supplementing pipeline crude from Texas, Louisiana and California.
EMPLOYEES:	The plant is staffed by approximately 1,450 ExxonMobil employees and 600 contract personnel to operate and maintain the plant on a 24-hour, year-round basis.
LOCAL TAXES:	Property taxes in 2001 totaled $28.1 million for city, county, school and college.
PAYROLL:	Annual salaries, wages and benefits at the plant are approximately $134 million.
PURCHASES:	The plant purchases approximately $288 million in goods and services annually.
PRODUCTION:	Crude capacity is currently 522,000 barrels per day. The largest of ExxonMobil's refineries worldwide, the Baytown Refinery produces a full range of petroleum products. Specialties products include lube oils and fluids, and various blends and grades of specialties products are made. Gasoline is supplied to Arkansas, Delaware, Florida, Georgia, Maryland, New Jersey, North Carolina, Pennsylvania, Tennessee and Texas.

GROWTH:	In late 1999, a lubricant unit was completed. This unit reinforces Baytown's position as a primary source of basestocks for passenger car motor oils. Construction was completed in October 2001 on the Baytown Delayed Coker Project. The project supports the processing of Mayan crude.

PRODUCTS PROCESSED FROM CRUDE

DISTILLATES	Jet Fuel, Diesel
GAS	Ref. Gas, Propane
GAS OILS	Heating Oil, Chemical Feedstocks, Lubricating Oils
NAPHTHAS	Fluids, Gasolines
RESIDUUM	Coke

PRODUCT SHIPMENT:	Approximately 20 percent of the products leave by tanker or barge, 77 percent by pipeline and 3 percent by tank car and tank truck.
AWARDS:	The ExxonMobil Complex was awarded the 1997 Silver Well Workplace award by the Wellness Council of America. The refinery-chemical plant firefighters took top honors at the Industrial Rescue Training Symposium in 1998 and are consistently at the top in the International Rescue and Emergency Care Association competition.

For additional information, contact Warren Dold at (281) 834-3333.

http://www.hydrocarbons-technology.com/projects/baytown/index.html

THE WEBSITE FOR THE HYDROCARBONS INDUSTRY

INDUSTRY PROJECTS

BAYTOWN REFINERY COKER FACILITY, USA

On the 29th February 2000, Exxon Mobil USA announced the start of construction of the new delayed coker at its existing Baytown Refinery. The project was initiated in November 1998 when Exxon Mobil awarded the contract to provide Conoco-licensed delayed coking technology for two of Exxon's refineries, to the Conoco-Bechtel Coker Technology Alliance, a business unit of the Bechtel Corporation. The plant began operations on the 19th December 2001.

MARKET RATIONALE

The addition of the 40,000 barrels/day coker to the Baytown refinery is part of Exxon Mobil's recently announced crude oil supply agreement with the Mexican state oil company, Petroleos Mexicanos. The Conoco coking process is based on more than 40 years of operating experience by Conoco.

The investment was undertaken due to the fact that the new delayed coker and related facilities will enable Exxon Mobil to better process heavy crude oil feedstocks, including Maya crude. It is therefore ensuring that the plant is producing cleaner, higher-valued fuels at a lower cost. Under the terms of a supply agreement agreement that was signed in September 1998, Pemex is supplying 65,000 barrels/day of Maya crude oil to the refinery. The Baytown Refinery processes approximately 465,000 barrels/day of crude.

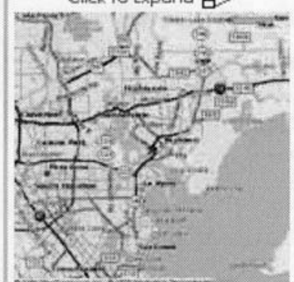
The 40,000 barrels/day coker will also allow the refinery to eliminate the production of low value, heavy fuel oil and increase production of higher value, cleaner burning fuels.

This will provide an additional supply of competitively priced heavy crude oil for Exxon Mobil and further improve the competitiveness of Exxon Mobil's Baytown manufacturing complex, already one of the largest in the USA with fuels conversion, lubes and petrochemical facilities. Therefore, the company will be able to meet two aims simultaneously. It will move into higher margin products, whilst improving its environmental conditions.

PLANT PRODUCTION AND COST

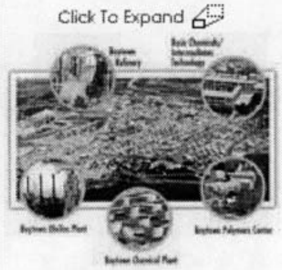
Exxon Mobil selected a total of four firms to build the coker and its related facilities. Bechtel Corporation was chosen to design, develop and construct the delayed coker process unit; Fluor Daniel Company is in charge of making modifications to existing utility and processing

Click To Expand



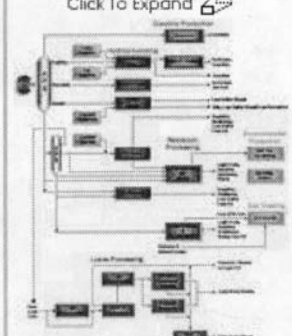
Map showing the location of Baytown.

Click To Expand



The Baytown complex.

Click To Expand



Overview schematic of Exxon Research and Engineering's refining technology showing the processing sequence in a refinery.

Hydrocarbons Technology - Baytown Refinery Coker Facility USA

http://www.hydrocarbons-technology.com/projects/baytown/index.html

units; TPA Inc. will take charge of work for the sulphur recovery facilities and GDS Inc. for site clearance, coke handling and control systems.

Exxon Mobil's activities in Baytown currently include a refinery, two manufacturing plants and two research centres. In all, the company's presence in the area will provide work for more than 4,000 employees and 2,000 contractors during the construction period.

LEAD CONTRACTOR

Under the Conoco-Bechtel Alliance, which was formed in 1994, Bechtel operates as Conoco's exclusive worldwide partner to market the Conoco Coking Process. This allows Bechtel access to Conoco's valuable process technology. Usually the most valuable element in such a project is the process technology license, which can be worth much more than the actual physical equipment, so this is a significant boon to Bechtel. Furthermore, the ability to install a cutting edge technology is a major advantage in winning contracts. The advantage for Conoco is that by teaming up with such a well known contractor with a world wide network, it shares in Bechtel's profits.

Click here for printable version

Click To Expand

The products are likely to be sold at Mobil branded service stations.

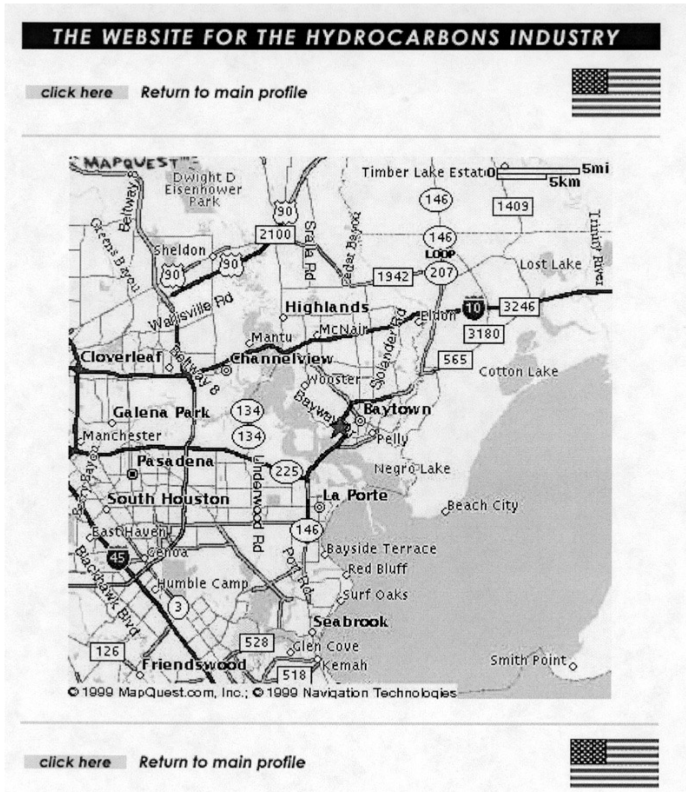
Click To Expand

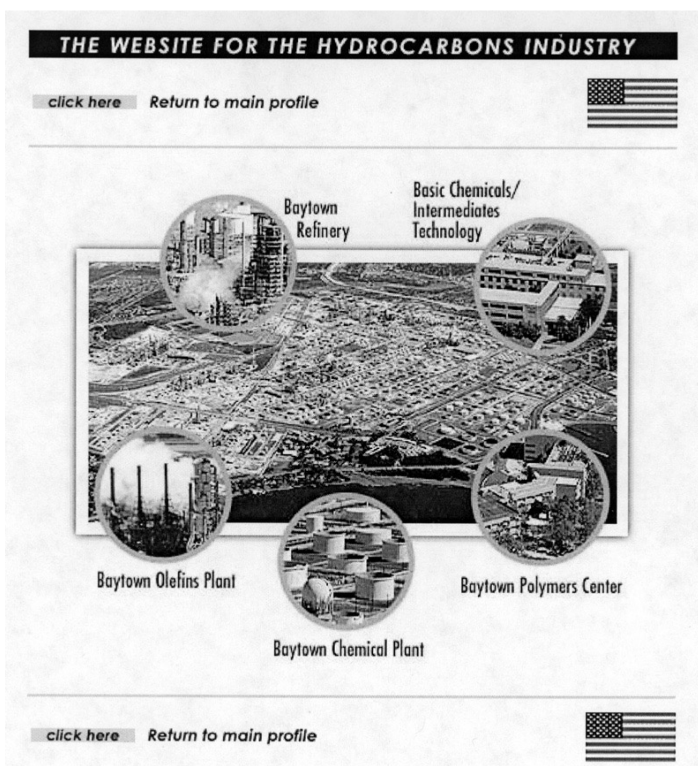
The refinery is ultimately managed from the ExxonMobil headquarters in Irving.

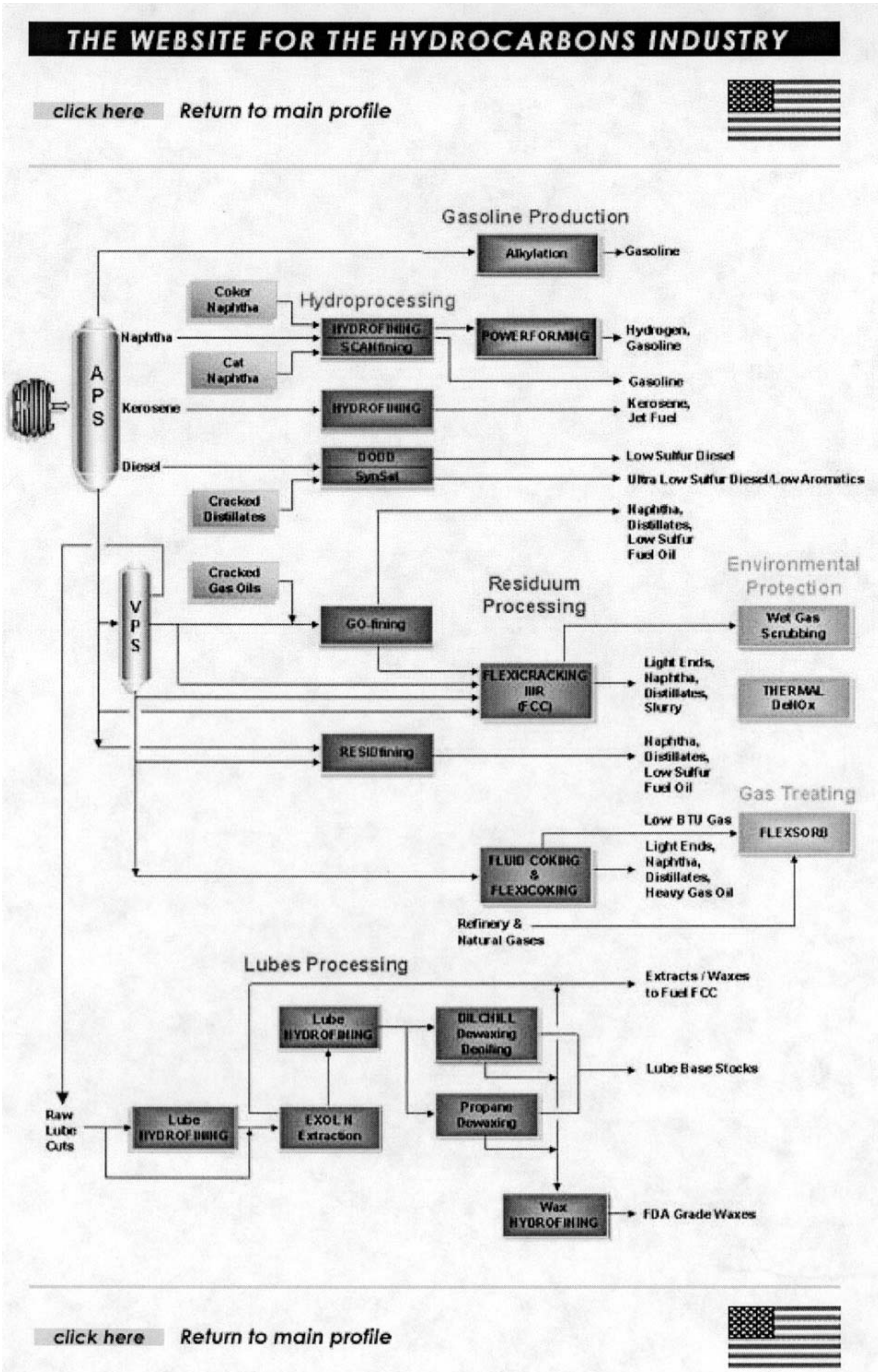
SPECIFICATION

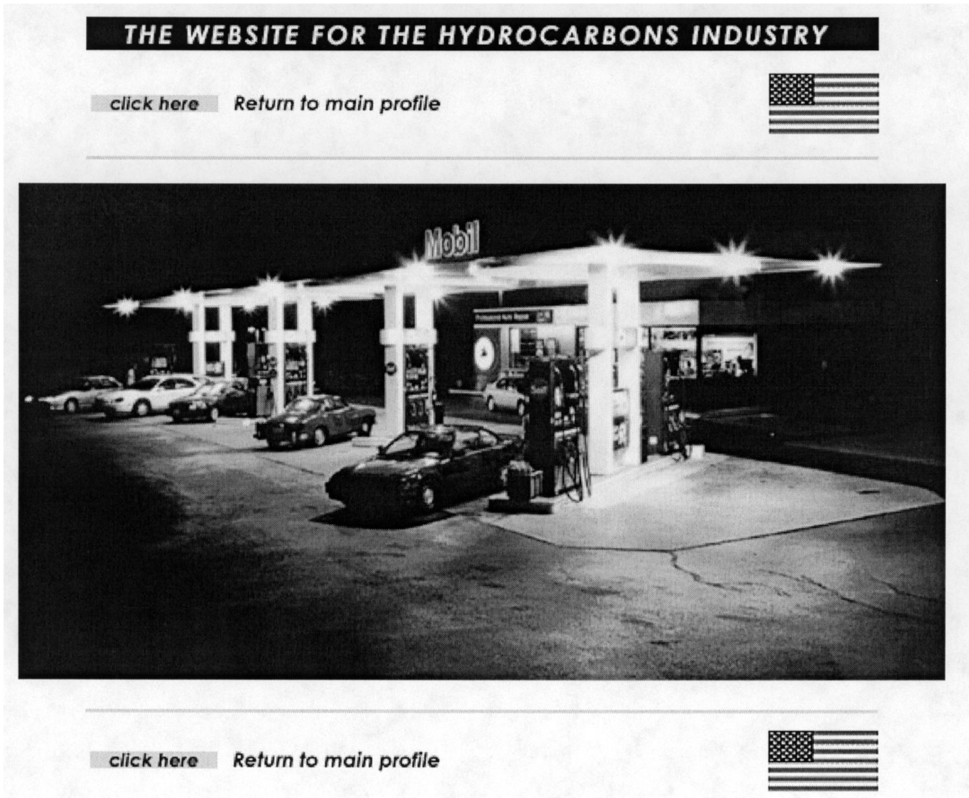
APPROVED SUPPLIERS

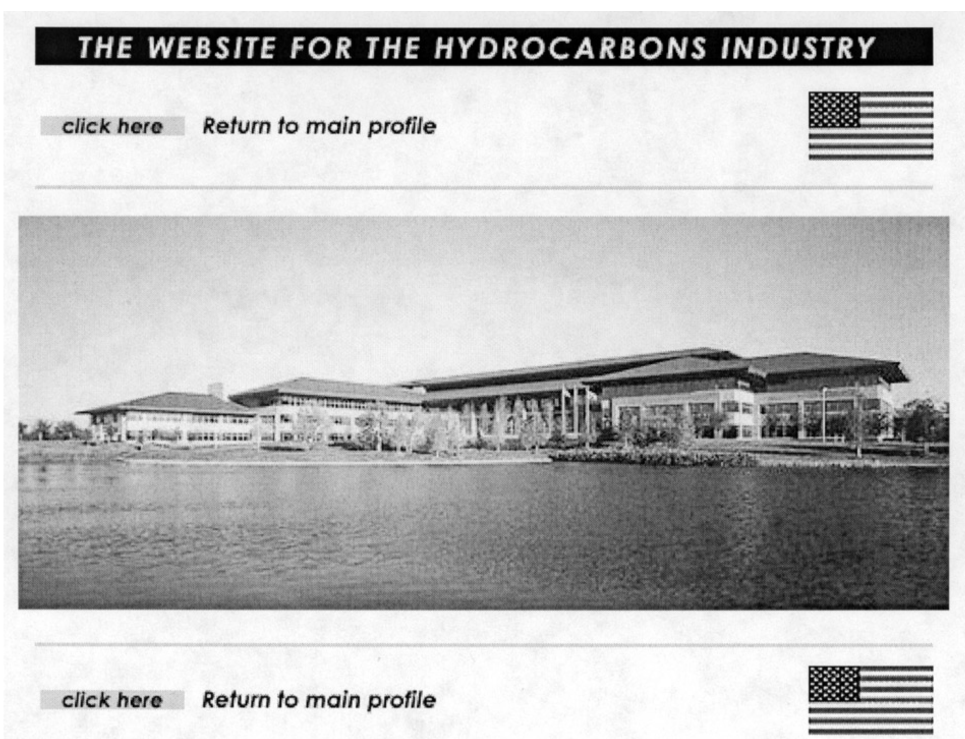
ONDEO Nalco Energy Services - Fouling and Corrosion Control Systems (Chemicals, Additives and Raw Materials)


THE WEBSITE FOR THE HYDROCARBONS INDUSTRY
click here Return to main profile
MAPQUEST
Dwight D Eisenhower Park
Timber Lake Estat
Sheldon
Highlands
Lost Lake
Mantu
McNair
Cloverleaf
Channelview
Cotton Lake
Wooster
Galena Park
Baytown
Manchester
Pelly
Pasadena
Negro Lake
South Houston
La Porte
Beach City
East Haven
Genoa
Bayside Terrace
Humble Camp
Red Bluff
Surf Oaks
Seabrook
Glen Cove
Friendswood
Kemah
Smith Point
© 1999 MapQuest.com, Inc.; © 1999 Navigation Technologies
click here Return to main profile


THE WEBSITE FOR THE HYDROCARBONS INDUSTRY
click here Return to main profile
Baytown Refinery
Basic Chemicals/ Intermediates Technology
Baytown Olefins Plant
Baytown Polymers Center
Baytown Chemical Plant
click here Return to main profile


THE WEBSITE FOR THE HYDROCARBONS INDUSTRY
click here
Return to main profile
Gasoline Production
Alkylation
Gasoline
Coker Naphtha
Hydroprocessing
HYDROFINING
SCANfining
POWERFORMING
Hydrogen, Gasoline
Naphtha
Cat Naphtha
Gasoline
A P S
Kerosene
HYDROFINING
Kerosene, Jet Fuel
Diesel
DODD
SynSat
Low Sulfur Diesel
Ultra Low Sulfur Diesel/Low Aromatics
Cracked Distillates
Naphtha, Distillates, Low Sulfur Fuel Oil
Environmental Protection
Cracked Gas Oils
Residuum Processing
V P S
GO-fining
Wet Gas Scrubbing
FLEXICRACKING IIIR (FCC)
Light Ends, Naphtha, Distillates, Slurry
THERMAL DeNOx
RESIDfining
Naphtha, Distillates, Low Sulfur Fuel Oil
Gas Treating
Low BTU Gas
FLEXSORB
FLUID COKING & FLEXICOKING
Light Ends, Naphtha, Distillates, Heavy Gas Oil
Refinery & Natural Gases
Lubes Processing
Extracts / Waxes to Fuel FCC
Lube HYDROFINING
DILCHILL Dewaxing Deoiling
Lube Base Stocks
Propane Dewaxing
Raw Lube Cuts
Lube HYDROFINING
EXOL N Extraction
Wax HYDROFINING
FDA Grade Waxes
click here
Return to main profile


THE WEBSITE FOR THE HYDROCARBONS INDUSTRY
click here Return to main profile
Mobil
click here Return to main profile


THE WEBSITE FOR THE HYDROCARBONS INDUSTRY
click here Return to main profile
click here Return to main profile

ASSOCIATED BUILDERS AND CONTRACTORS, INC.

ABC Newsline for March 16, 2001

ABC Honors the Nation's Top Projects at National Convention

Seventy-six ABC contractors received awards for outstanding projects at ABC's national convention in San Antonio. Thirty-eight contractors received a first place Award of Excellence in 38 categories, and 38 others received an Award of Merit in 35 categories. The winning projects were selected from entries submitted from across the country and were judged on complexity, attractiveness, unusual challenges, completion time, workmanship, innovation, safety and budget. ABC's awards program is designed to recognize publicly the quality and innovation of merit shop construction and to honor all the members of the construction team, including the contractor, the owner and the design team. "These projects reflect the unique capabilities and talents of our merit shop contractor community," 2001 ABC President Henry Kelly said at the convention.

The following contractor and project received awards:

MEGA-PROJECTS Over $100 Million
Contractor: Parsons Construction
Project Name: ExxonMobil, Baytown Syngas Project
Project Location: Baytown, Texas
Owner: ExxonMobil Chemicals Americas
Architect: Parsons Energy & Chemical Group, Inc.

Source: www.abc.org/Newsline/march16/excelnl16.htm

Jacobs Consultancy

Foster Wheeler International

ABB Lummus Global

Stone & Webster, Inc.

GE Aero Energy Products

Parsons Energy & Chemicals Group Inc.

Princeton Energy Resources/Global Management Partners

Princeton Energy Resources International

Profile
Princeton Energy Resources International, LLC (PERI) established in 1980, is a multifaceted, small, minority-owned business technology management services consulting firm providing a broad array of energy and environmental expertise to the domestic and international marketplace — in both the public and private sectors. The company is headquartered in Rockville, Maryland USA, from where it serves its clientele of U.S. and foreign government agencies and commercial sector firms.

PERI's globally recognized expertise focuses on renewable as well as fossil energy technologies and the environmental implications of their use. We provide services in:

- Technology Characterization
- Power Sector Economics
- Market Assessment and Deployment
- Project Financing Strategies
- Training and Outreach
- Policy, Regulatory, and Institutional Analysis
- Performance Management and Measurement
- Engineering Design
- Energy and Environmental Resource Assessments
- Environmental Impact
- Mitigation
- Infrastructure Development, Restructuring and Reform
- Privatization and
- Deregulation Evaluation
- Economic Impact
- Modeling and Benefit-Cost Analysis
- Strategic Planning
- R&D Program
- Management
- Feasibility Studies
- Information Systems and Content Management
- Project Planning and
- Development
- Financial Analysis

Areas of Expertise
PERI leverages its core competencies into five key areas of expertise to serve government and private sector clients:

Energy Technical Services
Serving key decision-makers in industry and government, we provide an array of technical services in the fields of utility analysis, resource and technology planning, energy efficiency, power management strategies, electric energy transmission and distribution, and policy and regulatory analysis. We define target markets for new and emerging renewable and fossil energy applications, identify the constraints for accessing these markets, and overcome technical and economic barriers associated with their use. Our expertise encompasses modeling and analysis of more efficient and cleaner energy technologies, developing methodologies for

examining the environmental implications of energy production, and conducting feasibility studies for proposed power generating facilities.

Environmental Assessment
Finding innovative approaches to control and mitigate today's complex environmental problems is the goal of our staff of scientists, analysts, and environmentalists. We employ advanced analytical tools such as cumulative impact assessment, comparative risk analysis, social costs analyses and environmental impact assessments to quantify and compare environmental stresses and emissions from various generating technologies to determine their full economic and social implications. We also develop environmental performance measures, design pollution prevention strategies and conduct NEPA-related assessments and evaluations.

Economic, Financial, and Market Analysis
Working closely with electric utilities, service industries, governmental agencies, and energy planners and producers, we study and define target markets for new and emerging technologies. We design and develop methodologies and decision-making tools to analyze and forecast energy issues from a regional, national or international perspective. Economic modeling, benefit-cost and financial/decision analysis techniques are among the approaches we use to evaluate a wide range of energy technologies to determine their cost-competitiveness and likelihood of reaching the marketplace. We design tariff structures and perform financial analyses in support of power producers and project developers.

International Project Development
International development efforts provide system engineering, design, development, and installation to deploy appropriate energy technologies in countries around the world. With extensive experience in international markets and an in-depth knowledge of renewable and fossil energy technologies, we provide total system services from project identification and screening, resource assessments, feasibility studies, and due diligence evaluations to preparation of bid documents and the procurement of generation-transmission-distribution systems and equipment. We have supported extensive energy development efforts in China, India, Ecuador, Russia, Central and Eastern Europe, Venezuela, and the Philippines and have employed indigenous energy options, energy efficiency techniques, and energy resource systems in rural development settings.

Management Services
Working with regional, state, and federal agencies (as well as the private sector), we analyze organizational, management, personnel, and information systems requirements that links mission and function objectives to the adherence of project, corporate or government agency goals, while improving the overall efficiency and effectiveness of the specific entity. Important elements include the allocation of financial resources within the constraints of project schedules, agency operations, legislative and executive directives that influence overall operations, and the frequently short time frames available to make and implement decisions. Selected services include strategic planning, business and operational assessment,

organizational and financial analysis, quality improvement management, performance enhancement, group facilitation services, survey research, and project and procurement management. Information transfer and decision making are supported through workshops, seminars, outreach publications and technical conferences.

Representative Client Listing

- Battelle Memorial Institute
- California Energy Commission
- Electric Power Research Institute
- Federal Aviation Administration
- Idaho National Engineering Laboratory
- International Energy Agency
- Montgomery County (MD) Public Schools
- National Energy Technology Laboratory
- National Renewable Energy Laboratory
- NJ TRANSIT
- State of Maryland
- The World Bank
- U.S. Agency for International Development
- U.S. Department of Energy
- U.S. Environmental Protection Agency
- U.S. Trade and Development Agency
- United Nations Development Program
- Varied Commercial (Proprietary) Entities

For further information, contact:

Dr. Thomas C. Schweizer, President and CEO
Princeton Energy Resources International
1700 Rockville Pike, Suite 550, Rockville, Maryland 20852, USA
(301) 881 0650
e-mail: tschweizer@perihq.com

Global Management Partners

Private Sector Financing and Partnership Development

Global Management Partners, LLC (GMP) is a recognized leader in power project development, procurement services management, and financing and debt equity sourcing. GMP's personnel have helped pioneer some of the first private infrastructure projects in the developing world using Build-Own-Operate (BOO) and Build-Own-Operate-Transfer project financing schemes. Our staff has the expertise to structure and negotiate agreements and has the ability to help arrange both conventional and alternative financing. Ultimately, GMP personnel have led or played key roles in the development of over five billion dollars of infrastructure projects worldwide. Examples of work that GMP and our personnel have done in this area are described below:

Hub River Power Project

GMP personnel directed the development of the 1,292 MW, $1.7 billion Hub Power project in Pakistan, which was the largest BOO power plant in the developing world at that time. Under our staff's direction, the Hub River Power Group structured and negotiated agreements between the public and private sectors, secured private financing, and arranged a unique limited-recourse co-financing from the World Bank.

Manah Power Project

GMP personnel directed the negotiation the Power Purchase Agreement, the Concessions Agreement, and the Land Lease Agreement with an Independent Power Producer on behalf of the Government of Oman in the development of the 90 MW plus 180-kilometer length transmission lines, $220 million Manah Power Project in Oman. GMP personnel also provided project management during the construction period for the project.

Rades Combined Cycle Power Plant

GMP personnel led the development of the Power Purchase Agreement and the Concessions Agreement for the 400 MW, $225 million Rades Combined Cycle Power Project.

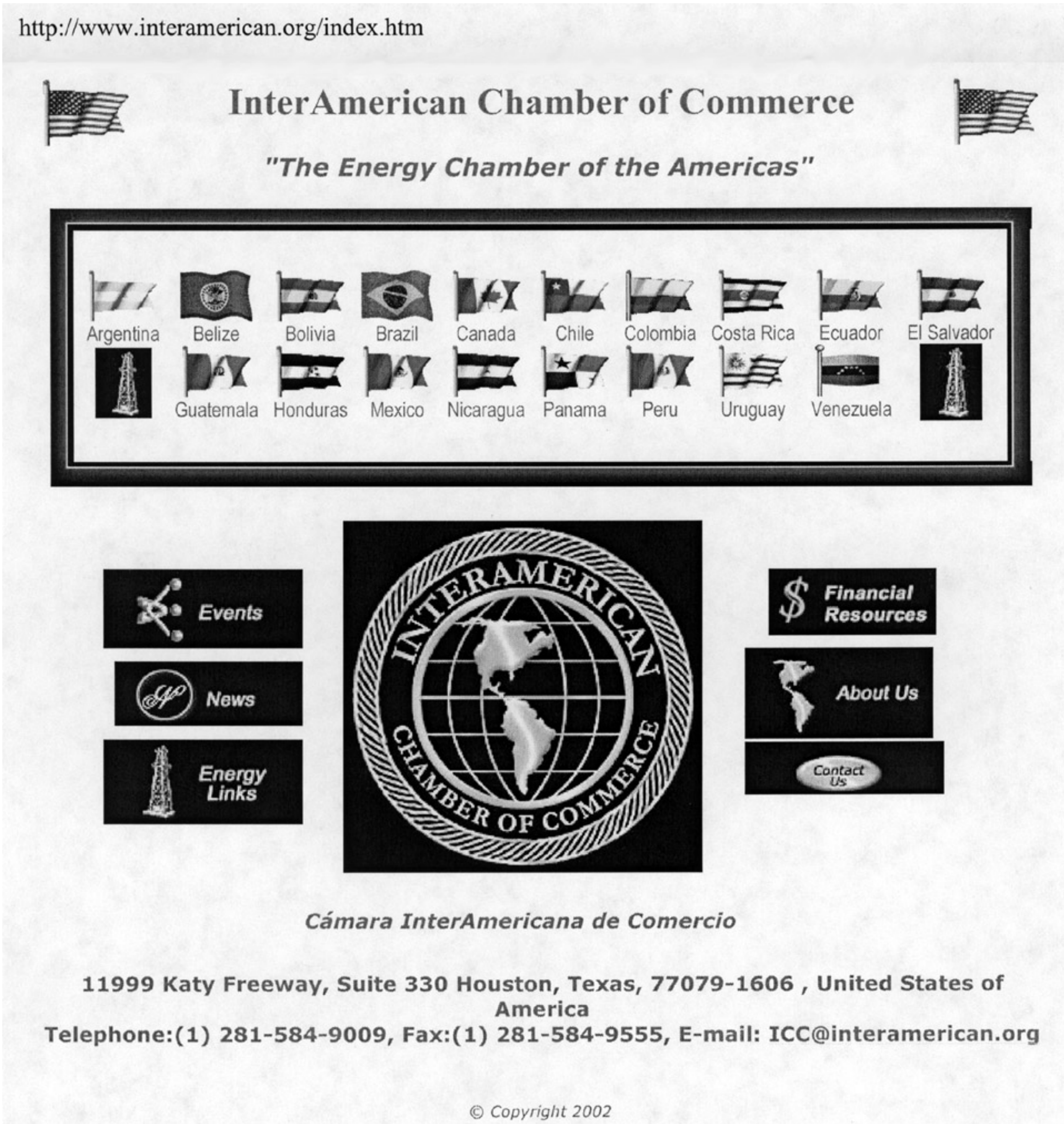
Telefonicas Publica y Privada

GMP arranged debt financing equal to $4.5 million for Telefonica Publica y Privada, a telecommunications company located in Argentina. The money was used to construct a series of phone centers throughout Argentina and GMP arranged the financing through the U.S. Export-Import Bank and a commercial bank.

For further information, contact:
Mr. Adolfo Menéndez, Chairman and CEO or Mr. Kirit Parikh, President
Global Management partners, LLC
1700 Rockville Pike, Suite 535, Rockville, Maryland 20852, USA (301) 881 3242
email: GMPLLC@attglobal.net

InterAmerican Chamber of Commerce

InterAmerican Chamber of Commerce



Cámara InterAmericana de Comercio

About Us

InterAmerican Chamber of Commerce

"The Energy Chamber of the Americas"

Events

News

Energy Links

Financial Resources

About Us

Contact Us

Home

Business Mission

To facilitate economic development and energy integration in the Western Hemisphere:

- Over 20 years' expertise - Founded in 1978, Houston, Texas, United States of America
- A unique Americas' organization located in the heart of the U.S. energy capital
- A membership organization representing companies in the Western Hemisphere
- An independent, non-profit trade organization - Internal Revenue Tax Status: 501 (c) 6

A U.S. Conference Organizer

- A forum for Latin American countries to present International Bidding Rounds
- Internationally recognized U.S. Conference Organizer for Latin America's energy sector
- ICC has organized conferences for U.S. Government sectors (U.S. Department of Energy - U.S. Trade and Development Agency - U.S. Department of Commerce

Distinguished Guest Speakers

- **Past speakers' list includes distinguished leadership from Latin America:**

  Country Presidents and Vice Presidents
  Ministers: Energy - Finance - Commerce - Industry
  Ambassadors
  Oil and Gas state-owned companies - Presidents and key executives

- **ICC has enjoyed participation and collaboration with:**

  Foreign Governments (Latin America)
  U.S. Trade and Development Agency (TDA)
  U. S. Department of Energy (DOE)
  Inter-American Development Bank (IDB)
  Overseas Private Investment Corporation (OPIC)

Contact List

Marsha Hurtado
U.S Trade and Development Agency
1621 North Kent Street
Suite 200
Arlington, VA 22209-2131
Phone: (703) 875-4357
FAX: (703) 875-4009
E-mail: mhurtado@tda.gov

Gabriella Rigg
U.S Trade and Development Agency
1621 North Kent Street
Suite 200
Arlington, VA 22209-2131
Phone: (703) 875-4357
FAX: (703) 875-4009
E-mail: grigg@tda.gov

Julio Carbó
Commercial Specialist
U.S. Commercial Service - Bogotá, Colombia
Unit 5120, APO AA 34038
Phone: (571) 315-2126 / 315-2298
FAX: (571) 315-2171
E-mail: Julio.Carbo@mail.doc.gov

John Rezaiyan
Princeton Energy Resources International, LLC
1700 Rockville Pike, Suite 550
Rockville. MD 20852
Phone: (301) 468-8430
FAX: (301) 230-1232
E-mail: jrezaiyan@perihq.com

Albert W. Angulo
Regional Director, Latin America
and the Caribbean
U.S. Trade and Development Agency
1621 North Kent Street
Suite 200
Arlington, VA 22209-2131
Phone: (703) 875-4357
FAX: (703) 875-4009
E-mail: aangulo@tda.gov

Evaluation Form

EVALUATION FORM

U.S. Trade and Development Agency
Orientation Visit: Colombia Refinery Sector Business Briefing – Houston, Texas
June 25, 2002

Company Name:

Contact Name:

Telephone Number:

Address:

E-mail:

1. *Did you find the U.S. TDA sponsored Colombia Refinery Sector Business Briefing helpful and useful?*

2. *Are you planning any follow-up discussions or contacts with the Colombian officials after the business briefing?*

3. *Do you think that any future business will develop between your company and the foreign participants that can be attributed in some degree to this U.S. TDA-sponsored activity? Are you currently working on any specific commercial opportunities that were assisted by the activity?*

4. *Did U.S. TDA activity provide any new information on commercial opportunities that you were previously unaware of? Please explain.*

6. *Did you develop any contacts as a result of this Business Briefing that may bring your company future commercial benefits? Or did you significantly enhance an existing relationship?*

U.S. Industry Participant List (Preliminary)

Last Name	First Name	Title	Organization	Phone Number
Alatorre	Carlos	International Sales	Tioga Pipe Supply Co., Inc.	(713) 433-2111
Arnold	Gwynne	Conference Registration Manager	InterAmerican Chamber of Commerce	(281) 584-9009
Beeston	Steve	Latin America Sales Manager	UOP LLC	(847) 375-7549
Bettes	Terry	Sales Manager	Kodiak Industries, Inc.	(713) 991-3283
Castells	Javier	Account Manager	UOP LLC	(847) 391-1345
Cathriner	William	President	Continental Corporation	(713) 355-4900
Correa	Gustavo	Director of Marketing	KBC Advanced Technologies	(281) 293-8200
Cosso	Sergio	Director, Latin America Sales	Dresser-Rand	(713) 973-5366
Diez	Dario	Director	Fluequitec Ltda	(571) 298-7189
Dorman	Fan	President & CEO	InterAmerican Chamber of Commerce	(281) 584-9009
González	Eduardo	Business Analyst	Gaffney Cline & Associates	(713) 850-9955
Gutierrez	Raul	Director, Latin America Sales	Black & Veatch	(913) 458-7267
Johnson	Patrick Wm.	President	Kodiak Industries, Inc.	(713) 991-3283
Johnston	Elmer	Secretary & General Counsel	Global Energy Development PLC	(281) 504-6408
Leiss	Benigna	Director, Business Development, L.Am.	ChevronTexaco	(713) 752-6655
Llovet	Juan	Vice President	Parsons E & C	(713) 407-5053

Last Name	First Name	Title	Organization	Phone Number
Maeda	Takeshi	Project Development Manager, Onshore	KBRD, LLC	(713) 753-3551
Martinez	Jaime	International Project Director	ONYX Engineering, Inc.	(281) 759-3091
Martinez	Sergio	President	Panamerican Enterprises, Inc.	(956) 546-8297
Mathieu	Rene	Vice President	Foster Wheeler International	(281) 752-3773
Meckel	Charles	International Sales Manager	Stainless Specialties, Inc.	(713) 840-0444
Nilsson	Gunnar	Vice President	ABB Lummus Global	(713) 821-4731
Ortiz	Roberto	Business Development Manager	Stone & Webster, Inc.	(281) 368-4155
Pereira	José	Business Development Manager	SPS Inc.	(281) 920-6540
Pulido	Clara	Technical Sales Manager	Koch-Glitsch, LP	(214) 583-3285
Rabie	Rocio	Logistics Coordinator	Princeton Energy Resources International	(301) 468-8430
Ramos	Pablo	Business Development	FMC Energy Systems	(713) 510-6764
Rezaiyan	A. John	Vice President	Princeton Energy Resources International	(301) 468-8430
Russo	Simon	Senior Consulant	Jacobs Consultancy	(832) 351-7829
Saul	Harry	Manager, Houston Office	Sproule Associates Inc.	(713) 652-5140
Schlesing	Bill	Director, Business Development	Jacobs Consultancy	(832) 351-7812

Last Name	First Name	Title	Organization	Phone Number
Schmulson	Daniel	International Sales	North Shore Supply Co.	(713) 453-3533
Serrano	Roberto	Associate	KBC Advanced Technologies	(281) 293-8200
Silva	Roberto	Business Manager	BOC Gases	(908) 771-1756
Urbaez	Fernando	International Sales Director	Cooper Energy Services	(713) 354-1242
Vila	Daniel	Sales Manager	ENRAF	(832) 467-3422
Vittor	Jose Luis	Partner	Bracewell & Patterson LLP	(713) 221-1167
Wallendorf	William	Senior Manager	Stone & Webster, Inc.	(281) 368-3100
Wasp	Timothy	Vice President, Technology Sales	Kellogg Brown & Root	(713) 753-2138
West	Greg	Manager, International Marketing	GE Aero Energy Products	(713) 803-0939

Other Participants

Last Name	First Name	Title	Organization	Phone Number
Angulo	Albert W.	Regional Director, Latin America & The Caribbean	U.S. Trade and Development Agency	(703) 875-4357
Carbo	Julio	Commercial Service Officer	U.S. Department of Commerce (Bogota)	(571) 315-2126
Gutierrez	Otto	Consul General	Government of Colombia	713-789-8919
Rodriguez Andrade	Mauricio	General Manager	Androma Ltda (Bogota)	(571) 624-2418

Annex 1

Cartagena Refinery Master Plan

Annex 2

Sebastopol Refinery

Sebastopol Refinery

First Grass Roots Privately Owned Refinery in Latin America
Exclusive Provider of Premium Gasoline to the Colombian Market

Company:	Refineria Sebastopol Y Cia LTDA.
Business:	Refinery – 30,000 bpd high conversion facility of modular design utilizing “of-the-shelf” proven technology
Market place:	Colombia – Provide Wholesalers (Mobil, Esso, Texaco, Terpel, Shell and Ecopetrol) with Premium Gasoline and Diesel. Provide Ecopetrol with Ron 94 gasoline as a blend stock. Supply 25% of the LPG Market. Supply 60 MW of electric power through the Co-generation plant.
Production:	Premium Gasoline RON 94 - 22,000 bpd, LPG - 6,000 bpd, Diesel – 3900 bpd, Fuel Oil – 800 bpd and 75 MW.
Uniqueness:	First and Only Resolution issued by the Ministry of Mines and Energy to build, own and operate a private refinery. First and Only Resolution issued by the Ministry of Environment to operate a private refinery. 12 year crude supply contract with the Ecopetrol. 12 year off-take contract with Ecopetrol for 100% of the premium gasoline production. The Shaw Group Inc. will perform an EPC TURNKEY contract for the construction of the refinery providing a 100% completion guarantee for the project, which will be fully backstopped by a bond from Liberty Mutual Group. The Company is also in the process of engaging UOP for the Operation and Maintenance of the Refinery. Strategically located in the mid-Magdalena river valley, Medellin Region, northwest of Santafé de Bogota, within three miles of Colombia’s main crude pipeline. The OCENSA Pipeline, through which Cusiana/Cupiagua crude is exported; and importantly, adjacent to Ecopetrol’s Sebastopol products tank farm, Colombia’s principal hub for refined product distribution.
Financing:	The total project costs will be approximately US$380 million. A US Ex-Im Bank supported project financing for a substantial portion of the debt capital is expected ($225 million) and the balance through other MLB (OPIC, CAF, etc.). Equity portion will be sourced from Colombian investors (Pension Funds) - $60 million and industry sponsors and others - $20 million

COLOMBIA REFINERY SECTOR
BUSINESS BRIEFING
June 25, 2002

Executive Summary

Refinería Sebastopol (the "Company"), a Colombian corporation, was organized in 1997 to develop Colombia's fist private sector refinery. The project is designed to partially meet the Country's current and growing demand for refined products – Colombia currently imports in excess of 30,000 barrels per day ("bdp") of refined petroleum products, principally premium gasoline and LPG. The Refinery is a 30,000 bpd high conversion facility of modular design utilizing "of-the-shelf", proven technology. It will be strategically located in the mid-Magdalena river valley, Medellín Region, northwest of Santafé de Bogotá, within three miles of Colombia's main crude pipeline. The OCENSA Pipeline, through which the Cusiana/Cupiagua crudes are exported; and, importantly, adjacent to Ecopetrol's Sebastopol product tank farm, Colombia's principal hub for refined product distribution. Ecopetrol is the Stated-owned integrated oil and gas, petrochemical, and pipeline company.

The Refinery will process Cusiana and Cupiagua crudes. Initially, the plant will produce approximately 67% premium gasoline (RON 94) or 21,000 bpd, approximately 20% LPG or 6,000 bpd, and approximately 13% industrial fuels. Ecopetrol, presently the sole refined product supplier for Colombia, currently imports in excess of 27,000 bpd of premium gasoline and expects to import 12,000 bpd of LPG by 2001. Country demand for premium gasoline, which is also used by Ecopetrol as a blend stock for the production of its regular gasoline, is expected to grow 3-5%. LPG is the Country's principal fuel for cooking and heating and its demand is expected to remain stable for the foreseeable future notwithstanding the nascent urban natural gas distribution network as more of the rural population is weaned from burning wood in favor of LPG for heating and cooking.

The Company has negotiating a 12-year off-take contract (pending signing of contracts) with Ecopetrol for 100% of the premium gasoline production which will be sold FOB at the Refinery gate and delivered into the Ecopetrol tank farm nearby. The contract also provides for the Company, at its option, to reduce volumes sold to Ecopetrol should alternative markets become available. LPG will be sold through one or more local distribution companies also via a long-term contract with credit enhancements as necessary. LPG will be delivered into the LPG product pipeline which runs through the project property or through the thank rack at the Refinery.

Crude supply will also be supported by a long-term contract. Ecopetrol will supply 30,000 bpd of Cusiana/Cupiagua or equivalent crude to the Refinery 12 years. The Cusiana/Cupiagua fields contain over 2 billion barrels of recoverable reserves with a reserve life of more than 18 years.

The location of the Refinery results in significant advantages from a products pricing and operations perspective. As the Company will be competing with relatively expensive imported products, it will benefit the transportation differential for importing refined products from the U.S. Gulf Coast, Caribbean, or South America – such differential includes shipping, pipeline transmission and all attendant costs and charges. Additionally, as the Refinery is located near crude and products pipelines, and Ecopetrol's products storage facilities, the cash cycle will greatly be reduced when compared with typical refining companies which must bear the costs and risks of longer cash cycles as a result of ordering a variety of crude months in advance; and the need to store supplies of crude oil and products. Conversely, the Company will by and large refine daily volumes of crude oil as it is shipped to the plant, and sell product as it is produced daily thereby shortening the cash cycle to just a few days.

The Company has engaged the Shaw Group out of Baton Rouge, LA. as its principal EPC contractor for the project. In their capacity Shaw will perform or oversee all engineering, fabrication and construction. Additionally, Shaw will provide a 100% completion guarantee for the project that will be fully backstopped by a bond from the Liberty Mutual Group – this undertaking guarantees, among other things, that capital costs will not exceed $300 million and construction will be completed within 36 months. The Company has signed an LOI with UOP, LLC, for operations and maintenance of the Refinery. Additionally, the company has signed an agreement with the engineering firm GROUP ICONSA of Mexico to become the co-sponsor and a commitment to invest US $15,000,000 dollars.

Of the total capital costs for the project, more than US$235 million will be derived from U.S. sources. Financing will be sourced from Colombian investors for a portion of the equity, mainly Colombian Pension Funds, of which the company has already received LOI's from three of the largest Pension Funds. The company is structuring a zero coupon bond for US $65,000,000 million dollars at 12 years which will be subordinate to the senior debt. The remainder of debt and equity capital will be arranged in the international financial markets. A U.S. EXIM Bank-supported project financing for a substantial portion of the debt capital is expected. Total project costs will be approximately US$380 million (US $300 million – Debt, US $80 million – Equity, which includes into capital costs, interest during construction, closing costs, and initial working capital.

All governmental licenses and permits, including environmental approvals, for the project have been obtained.