June 2004

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Venezuela

Venezuela is important to world energy markets because it holds proven oil reserves of about 78 billion barrels, excluding billions of barrels of extra-heavy oil and bitumen. Venezuela consistently ranks as one the top suppliers of U.S. oil imports and is among the top ten crude oil producers in the world.

Note: information contained in this report is the best available as of June 2004 and can change.

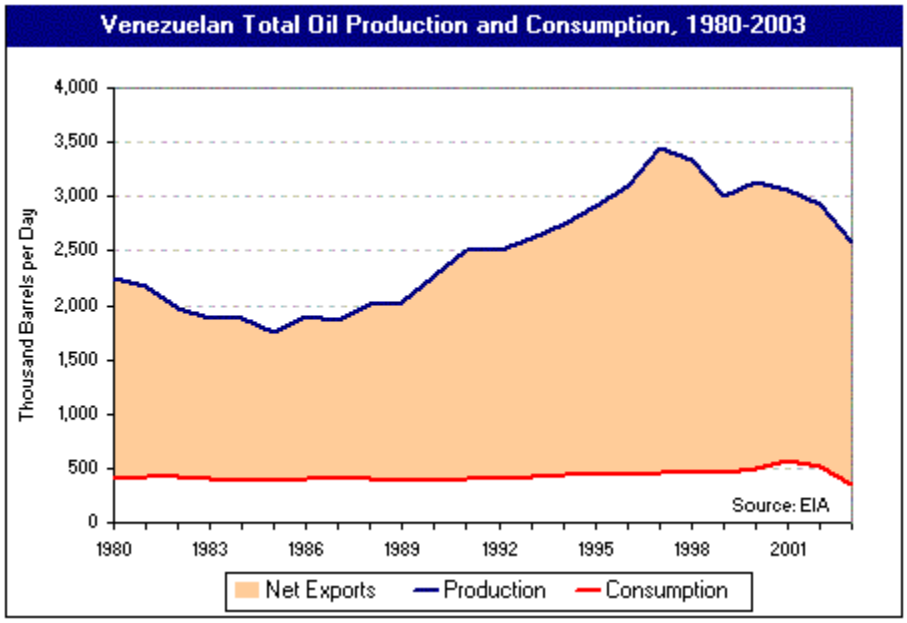
GENERAL BACKGROUND

After a period of modest economic growth in 2000 and 2001, the Venezuelan economy entered into recession in 2002. Political conflict, particularly a nationwide strike beginning early in December 2002, further compounded the deteriorating situation of the country's economy. On December 2, 2002, opponents of President Chávez organized a nationwide strike to call for an early referendum on the President's rule. Employees from Venezuela's state-owned oil company Petróleos de Venezuela S.A. (PdVSA) also joined the strike, shutting down a large portion of the country's oil industry and drastically reducing the production of Venezuelan oil and its delivery to internal and external markets. President Chávez declared the strikers' demands unconstitutional and dismissed nearly half of PdVSA's work force. In 2003, the strike, along with the implementation of currency controls, severely impacted Venezuela's economy, with real gross domestic product (GDP) contracting 29% in the first quarter, and 9.2% for the entire year after already contracting 8.9% the previous year.

The petroleum industry is the mainstay for Venezuela's economy, accounting for more than three-quarters of total Venezuelan export revenues, about half of total government revenues, and about one-third of GDP. Although the Venezuelan government insists that crude oil production (including synfuels) currently is over 3 million barrels per day (bbl/d), close to pre-strike output levels, former PdVSA employees and independent analysts maintain that crude oil production is around 2.5-2.6 million bbl/d. In 2004, the economy is forecast to expand 5%, after the Venezuelan economy suffered two years of recession.

Venezuela's opposition movement continues to push for a constitutional referendum on Chávez's presidency. The country's constitution allows Venezuelans to petition for a referendum (recall vote) on whether a president should step down after the midpoint of the president's six-year term. On June 2, 2004, Venezuela's National Electoral Council (CNE) announced that that the opposition had collected enough signatures to trigger a recall vote. Under the Venezuelan constitution, if President Chávez is recalled before August 19, 2004, new elections will be held within 30 days. If the referendum, however, is held after August 19, 2004 and Chávez loses, his vice president will take over until elections are held again in December 2006.

OIL



Venezuela is home to the Western Hemisphere's largest conventional proven oil reserves, at 77.8 billion barrels, as of January 2004, according to the *Oil and Gas Journal* (substantial extra-heavy oil and bitumen deposits are not included in this total). Venezuela has four major sedimentary basins: Maracaibo; Falcon; Apure; and Oriental. The crude oil held in these fields has an average API gravity of less than 20 degrees, making Venezuela's conventional crude oil heavy by international standards. Due to the maturity of many of these basins and their declining productivity, PdVSA reportedly plans to spend $26 billion during the 2004-2009 timeframe to increase production at the country's existing oil wells, as well as to develop new non-conventional extra heavy crude oil and natural gas resources.

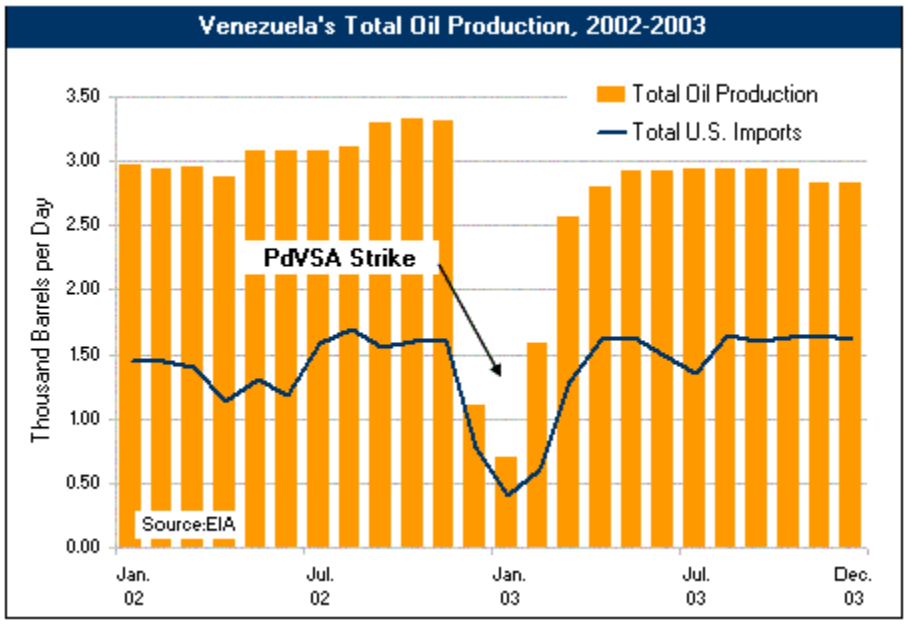
In 2003, Venezuela's total oil production was an estimated 2.6 million barrels per day (bbl/d), a 10% decrease year-on-year, while consuming between 350,000-400,000 bbl/d. Venezuela's net oil exports were approximately 2.25 million bbl/d, of which 1.39 million bbl/d were shipped directly to the United States (Note: this does not count crude oil sent to the Caribbean, refined there, and then re-exported to the United States) (More detail on crude oil and petroleum exports below).

The Strike and Resumption of Operations

After a strike that resulted in a near complete shutdown of PdVSA's operations in late 2002 and the early months of 2003 and in a loss of nearly half its employees, current oil production levels in Venezuela are a bit uncertain. While PdVSA insists that oil production has recovered to pre-strike levels, outside observers, as well as former PdVSA employees, claim that production remains considerably lower. The strike, which began on December 2, 2002, significantly affected PdVSA operations, causing total oil production in Venezuela to drop from 3.3 million bbl/d in November 2002 to about 700,000 bbl/d in January 2003 (see table below)

Since then, there has been substantive progress in restoring production, refining operations and exports, although there remains disagreement regarding the degree to which this has occurred. Some analysts have pointed out that the government's hurried restoration of PdVSA's production may

have caused reservoir damage, potentially accelerating the rate of decline in PdVSA-operated fields in coming years. Much of this increased output reportedly came from shut-in spare capacity located in eastern Venezuela, as well as the resumption of production from fields operated by third parties. On the other hand, the loss of 18,000 employees who were fired for joining the anti-government strike could make it difficult for the company to counter normal oil production capacity depletion rates for Venezuela of an estimated 25% per year.



More critical to restoration of Venezuela's oil sector is the country's ability to attract foreign investment in order to compensate for a lack of domestic investment. Whether foreign companies invest in Venezuela's oil sector hinges partly on the country's political situation. In April 2004, the U.S. government's Overseas Private Investment Corporation (OPIC), a political risk insurance agency, indicated that it was unlikely to back new ventures in Venezuela. OPIC reportedly based its decision on PdVSA's decision to dissolve Intesa, a joint venture with U.S.-based Science Applications International Corporation (SAIC), after the Venezuelan government accused Intesa employees of helping to sabotage PdVSA computer systems during the strike.

International oil companies may be furthered discouraged from investment because of Venezuela's 2001 Hydrocarbons Law, which came into effect in January 2002. This law replaced the Hydrocarbons Law of 1943 and the Nationalization Law of 1975. The new Hydrocarbons Law raised royalties paid by private companies to 20%-30% from the previous 1%-16.66% and guaranteed PdVSA at least a 51% stake in any project regarding exploration, production, transportation and initial storage of oil.

In sum, the current status of PdVSA and Venezuela's oil industry remains unclear. According to many observers, it will most likely take PdVSA some time to restore fully its production activities on account of damage to reservoirs and equipment, lack of funds for sufficient investment, and the hiring of less experienced and qualified staff. On a positive note, joint-ventures operations, namely increased production from the Hamaca heavy crude operation and Corocoro, are expected to come onstream in 2004 and 2006, respectively, and could offset potential declines from PdVSA-operated fields.

Social Commitment

Since taking office in 1998, the Chávez administration has reportedly realigned PdVSA's mission, having the company provide more direct financial support to the bulk of Venezuelan society. According to PdVSA's 2004 budget, a total of $1.7 billion of the company's $15 billion budget has been dedicated to fund social programs. Many analysts have predicted that these social outlays could compromise the country's oil production, as Venezuela's oil sector reportedly has been

suffering from under-investment. Moreover, these attempts to realign PdVSA have not been without opposition or consequences. Since taking office in 1998, Chávez has appointed five different directors of PdVSA. In April 2002, after attempting to place political allies in top PdVSA positions, a coup briefly forced him out of the office.

Restructuring

In January 2003, the Venezuelan government decided to restructure PdVSA, splitting the company into two regional operating units: one responsible for all activities in the eastern Venezuela; and the other for activities in the western part of the country. The goal of the reorganization, according to PdVSA, was to decentralize the company, making it more efficient. In March 2004, Venezuela's Ministry of Energy and Mines (MEM) announced that the restructuring of PdVSA along geographical lines had only been a temporary measure to deal with the strike. According to MEM, PdVSA's activities will now be divided into departments, such as commerce and supply, research and development, natural gas development and exploration and production, with each carrying out operations in the East regions of the country.

In August 2003, Venezuela's Ministry of Energy and Mines transferred PdVSA's 33 operating contracts, the four Orinoco Belt strategic associations, and the risk exploration contracts to subsidiary Corporacion Venezolana de Petroleo (CVP). The move intends to allow PdVSA to concentrate on production from its own fields while CVP will administer the agreements. CVP reportedly will be in charge of renegotiating private sector participation in Venezuela in line with the 2001 Hydrocarbons Law.

Venezuela and OPEC

Venezuela, a founding member of the Organization of Petroleum Exporting Countries (OPEC), regularly exceeded its OPEC-agreed oil production targets prior to President Chávez's December 1998 election. Since his election, Chávez has maintained a policy of strict adherence to OPEC quotas. This has required PdVSA to shut in production, cut production at existing fields, and reduce investment and total production capacity. According to current estimates, however, Venezuela has been producing less than its current OPEC production quota of 2.704 million bbl/d (effective 4/1/04). It remains unclear whether Venezuela will be able to reach its new OPEC quota of 2.934 million bbl/d (effective 7/1/2004), which the country was alloted on June 1, 2004.

Sector Organization

Petróleos de Venezuela (PdVSA)

Venezuela nationalized its oil industry in 1975-1976, creating PdVSA, the country's state-run oil and natural gas company. Along with being Venezuela's largest employer, PdVSA accounts for about one-third of the country's GDP, 50% of the government's revenue and 80% of Venezuela's exports earnings. In recent years, under the influence of President Chávez, PdVSA's previous autonomy has been reduced and the rules regulating the country's hydrocarbons sector amended. The privatization of PdVSA is banned under Venezuela's 1999 constitution.

According to a statement made in May 2004, PdVSA plans to invest $26 billion in oil and natural gas exploration and production between 2004-2009, with oil production reaching 5 million bbl/d by 2009. The state-owned oil company expects new production coming on from the Tacata, Chaguaramal, El Furrial and Tomoporo fields. Along with new production, PdVSA expects to increase or prolong production from reservoirs under development and mature fields through water and natural gas injections, as well as average 111 rigs annually in operation. As of early June 2004, PdVSA already had drilled four wells at the Tomoporo field located in Lake Maracaibo. The field, with estimated recoverable reserves of 1 billion barrels, is projected to eventually produce 250,000 bbl/d. Nonetheless, private contractors, particularly oil service companies, operating on the ground

in Venezuela reportedly have yet to see significant signs of increased investment by PdVSA in 2004.

Private Sector Investment

In the 1990s, Venezuela's upstream oil and natural gas was opened (Apertura de Petróleo y Gas) to private sector investment. In three bidding rounds (1992, 1993, and 1997), PdVSA concluded 33 operating service agreements with private companies, such as Chevron (now ChevronTexaco), BP, Respol-YPF, Total, Perez Companc (now Petrobras Energía), Shell, China National Petroleum Corporation, and Teikoku Oil. Under these contracts, companies operate fields for a fee.

PdVSA also holds three risk/project sharing agreements and four strategic associations for heavy crude extraction. Under a risk/profit sharing contract, private companies assume the initial costs for exploration. If oil or natural gas is found in commercial volumes, PdVSA retains the option of participating in the joint venture and may assume up to 35% of equity in the project. ConocoPhillips, for example, was awarded a risk/profit sharing agreement to explore the Gulf of Paria West block in 1996. In 1999, ConocoPhillips initially discovered oil and natural gas in the block, which was declared commercial in October 2002. Since then, CVP, a subsidiary of PdVSA, has exercised its 35% buy-in-right in the field, known as Corocoro. In April 2003, PdVSA approved the $480 million first development stage of Corocoro, which is projected to produce 55,000 bbl/d by 2006. Other partners include Eni (26%) and Taiwan's OPIC Karimun Corporation (6.5%). Corocoro holds 450 million barrels of recoverable oil. ConocoPhillips is currently exploring an adjacent block, Gulf of Paria East, in which the company holds a 37.5% operating interest. Other partners include Eni (30%), IneParia (25%) (a subsidiary of Venezuelan-based Inelectra), and OPIC Karimun (7.5%). Two exploration wells are planned for 2004 to assess additional opportunities in Gulf of Paria East.

New Investment

Petrobras Energía and Anadarko Petroleum Corporation plan to drill 15 development wells and work over 50 existing wells in Venezuela's Oritupano-Leona field in eastern Venezuela. Petrobras, the operator of the field with 54% interest, was awarded a 20-year exploration and production service contract for Oritupano-Leona in 1994. Anadarko holds 45% of the fields while Venezuelan company Corepli holds the remaining 1%. Petrobras' other service contracts in Venezuela include La Concepción Block (90%) near lake Maracaibo, the Maca and Acema Blocks (86.23%) in the East. In December 2003, Petrobras received a $105 million loan from the International Finance Corporation (IFC) to help develop the aforementioned fields.

In November 2003, Benton-Vinccler, a subsidiary of U.S.-based Harvest Natural Resources, signed an agreement with PdVSA to determine how much oil and natural gas is recoverable from the Temblador and El Salto fields in South Monagas state. In the second quarter of 2004, the company expects to commence a 10-well drilling program at its Uracoa field, which is part of its 20-year operating service agreement with PdVSA.

Extra Heavy Crude Oil (Strategic Associations)

Venezuela contains billions of barrels in extra-heavy crude oil and bitumen deposits, most of which are situated in the Orinoco Belt, located in Central Venezuela (estimates range from 100 to 270 billion barrels of recoverable reserves). There are four congressionally approved joint ventures between PdVSA and foreign partners to develop extra-heavy crude oil, known as strategic associations.

Strategic Associations				
	Petrozuata	Cerro Negro	Sincor	Hamaca
Partners	PdVSA 49.9% ConocoPhillips 50.1%	PdVSA 41.67% ExxonMobil 41.67% BP 16.66%	PdVSA 38% Total 47% Statoil 15%	PdVSA 30% ConocoPhillips 40% ChevronTexaco 30%
Extra-Heavy Oil Production Capacity	120,000 bbl/d 9.3° API	120,000 bbl/d 8.5° API	200,000 bbl/d 8-8.5° API	200,000 bbl/d 8.7° API
Synthetic Crude Production Capacity	104,000 bbl/d 19-25° API	105,000 bbl/d 16° API	180,000 bbl/d 32° API	170,000 bbl/d 26° API
Initial Production	October 1998	November 1999	December 2000	October 2001

The four projects convert the extra heavy crude from approximately 9° API crude to lighter, sweeter synthetic crude, known as syncrude, at the Jose refinery complex on Venezuela's northern coast. In 2003, these projects were producing about 500,000 bbl/d of synthetic crude oil (this is expected to increase to 600,000 bbl/d by 2005). Syncrude is considered by the International Energy Agency (IEA) a "non-conventional crude oil." The upgrading process also produces byproducts, such as coke and sulfur.

Developments

Total has announced that it would like to construct a second Sincor synthetic crude oil project in Venezuela by 2010, pending governmental approval. The Sincor group plans to shut in production on October 1, 2004 for 48 days starting in order to conduct maintenance. The overhaul will increase the syncrude capacity of the Sincor upgrader by 14,000 bbl/d. The Hamaca strategic association, also known as Ameriven, plans to complete its upgrading facility at the Jose complex in the third quarter of 2004. Once completed, the new upgrader will allow Ameriven to produce 180,000 bbl/d of 25.9º API. Currently, Venezuela's Ministry of Energy and Mines is working on a new licensing round to offer up new blocks for exploration and production in the Orinoco Belt. Any new heavy-crude projects would fall under the 2001 Hydrocarbons Law, which requires PdVSA to have a controlling 51% stake in oil projects

Orimulsion

Orimulsion® is a branded product that is used as a boiler fuel. It is a mixture of approximately 70% natural bitumen, 30% water, and less than 1% surfactants (emulsifiers). Bitumen is considered a non-oil hydrocarbon and is not counted towards Venezuela's OPEC crude oil production quota. Bitor (Bitumenes del Orinoco), a subsidiary of PdVSA, manages the processing, shipping and marketing of Orimulsion. Bitor operates one Orimulsion plant in Cerro Negro, with a capacity of 5.2 million metric tons per year. According to Bitor, economically recoverable reserves are estimated at about 267 billion barrels.

The future of Orimulsion production, however, is unclear. In September 2003, PdVSA announced that it was dissolving Bitor into PdVSA's eastern operating division and not expanding production of Orimulsion. The reason behind PdVSA's decision was reportedly based on economics, namely, the company decided that it could make larger profits by selling fuel oil than Orimulsion. PdVSA also announced that it intended to fulfill long-term contracts which Bitor had with utilities in Canada, Denmark, Japan, Italy and Japan but would not sign any more Orimulsion contracts or respect contracts under negotiation. PdVSA's shift in policy has not been without controversy, notably a botched deal with New Brunswick Power in Canada. NB Power thought it had a deal with PdVSA to supply Orimulsion to its Coleson Cove power plant, which had been reconfigured to burn the low-cost fuel, but PdVSA officials said they never signed the fuel-supply contract with NB

Power.

Sinovensa

In December 2001, China National Petroleum Corporation (40%) (CNPC), PetroChina Fuel Oil Company, a subsidiary of CNPC (30%), and PdVSA, through Bitor, (30%) created Orifuels Sinoven, S.A. (Sinovensa). The partners invested $330 million to develop blocks to produce 6.5 million metric tons annually of Orimulsion by the end of 2004. Construction of Sinovensa project reportedly began in April 2004, with Inelectra as its general contractor. On November 26, 2003, CNPC began constructing China's first Orimulsion-fired power plant located in Zhanjiang city in southern China's Guandong province.

Refining

In the Western Hemisphere, PdVSA operates one of largest refining systems, as well as the largest refinery, the 940,000-bbl/d Paraguana refining complex. Domestic refinery capacity stands at 1.28 million bbl/d. PdVSA's overall crude oil refinery capacity is over 3 million bbl/d when its operations in the Caribbean, the United States and Europe are included. About one-third of Venezuela's refined product exports, such as reformulated gasoline, are sold to the United States, where they are distributed mainly by Tulsa-based CITGO, PdVSA's wholly-owned U.S. refining and marketing subsidiary, and one of the largest U.S. gasoline retailers (In April 2004, CITGO announced that it will be moving its corporate headquarters from Tulsa to Houston). Recently, PdVSA has been looking for partners to increase the company's ability to refine Venezuela's heavy and extra heavy crude in order to increase production in coming years. PdVSA reportedly has been in negotiations with Brazil's Petrobras to construct a 150,000-200,000 bbl/d refinery in Brazil's northeastern state of Pernambuco or Ceara.

International Presence (U.S.)

As of December 2003, CITGO's aggregate net interest in crude oil refining capacity in the U.S. was 865,000 bbl/d (see table below). Through its Lake Charles, Corpus Christi and Lemont refineries, CITGO mainly produces light fuels and petrochemicals, while Paulsboro and Savannah are asphalt refining operations. CITGO purchases refined products from its joint venture refinery in Houston. PdVSA supplies CITGO with most of its crude oil through long-term supply contracts. In 2003, for example, PdVSA supplied Lake Charles, Corpus Christi, Paulsboro, and Savannah with a combined 298,000 bbl/d. The heavy crude oil processed by the Houston refinery is supplied by PDVSA under a long-term crude oil supply agreement through the year 2017, while the Lemont refinery purchased about 3,000 bbl/d in 2003 from PdVSA, with Canadian imports supplying the remainder.

CITGO Refining Capacity 2003

	Owner	CITGO Interest %	Total Rated Crude Refining Capacity (Mbbl/d)	Net CITGO Ownership in Refining Capacity (Mbbl/d)
Lake Charles, LA	CITGO	100	320	320
Corpus Christi, TX	CITGO	100	157	157
Lemont, IL	CITGO	100	167	167
Paulsboro, NJ	CITGO	100	84	84
Savannah, GA	CITGO	100	28	28
Houston, TX	Lyondell-CITGO	41	265	109
		Totals	**1,021**	**865**

Source: CITGO

In March 2004, Citgo announced that it plans to increase the crude processing capacity at the Lake Charles refinery to 450,000 bbl/d from the current 320,000 bbl/d, as part of the company's Tier II program. The expansion will include upgrades which will allow the refinery to process heavier

crude streams from Venezuela.

Caribbean

In October 1998, PDVSA acquired a 50% equity interest in Hovensa refinery located in St. Croix, U.S. Virgin Islands. Amerada Hess holds the other 50% equity interest in the refinery. Most of the products refined at the 495,000-bbl/d refinery are exported to the U.S. The Hovensa joint venture plans to invest $400-$450 million in a clean fuels program from 2004-2006. The investment is to meet clean fuel regulations in the U.S. PdVSA also owns and operates the 320,000-bbl/d Isla Refinery on the island of Curaçao located in the Netherlands Antilles.

Europe

PdVSA currently has two main refining joint ventures in Europe: AB Nynäs Petroleum (Sweden) and Ruhr Oel GmBH (Germany). PdVSA, in partnership with Fortum (Finland), has controlled Nynäs since 1995. The partnership gives PdVSA access to five refineries: Nynashamm 28,000 bbl/d (Sweden); Gothenburg 13,000 bbl/d (Sweden); Antwerp 21,000 bbl/d (Belgium); Eastham 22,500 bbl/d (UK); and Dundee 12,000 bbl/d (Scotland). Since December 2003, PdVSA has been in negotiations with BP to offload its 50% stake in Ruhr Oel. BP, through Veba Oel, currently controls the other 50% in Ruhr Oel, and has right of refusal before PdVSA can offer it other buyers. The refinery currently operates four refineries in Germany (Gelsenkirchen, Neustad, Karlsruhe, and Schwedt), with a crude processing capacity of 1 million bbl/d, of which PdVSA controls about 216,000 bbl/d.

Exports

United States

Venezuela's Share of U.S. Gross Petroleum Imports

	1997		2000		2003	
	*bbl/d	Share	bbl/d	Share	bbl/d	Share
Venezuela	**1.773**	**17.4%**	**1.546**	**13.5%**	**1.385**	**11.3%**
Canada	1.563	15.4%	1.807	15.8%	2.068	16.9%
Mexico	1.385	13.6%	1.373	12.0%	1.639	13.4%
Saudi Arabia	1.407	13.8%	1.572	13.7%	1.772	14.5%
US Gross Imports	10.162		11.459		12.254	

* million barrels per day including crude oil and petroleum products
Source: EIA

In recent years, Venezuela has ranked consistently as one of the four top sources of U.S. petroleum imports (along with Canada, Mexico, and Saudi Arabia). Venezuelan crude oil and petroleum products exports to the United States peaked in 1997 at an estimated 1.77 million bbl/d. Since 1997, Venezuela's imports have decreased, with a market share of 11.3% in 2003.

In 2003, approximately 91% of Venezuela's crude oil exports to the U.S. went to PADD III (Petroleum Administration for Defense District – U.S. Gulf Coast), where its wholly-owned subsidiary Citgo operates two large refineries, Lake Charles (Louisiana) and Corpus Christi (Texas), as well as the joint Lyondell-Citgo (Houston, Texas).

Central America and the Caribbean

In addition to being a major supplier to the United States, Venezuela also provides significant quantities of oil to its neighbors. Under the auspices of the San Jose Accord, Venezuela and Mexico provide eleven Central American and Caribbean nations with crude oil and products under preferential terms. The San Jose Accord, originally implemented in 1980 and renewed annually, currently covers the following countries: Barbados, Belize, Costa Rica, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Nicaragua, Panama and the Dominican Republic. Venezuela also supplies Cuba with 53,000 bbl/d of oil on favorable financing terms under an agreement signed between President Hugo Chávez and Cuban President Fidel Castro in 2000. In March 2004,

President Chávez reportedly agreed to increase the amount of oil supplied to Cuba to 78,000 bbl/d. There have also been reports that Cuba is behind an estimated $891 million in payments to Venezuela mostly for shipments of oil.

NATURAL GAS

Venezuela has proven natural gas reserves of 148 trillion cubic feet (Tcf), the second largest in the Western Hemisphere (behind the United States). In 2002, Venezuela produced 1.1 Tcf, all of which was consumed domestically. According to Venezuela's Ministry of Energy and Mines (MEM), in 2002, approximately 34% of the country's natural gas production was consumed by the oil industry, which either reinjects gas into oil fields to maintain reservoir pressure or flares it. About 20% of Venezuela's natural gas was used for power generation; 12% in petrochemical production; and the remainder by industrial or commercial customers in large cities. The Chávez administration has plans to increase both natural gas production and consumption.

Sector Organization: PdVSA and Private Companies

PdVSA has traditionally monopolized Venezuelan natural gas production, allowing for only a few joint ventures. Moreover, in the 1990s, the government of Venezuela and PdVSA had focused their efforts on opening (Apertura) the oil sector in order to attract foreign and domestic investment to boost oil production. In 1999, the government of Venezuela and PdVSA began shifting their emphasis to concentrating on opening and developing the country's natural gas sector, including both upstream and downstream operations. On September 23, 1999, Venezuela adopted the Gas Hydrocarbons Law, allowing foreign investment into virtually all segments of the gas industry, from exploration and production to distribution and gasification plants. GOV particularly wanted to attract investment to develop non-associated gas fields, as nearly 90% of Venezuela's proven natural gas reserves are characterized as associated with oil production. Consequently, Venezuela's natural gas supply availability has depended largely on levels of crude oil production, which, in turn, is linked to oil prices, OPEC quotes and other market conditions. Furthermore, about one-third of the natural gas from associated fields is reinjected. Overall, the Venezuela established the following goals: 1) development of natural gas reserves; 2) expansion of the country's natural gas transmission pipeline infrastructure and establishment of a national distribution network; 3) promotion of LNG export industry and gas-to-liquids projects; and 4) expansion of power and petrochemical plants fed by natural gas.

Tender for Non-Associated Fields

In June 2001, PdVSA natural gas unit, PdVSA Gas, held its first non-associated natural gas exploration and production licensing round for 11 blocks, of which six were awarded. The TRIO consortium (TotalFinaElf, Repsol-YPF, Otepi and Inelectra) was awarded the Yucal Placer Norte and Yucal Placer Sur Blocks. The Blocks contain potentially 2 to 3 Tcf of natural gas, with some infrastructure already in place. Other winners included Repsol-YPF (Barrancas Block); Pluspetrol (Barbacoas and Tiznado Blocks); and Pérez Companc, now Petrobras Energía, (Tinaco Block).

Production from the Yucal Placer Norte and Sur Blocks began in April 2004, with an initial output of 60 million cubic per day (MMcf/d). The consortium expects to increase production to 100 Mmcf/d, eventually reaching 300 Mmcf/d by 2007. Total (operator) has a 69.5% stake in the consortium, together with Repsol-YPF (15%), Inepetrol (Inelectra) (10.3%), and Otepi (5.2%).

In August 2003, Repsol-YPF began exploring and developing the Barrancas Block, which is projected to hold between 2-6 Tcf. The company expects to be supplying a nearby power plant by 2006. Since 2001, Repsol-YPF has also been producing natural gas from Quiriquire field, in western Venezuela, which the company was awarded in 1993 during the second tendering round. Petrobras Energía is still conducting seismic studies on its Tinaco concession but expects to bring it

into production in 2-3 years, along with the San Carlos concession. In October 2002, Pérez Companc (Petrobras Energía) farmed out 50% stakes in the Barbacoas and Tiznado Blocks to Teikuko Oil (Japan). It remains unclear when the two companies will begin production from the Blocks.

Plataforma Deltana

In February 2003, PdVSA awarded ChevronTexaco and Statoil 35-year licenses to appraise and develop two of its five offshore blocks located in the Plataforma Deltana. The blocks, located in waters contiguous with Venezuela's northeastern maritime border with Trinidad, are estimated to contain proven natural gas reserves up to 40 Tcf. ChevronTexaco (60%) (operator), along with partner ConocoPhillips (40%) will develop Block 2 (known as the Loran field). ChevronTexaco also has a 50% interest in Block 6d in Trinidad and Tobago, which is thought to contain a cross-border extension to the Loran field. In March 2004, ChevronTexaco was awarded the adjacent Block 3, known as Lau-Lau. According to ChevronTexaco, if sufficient commercial gas is found in its two blocks, the company plans to build an LNG liquefaction terminal in Venezuela.

Statoil will be the sole licensee of Block 4, known as the Cocuina field, during the exploration phase. The company has committed to drilling three exploration wells at an estimated cost of $60 million in order to identify potential reserves of the area. In both blocks, PdVSA retains the right to acquire a stake in fields if they become commercial. PdVSA has yet to attract interest for Block 5 which has been offered and rejected twice. BP is still in discussion with PdVSA over Block 1 (El Dorado), which the company wants to joint-develop with its Kapok Block, located in the territorial waters of Trinidad and Tobago (T&T). Whether this materializes depends on cross-border unitization negotiations that the government of Venezuela has been holding with T&T. In April 2004, the two countries signed an agreement to define what percentage of cross-border reserves belongs to Venezuela or to T&T. Venezuelan officials have indicated that they would like to develop their own LNG export industry, although T&T has offered to process Venezuelan gas through its LNG facilities.

PdVSA plans to offer seven blocks for exploration and production in July or August 2004. The blocks are located in Gulf of Venezuela and in the northeastern Falcon region. According to PdVSA, the blocks in the Gulf Venezuela and in Falcon could hold an estimated 22 Tcf and 3 Tcf, respectively.

Liquefied Natural Gas (LNG)

In December 2002, PdVSA, Royal Dutch/Shell, and Mitsubishi signed a preliminary joint-venture agreement for Mariscal Sucre Liquefied Natural Gas (LNG) project located on the Paria Peninsula. The 672 Mmcf/d-terminal would be supplied from an estimated 10.4 Tcf of natural gas reserves, off the northern shore of the Paria peninsula in eastern Venezuela. PdVSA, however, has yet to sign final agreement with Shell and Mitsubishi, which hold stakes in the project of 30% and 8%, respectively. PdVSA has indicated that it plans to lower its stake in the project from 60% to 51%, with Qatar Petroleum potentially acquiring a 9% stake. The remaining 2% would be open to individual investors. The start-up date for the Mariscal Sucre LNG plant is set for 2008.

Pipelines

Domestic

In March 2004, PdVSA awarded three contracts for the first stage of the Central-Occidental Interconnection (ICO) pipeline to three local companies, Trimeca, Inpavianca, and Conveca. The first stage consists of a 44-mile pipeline, connecting natural gas fields (Cumerabo and La Velas) in Falcon state, located northeast of Maracaibo Lake, to the Parguana refining complex. The pipeline is expected to have capacity ranging between 40 and 100 Mmcf/d, with operations beginning in

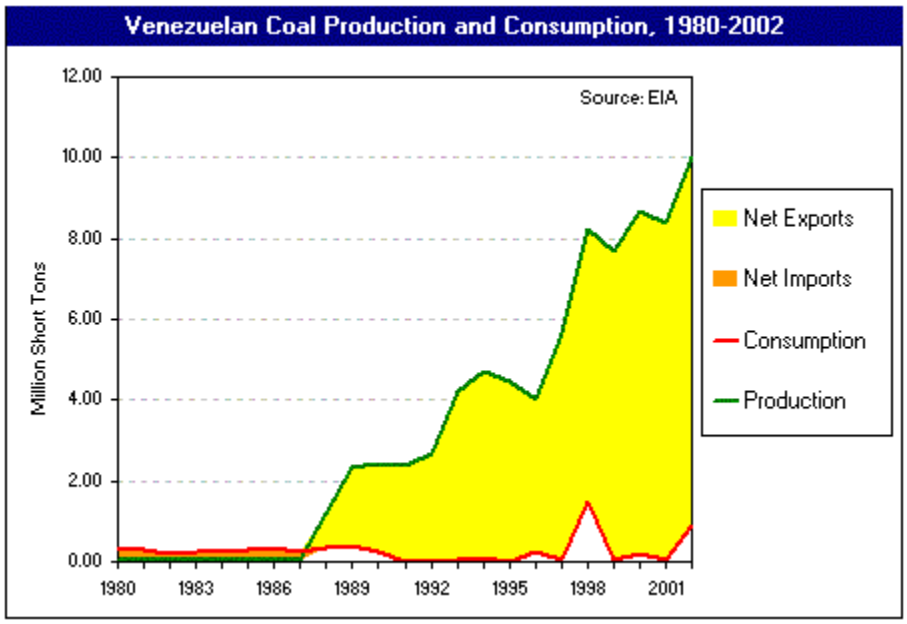
December 2004. The second stage of the project comprises constructing a 144-mile pipeline, connecting Venezuela's western pipeline (Ulé-Amuay), with PdVSA's eastern transport system (Anaco-Barquisimeto). The $403 million project also includes adding three new compressors (known as Altagracia, Los Morros and Móron) on the Anaco-Barquisimeto line in order to increase its transport capacity.

Cross-border

In April 2003, Colombia and Venezuela agreed to build a $120 million pipeline, allowing Colombia to export natural gas from its Guajira basin to the Zulia state, located on the eastern shore of Lake Maracaibo. The 92-mile pipeline, with an expected capacity of 300 Mmcf/d, will help alleviate current natural gas deficits in Western Venezuela, where much of the current natural gas production is reinjected into aging oil gas fields to keep up reservoir pressure. PdVSA would import natural gas until it has further developed its own natural gas reserves in the Maracaibo region, at which point the flow would be reversed, allowing exports to Colombia.

COAL

Venezuela has recoverable coal reserves of approximately 528 million short tons (Mmst), most of which is bituminous. Venezuela is the second largest producer of coal in Latin America, after Colombia. Coal production in 2002 amounted to 10 Mmst, almost all of which was exported to other countries in the region, the eastern United States, and Europe. Domestic coal consumption in 2002 was about 91,000 short tons.



The Guasaré Basin, near the Colombian border, is the major coal producing region in Venezuela. Coal production has been limited during the last several years by infrastructure and transportation constraints. The government announced in April 1999 intentions to increase production of high-quality coal to 21 million tons per year by 2008. Venezuela's coal sector is dominated by Carbozulia, which is owned by PdVSA.

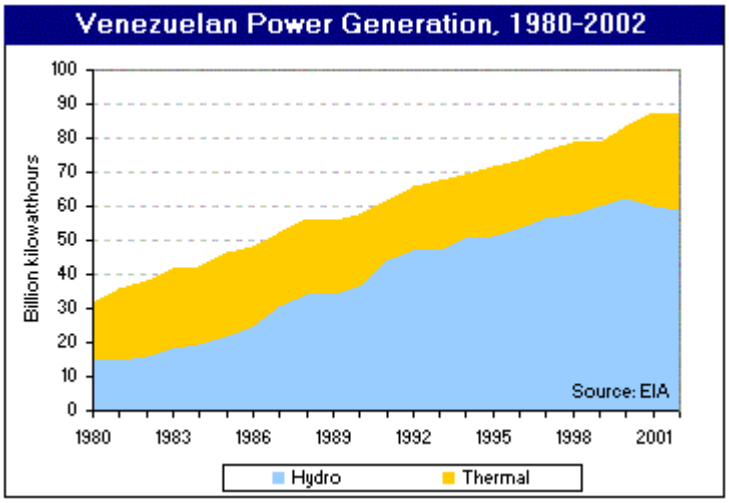
ELECTRICITY

As of December 2002, Venezuela's installed generation capacity stood at 21.2 gigawatts (GW), of which 62% was hydro and 38% thermal. In 2002, the country generated 87.0 billion kilowatthours (Bkwh) of electricity, while consuming 80.9 Bkwh. Venezuela is home to the world's second largest operational hydroelectric dam (after Itaipu in Paraguay/Brazil), the 10-GW Raúl Leoni dam on the Caroní River. Cross-border interconnectors allow Venezuela to exchange electricity with Colombia and Brazil.

Sector Organization

In 2002, there were 13 generation companies in Venezuela (5 public and 8 private). Public companies operate and own approximately 86% of Venezuela's installed generation capacity, with

state-owned EDELCA (Electrificación del Caroní) (a subsidiary of state-owned metals group Corporación Venezolana de Guayana - CVG) accounting for 62%. EDELCA operates the Guri plant (Raul Leoni dam) on the Caroní River, as well as the 3.14-GW Macagua hydropower plant, which together generate more than 70% of the country's power. EDELCA currently is constructing two new facilities on the Caroní River - Caruachi and Tocoma. The 2.28 GW Caruachi plant, located between Guri and Macagua, began partial operation in 2003, with completion expected by 2006. The 2.16-GW Tocoma hydroelectric dam will be EDELCA's fourth dam on the Caroní River and is scheduled to be completed by 2010. EDELCA controls a majority of Venezuela's transmission lines as well.



Venezuela's second largest generating company by capacity is state-owned CADAFE (Compañía Anónima de Administración y Fomento Eléctrico), while the country's largest private-sector electricity utility is La Electricidad de Caracas (EDC) (86% held by U.S.-based AES). EDC generates, transmits and distributes electricity primarily in the Caracas metropolitan region, with installed capacity of 2.6-GW (oil and natural gas). Other larger private-sector electric utilities include Electricidad de Valencia (ELEVAL) and Sistema Eléctrico del Estado Nueva Esparta (SENECA). U.S.-based CMS Enterprise, through its subsidiary CMS Electric and Gas, has an 86% stake in SENECA.

OPSIS (Oficina de Operación de Sistemas Interconectados) is responsible for managing Venezuela's national grid and matching supply with demand. According to OPSIS, four companies (CADAFE, EDELCA, EDC and ENELVEN) supply 95.4% of the electricity to the national grid.

Cross-border Interconnectors

There currently exists three cross-border transmission lines between Venezuela and Colombia and one with Brazil. The connections to Colombia include: Cuartricentenario (Zulia Region)-Cuestecitas (230 Kv); La Fría (Andean Region) –Tibú (115 Kv); and El Corozo (Andean Region) - San Mateo (230 Kv). The 230 Kv Santa Elena – Boa Vista links Venezuela with Brazil.

Privatization

Electric sector privatization was underway when the current administration came into power in 1998. In September 1999, the Electric Service Law (LSE) which provides a framework for the deregulation of the electric utility industry in Venezuela, was enacted. On December 14, 2000, the Ministry of Energy and Mines enacted the Electric Law Regulations pursuant to the LSE. The LSE required integrated electric companies to divide generation, transportation, distribution, and marketing assets into independent companies which operate autonomously by January 2003. However, the unstable political and economic situation in Venezuela over the past few years has postponed further privatization of the electricity sector indefinitely. Generation and marketing will be deregulated and will be opened up to competition, whereas distribution and transmission will remain regulated businesses.

In addition, in January 1999, a joint resolution of the Ministry of Energy and Mines and the

Ministry of Industry and Commerce established the basic tariff rates applicable during the Four-Years Tariff Regime (1999-2002). Tariffs were adjusted: 1) semi-annually to reflect fluctuations in inflation and the currency exchange rate; and 2) monthly to reflect fluctuations in fuel cost. During 2003, the GOV issued a decree establishing price controls on a basket of basic goods and services including electricity. However, this decree included a clause allowing for electricity tariff adjustment in special circumstances.

Generation Disruptions

In 2003, Venezuela continually faced the potential of electricity shortfalls. The immediate reasons for this included reduced hydropower capacity and electricity theft. Low rainfall had diminished levels in reservoirs, reducing Venezuela's hydropower capacity. In 2002, for example, low water levels reportedly had resulted in six significant power failures. Rampant electricity theft had also compromised the country's supply, with illegal hookups accounting for an estimated quarter of Venezuela's total consumption. In 2004, it appears that Venezuela will likely avoid power shortfalls with higher reservoir levels at the Guri hydroelectric dam and new generation units coming onstream, namely the Caruachi hydroelectric dam. EDC also plans to begin construction of the 200-MW La Raiza power plant.

ENVIRONMENT

Venezuela's environmental problems include pollution and deforestation. Pollution from energy production and consumption is high relative to Venezuela's neighbors, as production is the mainstay of its economy and consumption is heavily subsidized. Therefore, it emits more carbon than many of its neighbors. Its use of non-hydro renewable energy sources is low. Addressing the high levels of energy intensity and pollution will present major environmental challenges for Venezuela.

COUNTRY OVERVIEW

President: Hugo Chávez Frías (since December 1998)
Independence: July 5, 1811 (from Spain)
Population (2002E): 22.4 million
Location/Size: Northern South America/352,144 square miles, slightly more than twice the size of California
Major Cities: Caracas (capital), Maracaibo, Valencia, Maracay, Barquisimento
Languages: Spanish (official), Indian dialects in the interior
Ethnic Groups: Spanish, Italian, Portuguese, Arab, German, African, indigenous people
Religions: Roman Catholic (96%), Protestant (2%)

ECONOMIC OVERVIEW

Minister of Finance: Tobias Nobrega Suarez
Currency: Bolívar
Exchange Rate (5/14/04): US$1 = 1,920.0 Bolívars
Nominal Gross Domestic Product (2003E): $89 billion
Real GDP Growth Rate (2003E): -9.2% **(2004F):** 5.0%
Inflation Rate (consumer prices, 2003E): 31.1% **(2004F):** 26.6%
Unemployment Rate (2003E): 18.0%
Merchandise Exports (2003E): $25.8 billion
Merchandise Imports (2003E): $10.7 billion
Current Account Surplus (2003E): $15.1 billion
Main Destinations of Exports (2002E): United States (28.1%), Colombia (20.4%), Mexico (7.3%), Japan (6.0%)
Major Export Products (2002E): Petroleum and derivatives (80%), aluminum (4%)
Main Origins of Imports (2002E): United States (32.8%), Colombia (8.6%), Brazil (6.7%),

Mexico (4.7%)
Major Import Products (2002E): Capital goods (20%), consumer goods (20%), and raw materials (60%)
Foreign Debt (2003E): $38.4 billion

ENERGY OVERVIEW
Minister of Energy and Mines: Rafael Ramirez
Head of PdVSA: Ali Rodriguez
Proven Oil Reserves (1/1/04E): 77.8 billion barrels (not including extra-heavy oil and bitumen)
Oil Production (2003E): 2.6 million barrels per day (bbl/d), of which 2.3 million bbl/d was crude
OPEC Crude Oil Production Quota (effective 4/1/04): 2.704 million bbl/d **(effective 7/1/04):** 2.934 million bbl/d
Oil Consumption (2003E): 350,000-400,000 bbl/d
Net Oil Exports (2003E): 2.25 million bbl/d
Crude Oil Refining Capacity (1/1/04): 1.28 million bbl/d in Venezuela, with almost 2 million bbl/d of capacity in the Caribbean, the United States and Europe
Oil Exports to the United States (2003E): 1.38 million bbl/d (not counting around 200,000-300,000 bbl/d of Venezuelan crude refined in the Caribbean and then sent to the United States)
Natural Gas Reserves (1/1/04E): 148 trillion cubic feet (Tcf)
Natural Gas Production/Consumption (2002E): 1.1 Tcf
Coal Reserves (2001E): 528 million short tons (Mmst)
Coal Production (2002E): 10.0 Mmst
Coal Consumption (2002E): 0.91 Mmst
Electric Generation Capacity (2002E): 21.2 gigawatts (62% hydro and 38% thermal)
Electricity Production (2002E): 87.0 billion kilowatthours (Bkwh)
Electricity Consumption (2002E): 80.9 Bkwh

ENVIRONMENTAL OVERVIEW
Minister of Environment and Natural Renewable Resources: Ana Elisa Osario
Total Energy Consumption (2002E): 2.91 quadrillion Btu* (0.7% of world total energy consumption)
Energy-Related Carbon Dioxide Emissions (2002E): 142.7 million metric tons (0.6% of world total carbon dioxide emissions)
Per Capita Energy Consumption (2002E): 115.1 million Btu (vs U.S. value of 339.1 million Btu)
Per Capita Carbon Dioxide Emissions (2002E): 5.7 metric tons (vs U.S. value of 20.0 metric tons)
Energy Intensity (2002E): 22,096 Btu/$ nominal-PPP(vs U.S. value of 9,348 Btu/$ nominal-PPP) **
Carbon Dioxide Intensity (2002E): 1.1 metric tons/thousand $ nominal-PPP (vs U.S. value of 0.55 metric tons/thousand $ nominal-PPP)**
Fuel Share of Energy Consumption (2002E): Natural Gas (43%), Oil (35.4%), Hydro (20.5%), Coal (1.0%)
Fuel Share of Carbon Dioxide Emissions (2002E): Natural Gas (50.9%), Oil (47.5%), Coal (1.6%)
Status in Climate Change Negotiations: Non-Annex I country under the United Nations Framework Convention on Climate Change (ratified December 28th, 1994). Not a signatory to the Kyoto Protocol.
Major Environmental Issues: sewage pollution of Lago de Valencia; oil and urban pollution of Lago de Maracaíbo; deforestation; soil degradation; urban and industrial pollution, especially along the Caribbean coast.
Major International Environmental Agreements: A party to Conventions on Biodiversity,

Climate Change, Desertification, Endangered Species, Hazardous Wastes, Marine Life Conservation, Nuclear Test Ban, Ozone Layer Protection, Ship Pollution, Tropical Timber 83, Tropical Timber 94, Wetlands and Whaling. Has signed, but not ratified, Marine Dumping.

* The total energy consumption statistic includes petroleum, dry natural gas, coal, net hydro, nuclear, geothermal, solar, wind, wood and waste electric power. The renewable energy consumption statistic is based on International Energy Agency (IEA) data and includes hydropower, solar, wind, tide, geothermal, solid biomass and animal products, biomass gas and liquids, industrial and municipal wastes. Sectoral shares of energy consumption and carbon emissions are also based on IEA data.
**GDP figures from CIA Factbook estimates based on purchasing power parity (PPP) exchange rates.

OIL AND GAS INDUSTRIES
Organization, *Oil and Natural Gas:* Petróleos de Venezuela, S.A. (PdVSA, state-held), with some foreign companies involved in joint ventures; *Coal:* Carbozulia, owned by PdVSA, with some foreign companies involved in joint ventures; *Electricity:* Several state-held and private utilities
Major Foreign Oil Company Involvement: BP, ChevronTexaco, CNPC (China), ConocoPhillips, ExxonMobil, Repsol-YPF, Shell, Statoil, TotalFinaElf, and Petro-Canada
Major Domestic Refineries (crude capacity-bbl/d) (1/1/04), PdVSA: El Palito, Puerto Cabello (126,900), Puerto de la Cruz (195,000), San Roque, Anzoategui (5,200); **Paraguana Refining Center:** Cardon/Judibana, Falcon (940,000), Maracaíbo, Zulia (15,000)

Sources for this report include: Business News Americas; Cambridge Energy Research Associates; CIA World Factbook; Citgo;ConocoPhillips; Deutsche Bank; Dow Jones; Economist Intelligence Unit ViewsWire; Energy Day; Electric Utility Week; Financial Times; Global Insight; Global Power Report; International Energy Agency; La Cámara Venezolana de la Industria Eléctrica (CAVEINEL); Latin America Monitor; Latin America Economic Outlook; Latin Finance; Ministerio de Energía y Minas; New York Times; Oficina de Operación de Sistemas Interconectados (OPSIS); Oil and Gas Journal; Oil Daily; Petrobras Energía; Petroleum Economist; Petroleum Finance Week; Petroleum Intelligence Weekly; Platt's Oilgram News; PdVSA; Power Engineering International; Repsol-YPF; Reuters; Sincor; The Oil and Gas Journal; TotalFinaElf; U.S. Department of Commerce; U.S. Energy Information Administration; U.S. Securities and Exchanges Commission; Wood MacKenzie; World Gas Intelligence; World Markets Analysis; World Oil.

LINKS

For more information on Venezuela, see these other sources on the EIA web site:

International Petroleum Monthly - EIA's latest monthly international petroleum data
EIA - Country Information on Venezuela
EIA OPEC Fact Sheet

Links to other U.S. government sites:

U.S. Embassy in Caracas, Venezuela
CIA World Factbook - Venezuela
U.S. Department of Energy's Office of Fossil Energy's International section - Venezuela
U.S. State Department's Consular Information Sheet - Venezuela
U.S. State Department Background Notes - Venezuela

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Associations and Institutions
Organization of American States (OAS)

Electricity
CADAFE
CVG Electrificación del Caroní, C.A – EDELCA
Electricidad de Valencia
Energía Eléctrica de Barquisimeto (ENELBAR)
Fundelec
La Cámara Venezolana de la Industria Eléctrica (CAVEINEL)
Oficina de Operación de Sistemas Interconectados (OPSIS)
Sistema Eléctrico del Estado Nueva Esparta (Seneca)

Government
Banco Central de Venezuela (english)
Corporación Venezolana de Guayana (english)
Instituto Nacional de Estadistica (national statistical office)
Ministerio de Energía y Minas (Ministry of Energy and Mines)

Oil and Natural Gas
Amerivan
Anadarko Petroleum Corporation
British Petroleum (BP)
ChevronTexaco
China National Petroleum Corporation
Citgo
ConocoPhillips
Fortum
Harvest Natural Resources
AB Nynäs Petroleum
OMV AG
Otepi
PdVSA
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