

ORINOCO magna reserva



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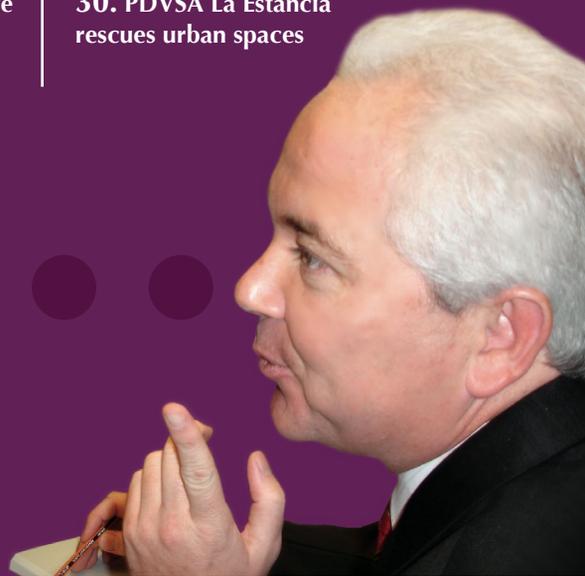
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Interview
with Minister Rafael Ramirez
"Our future is in the Orinoco Oil Belt"

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CARACAS PLAN FOR THE BICENTENNIAL YEAR OF INDEPENDENCE
 COMPREHENSIVE RESTORATION PROJECT
SABANA GRANDE BOULEVARD

YOUR BOULEVARD NOW LOOKS THIS WAY



NOW

WE CARE ABOUT THE CITY, WE ARE REVAMPING MEETING PLACES, WE ARE MAKING ROOM FOR FAMILY.

PDVSA La Estancia inspires possible things

Editorial

**Full Oil Sovereignty:
 An example for the world**

The Bolivarian Republic of Venezuela has, to date, 211.173 billion barrels of oil reserves certified in books. And by the end of 2010 reserves are expected to hit 316 billion barrels of oil. The key element in such resources is that about 80 percent, i.e. 170.265 billion barrels of oil, are heavy and extra heavy crudes.

The Bolivarian Government, led by President Hugo Chávez, has focused its energy policy on achieving the goal of Full Oil Sovereignty. The Organic Law on Hydrocarbons, enacted in 2000, clearly defines what was provided under the Venezuelan Constitution of 1999: that the primary activities of the oil industry are reserved to the Venezuelan State and the latter, through its oil company, Petróleos de Venezuela S.A. (PDVSA), must have control of these activities, which are of the essence for domestic development.

In compliance with the Organic Law on Hydrocarbons, our government advanced an extraordinary process to bring the oil projects developed during the harmful oil opening in the 1990s in line with the current legal framework. In this way, operating agreements and shared risk and profits exploration and operation associations migrated to joint ventures.

Further, as part of that strategy, we made efforts to gain recognition of the Orinoco Oil Belt. Thus, we defeated an ill strategy that, responding to transnational interests, had imposed the mindset both domestically and abroad that the Orinoco Oil Belt crudes were bitumen. Today, all oil companies in the world acknowledge the Orinoco Oil Belt as the largest oil reserve on the planet.

The Magna Reserva Project includes an initial phase of certification of reserves that envisages certification of 316 billion barrels of oil. However, it is worthwhile to note that certified reserve estimates take into account a recovery factor of 20 percent. The Orinoco Oil Belt holds 1.3 trillion barrels of original oil in place and, depending on the technology, a higher percentage of this oil could be recovered. For example, the US Geological Survey estimates that with a recovery factor of 43 percent, 585 billion barrels of oil could be recovered.

Under our Oil Sowing Plan, by 2015 crude oil production should stand at 4.15 million barrels per day. Target production in 2021 is 6.85 million barrels per day. This figure is important because we want to show that future oil production growth will largely come from developments in the Orinoco Oil Belt. Therefore, we are focusing particularly in preserving and properly developing these resources for all our people.

Implementation of the Full Oil Sovereignty policy is a clear example of what a government that advocates the interests of the people should do. Our experience is being studied in the fellow OPEC member countries and other oil and gas producers.

Rafael Ramírez

People's Minister for Energy and Petroleum and President of PDVSA

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More than USD 80 billion in investments

Rafael Ramírez: Our future is in the Orinoco Oil Belt

“To date we have certified more than 170 billion barrels of oil under the Magna Reserva Project. And no one can say that this project is politically biased, because it involves companies from the US, Europe, Asia and South America,” stresses Rafael Ramírez, People’s Minister for Energy and Petroleum and President of Petróleos de Venezuela

by Alfredo Carquez Saavedra

Development of the world’s largest oil reserves has been possible after the rescue of Petróleos de Venezuela, SA (PDVSA). The Bolivarian Government defeated an oil and business strike / sabotage in late 2002 and dismantled oil-related businesses created during the so-called oil opening, which aimed at privatizing Venezuela’s energy sector. Now, the Bolivarian Government is initiating upgraded oil production agreements with companies from four continents. It has organized mixed companies where the Venezuelan State is the majority stockholder, within a revolutionary and sovereign legal framework.

More than 170 billion barrels of oil have been certified to date as part of the Magna Reserva Project. Further, overall investment in the Orinoco Oil Belt is estimated at some USD 80

billion. Such funds are necessary to develop the area and boost production to 2 million bpd in 2016, in that region only.

The Orinoco Oil Belt comprises four major fields (Junín, Ayacucho, Boyacá and Carabobo) and it is divided into 31 blocks. A total of 27 companies from around the world are operating in the Orinoco Oil Belt. Some firms are developing blocks that have been allotted directly, under inter-governmental agreements, and others are operating in blocks awarded in competitive tendering or are involved in the continuation of projects that are under way.

“For example, discussions with Russian companies are related, of course, to the intergovernmental agreement signed in Moscow in August 2009 by Presidents Hugo Chávez (Venezuela)

and Dmitri Medvedev (Russian Federation). An annex of such agreement opened up the possibility of awarding the Junín 6 area of the Orinoco Oil Belt to Russian companies. For purposes of awarding this area to a consortium of Russian companies, we launched comprehensive talks with the Ministry of Energy of the Russian Federation and with all the firms in that country. Finally, we organized a joint ventures in compliance with the Organic Law on Hydrocarbons,” Minister Rafael Ramírez said.

Acknowledgment of the Venezuelan legal framework

These actions made by the Bolivarian Government are highly significant from the political standpoint, as private partners are acknowledging the legal and tax regulations in force in Venezuela. Note that some companies were already operating in Venezuela under operating agreements and partnership associations. Therefore, negotiations were required. “The merit is that most companies, except for Exxon Mobil and Conoco Phillips, accepted our terms,” stresses Ramírez.

“This process has been significant. Take for instance a company that has never operated in Venezuela before, and says, ‘Well, now let’s go to Venezuela. Let us invest USD 12 billion or USD 10 billion under these terms. Is there no arbitration? No, there is not arbitration. Are royalties at 33 percent? Yes, royalties are at 33 percent. Tax rates are 50 percent? Yes, they are 50 percent. Is Venezuela the majority stakeholder? Yes, it is the majority stakeholder.’ Companies come here to participate. They bid, organize a holding, make decisions. That is what we value as a very important issue, because from now on no one can say that we forced migration (to joint ventures), but everyone here adhered to a new legal framework.”

The Venezuelan official recalls that “during the 1990s, an accelerated privatization process of Petróleos de Venezuela was implemented. However, in order to reverse this negative situation that undermined the interests of the country, the Bolivarian Government decided to implement Articles 302 and 303 from the Venezuelan Constitution. These articles reserve the hydrocarbon sector to the Venezuelan State, and provide that PDVSA is the state body that manages the oil industry.”

According to Minister Ramírez, this is a very

important milestone, as the sole fact that PDVSA started to operate attached to the State and for the State, allowed the Bolivarian Government to dismantle the oil opening.

“This was not possible in the past, as the oil opening was shielded by the old PDVSA. When we gained control of the oil industry, we untangled the legal mechanisms that were used to implement the operating agreements. In 2005, we advised that we were set to change the operating agreements. In 2006, we completed migration of all 33 operating agreements to joint ventures. Then we amended the Hydrocarbons Law in order to introduce the Oil Extraction Tax. What did we obtain with that move? Oil operators formerly paid 16 2/3-percent royalties, but now all oil companies pay 33.33-percent royalties. Then, on May 1, 2007 nationalization of the oil industry became effective, with the takeover of both all operators in the Orinoco Oil Belt and the shared risk and profits exploration agreements. That is, we spent all these years, until 2008, restoring our tax and legal framework. Where is our growth? In the Orinoco Oil Belt. Our future is in the Orinoco Oil Belt. In parallel, we kicked off the Magna Reserva Project, to assess and certify reserves. Oil at the Orinoco Oil Belt used to be described as bitumen, but we have shown that it is oil,” Minister Ramírez highlights.



A historical comparison

During the oil opening, before projects at the Orinoco Oil Belt started, the former Ministry of Energy and Mines lowered the taxes levied on unexploited areas rather than those levied on mature areas. However, such fiscal terms were not provided for under the law. They cut royalties from 16 2/3 percent to 1 percent without any economic consideration.

"Now, under Article 42, Hydrocarbons Law, a discount of 30-20 percent can be applied to extra-heavy crude oil projects in the Orinoco Oil Belt. There is a range, from one to 10 percentage points, provided that evidence is produced at the People's Ministry for Energy and Petroleum that projects need an incentive to improve their economies," Minister Ramírez explains.

"The legislation does not refer to project profitability; it refers to project economies. Why does not the legislation make reference to profitability? Because a company may believe that profitability has to be 30 percent, otherwise it will not take part in the project. Therefore, that is a business problem: Do not become a partner. Get into some other business then. Yet if you are going to produce oil and you are going to stay 40 years with us, then we cannot talk about profitability under those terms. I cannot subrogate the estimation of profitability of multinationals," said Ramírez.

Our North is the South

It is worth mentioning that PDVSA owns a majority stake in joint ventures and therefore controls them. For joint ventures, the Venezuelan State has set target recovery factors at 20 percent, payment of royalties and surface taxes at up to 33.33 percent, and income tax at 50 percent, while commercialization has to take place under the monopoly of the State. Further, under this scheme there is no international arbitration. Companies undertake to develop upgraders —plants located south Venezuela, in the towns of Soledad and Mapire, because the Bolivarian Government aims at demographic and industrial decentralization in the country.

- What are the criteria for payment of bonds for award of areas in the Orinoco Oil Belt?

- From this year on, the Orinoco Oil Belt is going through a development phase. The areas awarded so far represent investments at USD 80 billion from 2010-2016. Further, we have obtained bonds for the Republic amounting to USD 5 billion. Unlike the past, we have not awarded not a single block without requiring a bond for the Republic. At the time we set that bond, we clarified a legal issue: the owner of the reserve is the Venezuelan State, the owner of all hydrocarbons in the subsoil is the Venezuelan State. Therefore, the Venezuelan State is entitled to a bond in exchange for granting foreign companies the right to participate. We have made a single calculation for bonds: one dollar for recoverable reserves, but as companies under this scheme are joint ventures with a 40 percent stake, then they have to pay USD 0.40 for recoverable reserves.

It is important to remember that a prerequisite was set for award of Carabobo oil blocks. Bidding companies offered to provide to PDVSA USD 1 billion to fund regional development. Then, 60 percent of the USD 80 billion is ours. Therefore, we are pursuing a strategy to finance these investments and that is why we decided to require companies to provide funding for our own development as well. Of course, we will repay this with the development of joint ventures. Then we have USD 5.73 billion in bonds for the Nation, USD 80 billion in direct investments in the oil sector, and USD 2.09 million bpd of increased production.

- How will these bonds be repaid?

- Most companies have to pay the largest share, at least 60 percent of the bonds, once the joint ventures is organized. Then, another bond is paid in the phase of engineering development and detailed engineering. Why paying another bond? Because companies will start to develop the area under an early production scheme. Subsequently, when upgraders are built, companies will pay the rest of the bond. This means that we will be receiving bonds over a period of at least three years.

- How will these projects be developed?

- These projects comprise enough area to achieve a lifespan of 40 years with a recovery factor of 20 percent. What is the issue here? We have insisted that companies must drill deeper, as we need to increase the recovery factor. Apparently 20 percent may be viewed as low. The US Geological Survey suggests a recovery factor of 46 percent. We invited companies with high technological skills precisely because we want them to drill into the ground, not to the sides.

During the oil opening, projects were designed for companies to produce oil with a recovery factor from 7-9 percent. Once they reached that recovery factor, companies started to develop new areas. That is, with a recovery factor of 9 percent, the area is depleted very soon and when that happens, you want another. That is a predatory production model. What we want now is to implement technology to increase the recovery factor. We, as an agency managing natural resources, find it unusual to recover only 9 percent and leave 91 percent in the subsoil. Obviously, we cannot recover 100 percent, but we can recover 20 percent, 25 percent or 30 percent.

We have agreed with our partners to implement pilot projects to reach a 20 percent recovery

factor. Why is it so low at the moment? Because the facilities and infrastructure required to attain a recovery factor of at least 20 percent have to be built from the commencement of production. Therefore, we have said that after the first 25 years, they may stay for additional 15 years, because this makes the investments required more reasonable.

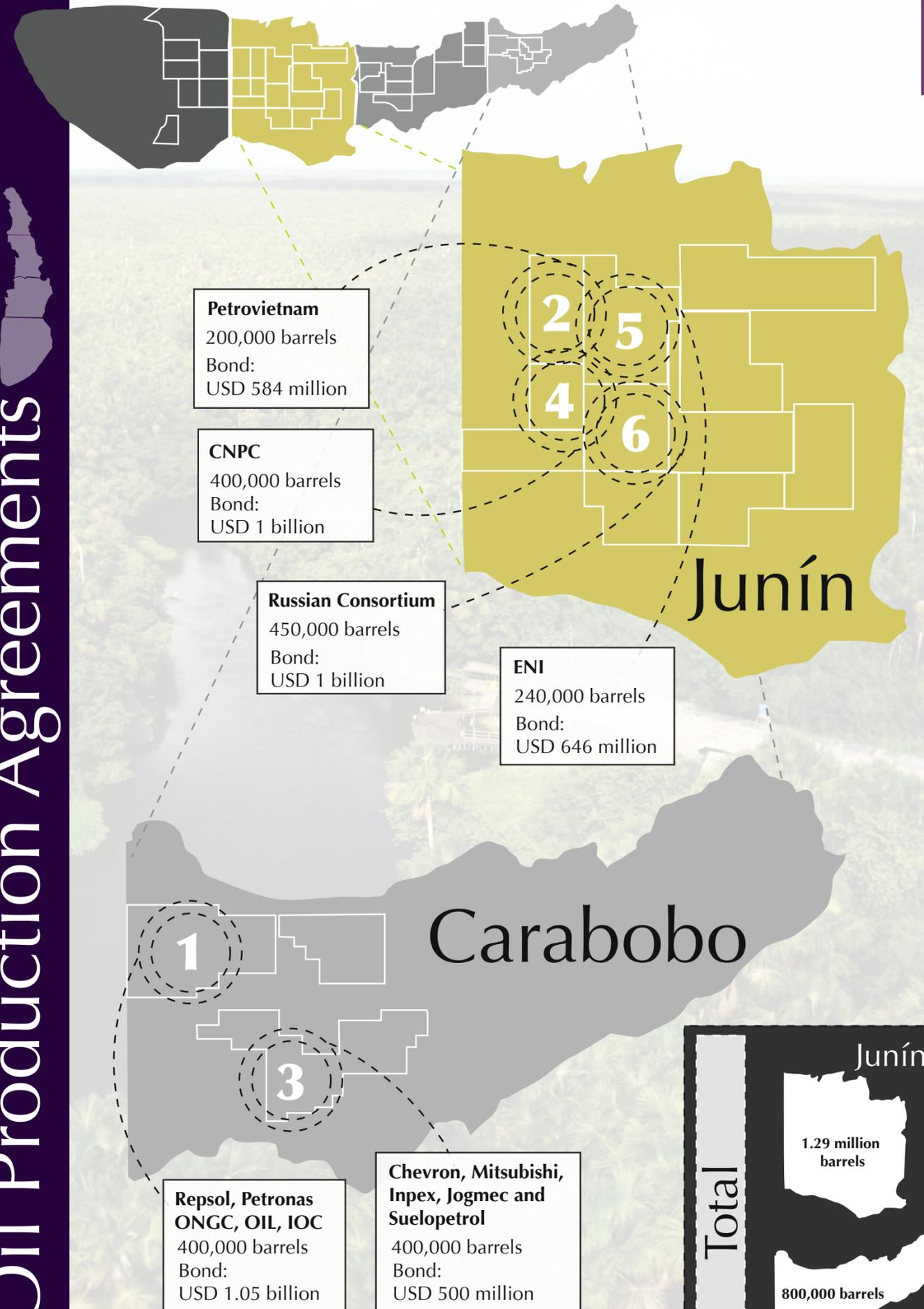
- How long could a company take to reach that 20 percent recovery factor?

- Well, every company has proposed its own development model, as part of the work done jointly with teams of our subsidiary Corporación Venezolana del Petróleo and PDVSA. Based on their production estimates, they can forecast when that 20 percent recovery factor may be attained. We are also going to deal with development of new technologies. We have created a division in INTEVEP (a PDVSA subsidiary that provides comprehensive technological solutions for the oil industry) to deal with this topic. We have even thought that the headquarters of INTEVEP's extra-heavy oil division should be based in the Orinoco Oil Belt. And the University of Hydrocarbons will be located in the Orinoco Oil Belt. Therefore, the Orinoco Oil Belt will be a major crossroad for technology development.

- How are you addressing the issue of environmental impact?

- We must be very careful with this because as we have said before, oil production here in our country has been disastrous. Oil producing countries should estimate the environmental disaster that multinationals have caused. In Venezuela, rivers have been polluted, a lake has been poisoned, river basins have been damaged and forests have been ravaged. Therefore, we are trying to implement high environmental standards under the new scheme at the Orinoco Oil Belt from the beginning. For us, this is a challenge.

Orinoco Oil Belt



Oil Production Agreements

V Anniversary of

Petrocaribe

Five years of accomplishments

by Mónica Madrid Biord

Central American and Caribbean countries have united in a new model that favors equality and solidarity over competition, and which joins efforts to address common needs. The foundations of this initiative have strengthened after five years of hard work

On June 29, 2010, Energy Cooperation Agreement Petrocaribe marked its fifth anniversary. Petrocaribe has developed into one of the few options for pursuing energy sovereignty and fighting against poverty in the region.

This new proposal came in response to the need to cope with the global crisis of the capitalist system and overcome models that have proven ineffective to foster equality and well-being among Latin American and Caribbean peoples.

Petrocaribe is a mechanism intended to bolster regional geopolitical integration, under the principles of shared solidarity, complementarity, respect for the sovereignty of peoples, peaceful coexistence and energy security.

Its multidimensional approach places the human being above economic-centered and short-sighted principles, thus establishing a new model of relationships and understanding among free and sovereign peoples.

Results

Despite the recent global economic ravages, Petrocaribe has continued to move forward steadily towards regional development. One of Petrocaribe's major areas of work has been

promoting an alternative economic space that serves to solve, in a joint fashion, common problems, such as food security, and boost productivity in the region.

In this regard, the bloc allows member countries to pay a portion of their oil bill with goods and services required by Venezuela, thus promoting fairer trade to strengthen the region.

Nicaragua, for example, has supplied heifers, black beans, milk, beef and soybean oil to Venezuela. The Dominican Republic has shipped glucose syrup and beans to Venezuela, while the Cooperative Republic of Guyana provides rice to Venezuela.

These products are imported and distributed by the Corporación de Abastecimiento y Servicios Agrícolas (CASA), the Corporación Venezolana Agraria (CVA), the Productora y Distribuidora Venezolana de Alimentos (PDVAL) and social mission Mercado de Alimentos (Mercal).

Strengthened supply

Through Petrocaribe, Venezuela offers oil and fuel supply to Petrocaribe member countries. To prevent the cost of these products from becoming an obstacle for the development of these countries, a mechanism has been provided that calls for deferred payment from 5

percent to 70 percent of the invoice, based on the price per barrel of oil and oil byproducts in world markets.

In 2005, Petrocaribe offer totaled 42,000 barrels per day (bpd) and at the end of 2009 it amounted to 106,000 bpd, which represents an increase of 152 percent. This is tantamount to 4 percent of Venezuelan oil exports.

As a result of fluctuating oil prices in world markets, to date, Petrocaribe has financed in average 45 percent of oil bills, with a significant positive impact on member countries. Petrocaribe signatories have been able to reactivate their economies, as the available funds resulting from the financing of oil bills are used to implement social and socio-productive projects to fight against poverty and exclusion.

Also, efforts have intensified to minimize costs and streamline the transport of crude oil and oil byproducts, thus optimizing logistics and supply strategies. To this end, Sandino and Petion vessels, owned and managed by Cuba-Venezuela joint ventures Transalba, started operations.

This move has helped fight against speculation of transnational energy corporations and brokers, which traditionally regar-

ded the Caribbean as a premium market, and increased hydrocarbons costs. In addition, direct deals between the member States have resulted in a more sovereign management of their energy resources.

Infrastructure

The Caribbean energy sovereignty has been strengthened with the completion of a series of infrastructure projects. The establishment of nine mixed companies in eight countries has paved the way for a binational management model under the bloc's new integration standards.

In 2007, in Cuba, the Camilo Cienfuegos refinery was put back in operation, and its processing capacity will be enlarged from 65,000 bpd to 150,000 bpd. Also in Cuba, another refinery will be built in the city of Matanzas; the Hermanos Díaz refinery, located in the city of Santiago, will be expanded and a regasification plant will be installed in the central region of the island.

In 2009, the Fuel Storage and Distribution Wai'tukubuli plant (39,000 barrels) was inaugurated in Dominica. The facility provides 100 percent of the diesel required for electricity generation in the island. It also comprises facilities for filling up to 20,000 bottles of



Regaining the Revolutionary Awareness

by Gustavo González Castro

liquefied petroleum gas (LPG) per month. The Government of Dominica has designed a social program to supply these cylinders to the neediest sectors of the population.

Similar projects are being set up in Grenada and St. Vincent and the Grenadines, for purposes of allowing both nations the sovereign management of hydrocarbons. In both countries, front-end engineering for a maritime terminal was completed.

In St. Vincent and the Grenadines, construction of an LPG Filling Plant was completed in February 2007, with a capacity of 20,000 bottles / month. The project enabled a USD 2.25 reduction in the retail price of 10 kg bottles. Additionally, in this country the first two tanks of 10,000 barrels of diesel are under construction as part of a plant that will store 34,000 barrels. Meanwhile, in Grenada detailed engineering of a 41,000-barrel plant is under way.

Grenada also began construction of a 18,000-barrel tank for storage and supply of diesel for electricity generation company Grenada Electricity Services. In St. Kitts and Nevis, works are under way to increase the storage capacity of the state-owned St. Kitts Electricity Department, with the construction of a tank for 5,000 barrels in the town of Need Must.

Purchase by PDVSA of a 49 percent stake in the Refinería Dominicana de Petróleo, SA (Refidomsa), located in the Dominican Republic, represents an asset that strengthens Petrocaribe supply strategy in the area. This facility has a refining capacity of 34,400 barrels.

Technology transfer

In Nicaragua, front-end engineering of the future supply center Complejo Industrial El Supremo Sueño de Bolívar, in the town of Miramar, has started. All these works involve technology and knowledge transfer, to strengthen the technical and human skills of workers in each country.

Further, power plants were built in Nicaragua (240 megawatts) and Haiti (60 megawatts). These are the two nations with the highest poverty rates in the region.

In an act of solidarity with Haiti, after the island was devastated by a severe earthquake on January 12, 2010, the Bolivarian Republic of Venezuela wrote off the debt of that Caribbean country with Petrocaribe, which amounted to USD 395 million. Further, it donated food and supplies and fuel for power generation plants and to support humanitarian relief efforts. Additionally, PDVSA's affiliate PDV Caribe joined the international committee working to bring energy supply back to normal in health-care centers and hospitals in Port-au-Prince.

Self-development

With a purely social approach, the ALBA Caribe Fund financed various projects in the fields of health, education, roads, access to drinking water and housing. So far, USD 179 million were allocated to 85 projects in 11 member countries and USD 29 million were allocated to three productive power projects.

Note that 36 of these projects, amounting to USD 84.8 million, have contributed to achieve the Millennium Development Goals set by the United Nations Organization (UN) to promote universal primary education, reduce child mortality, improve maternal health and ensure environmental sustainability, thus yielding an impact on more than 2.7 million people in nine countries.

ALBA Alimentos, an initiative involving Petrocaribe member countries, seeks to alleviate the effects of food crisis in recent years. In this way, 12 agribusiness projects have been funded in nine countries, amounting to USD 24.3 million.

The goal is to move towards socio-productive initiatives arising from communities to achieve self-development, independence and empowerment of the poorest strata of the population.



With the hard, extensive work of 125 Venezuelan volunteers, the barges "Granma", "5 Héroes" and dock "Patria Grande", were brought back to service in the Venezuelan oil industry.

Workers at the lacustrine terminals that were nationalized in May 2009 in the Eastern Coast of Lake Maracaibo, Zulia state, rescued the barges after a year of selfless volunteer work.

The barges "Granma" and "5 Héroes" (formerly known as Free Bird and Gian Marco, respectively) and the dock "Patria Grande" (formerly known as Venezuela Driver) are the living proof of a new path and a new awareness that arises from the heart of the socialist working class of the new PDVSA.

"Granma" evokes the vessel used by a group of Cuban patriots, led by Fidel Castro, who sailed from Mexico for Cuba to launch the revolutionary process in the Caribbean island. "5 Héroes" recalls the Cuban anti-terrorist activists who have been in jail for 11 years in the US.

Member countries

Antigua and Barbuda, Bahamas, Belize, Cuba, Dominica, Grenada, Guyana, Jamaica, Dominican Republic, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Venezuela created Petrocaribe in 2005. In 2007 Haiti and Nicaragua joined the bloc, while Guatemala became a member in 2008.



1 Workers commemorate the commissioning of tugboat "Granma"

2 Refurbishment works were conducted by volunteer workers of the Socialist PDVSA during one year

3 Oil worker repairing a hull section of the barge "5 Héroes"

4 Barge "5 Héroes" was given this name to honor the five Cuban citizens who are unfairly arrested in the United States for their involvement in anti-terrorist activities in the state of Florida

5 Tugboat "5 Héroes" docks at the western port "Patria Grande"



The thin green veil

by Ramiro Ramírez

The plunder of the environment as a free resource to make money in an economic system that recognizes no other value than capital accumulation has led human kind to destroy the environment that ensures their survival

The consumer society -the cornerstone of the capitalist system- has not changed in essence since its invention. However, what has evolved significantly is the sophisticated way the consumer society creates a mindset on the media at the service of big capitalist interests. An example of this sophistication is the thin "green" veil that has been drawn on the environmental problems that are causing the destruction of our planet.

We continually hear "green" messages claiming that one cannot talk about environment without talking about energy, because both are closely related. Therefore, implementation of supra-national policies is necessary to levy taxes on oil and subsidize the ill-named green energy. These facts beg an obvious question: why is oil fingered so emphatically as the major culprit of the gradual warming of our atmosphere due to greenhouse gases?

Discrediting oil

All fossil fuels produce carbon dioxide (CO2) as a result of combustion. In fact, coal is the energy source producing the highest CO2 emissions per unit of energy supplied, but the use of this fuel is hardly questioned.

The United States has large coal reserves. More than half of its electricity is generated with coal, and the United States is not willing to stop using coal as long as that involves financial losses or threatens its energy security.

However, as regards oil, whose major reserves are in the territories of the members of the Organization of Petroleum Exporting Countries (OPEC), the subject of greenhouse gases emissions from oil byproducts is widely discussed. In fact, it seems that there is a smear campaign against this non-renewable resource in order to weaken oil-producing countries.

Discrediting oil as an energy source would lead to a decline in demand from emerging markets (large developing countries), thus creating technological dependencies of the "clean energies" that underpin exclusively the economies of the highly industrialized countries at the expense of opportunities for growth in developing nations.

When developed countries talk about "energy and environment," they avoid the inescapable need to modify the factors that lead us to waste and wasteful consumption patterns. When developed countries talk about "saving

the planet," they try to justify the adoption of supra-national policies designed by them. Such policies are intended to levy taxes for raising funds to subsidize the introduction of products labeled as "green" that strengthen their economies at the expense of developing countries.

Such speech disregards the urgent need for action to address huge social and economic asymmetries that are actually the worst pollution on the planet.

Vindicating oil

The first thing we should ask ourselves when we hear these messages is "Where do they come from? The International Energy Agency (IEA) is an organization created in response to the creation of the OPEC, and its raison is to advocate the interests of developed countries that are largest consumers of oil.

Further, most international bodies are headed by officials from developed countries. Consequently, their messages and actions are aligned with those specific interests. Many Non Governmental Organizations also serve as a face to protect the interests of transnational corporations as well as the interests of governments.

Scientific research centers in the most powerful countries apply a varnish of alleged impartiality to many of these arguments, which are basically political rather than scientific. The ultimate goal is shaping international public opinion to reduce competition for oil, undermine the price and increase the chances of securing access to the largest oil reserves in the world. This would put the OPEC countries on their knees.

The environmental issue has become a Trojan horse to conceal interests that are widely known and to present them in a novel way. However, our planet continues to deteriorate inexorably, while no true solution to the problem is provided. This is the reason why initiatives such as the Climate Summit, held in Cochabamba (Bolivia), represent a new path to find real ways to solve imbalances in the planet.

Oil is and will remain a key energy source for the development of our country and the region. Media manipulation and creation of biased mindsets serve the interests of powerful countries that aim to reduce competition for access to this valuable resource. Hydrocarbons have a long history, and they are increasingly clean and efficient. This should be the focal point of debate.

What should be done?

Implementing our socialist principles to achieve a balance between social and economic affairs and rational use of natural environment, which is tantamount to sustainable development.

PDVSA intends to train workers with greater awareness and commitment who play an active role in the processes of the Corporation. Our country, with its most important state enterprise, should become a model of responsible management of this valuable non-renewable natural resource.

The technological challenge of HEAVY crude oil

Factors considered for implementation of new technologies:

The use of resources in the Orinoco Oil Belt, under the Orinoco Socialist Project, aims to avoid repeating the mistakes of the past, when the oil industry focused on being a supplier of raw material for the economies of developed countries, to the detriment of the needs of the Venezuelan people

by Jorge Sánchez Gordillo

In November 2009, when Venezuela hosted the World Congress on Heavy Crude Oil, Petróleos de Venezuela S.A. (PDVSA) presented its experiences and technological advances in the area of exploration and production in the Orinoco Oil Belt. During his inaugural speech, People's Minister of Energy and Petroleum and President of PDVSA Rafael Ramírez emphasized the leading role that Venezuela would play in the future in the global oil industry. "With the exploitation of extra-heavy crude oil in the Orinoco Oil Belt, we are going to drastically change the market perception regarding the availability and supply of hydrocarbon energy resources," he said.

Many authors and oil experts endorse such prospects, as they believe that the time of heavy crude oil has come. This gives Venezuela the opportunity to set itself up as the holder of the world's largest oil reserves, as the country has a vast number of heavy and extra-heavy crude oil deposits.

As of December 31, 2009, PDVSA reported crude oil reserves at 211.17 billion barrels, out of which 174 billion barrels are Orinoco Oil Belt reserves. Approximately 9.14 percent of these reserves are being developed.

Propitious outlook

According to Minister Ramírez, based on these figures, "when we speak of heavy oil, Venezuela is the natural site." However, how will the Venezuelan oil industry face the challenge of a more responsible use of the largest high viscosity hydrocarbon reserve on the planet?

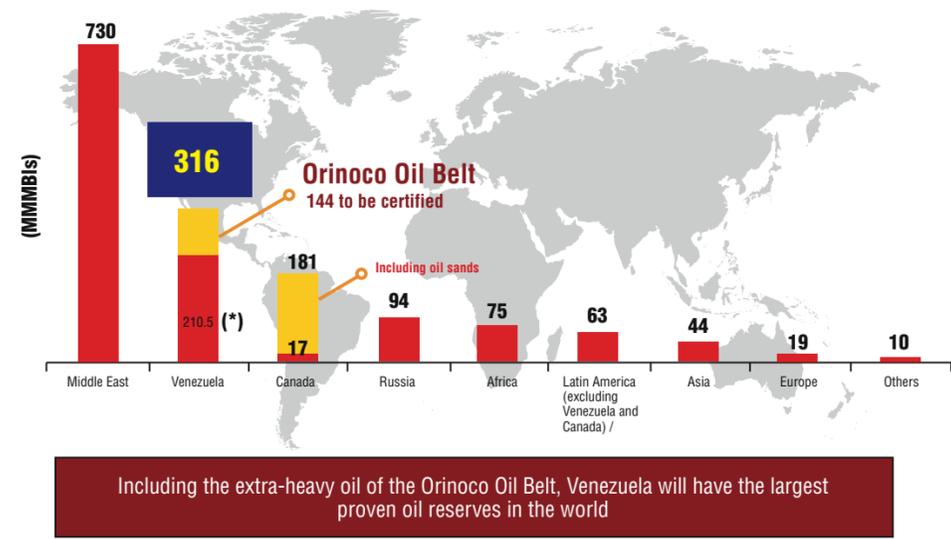
As oil prices increase and production declines in conventional oilfields, companies developing technology have focused on researching new developments for heavy and extra-heavy crude oil. Although a number of recovery technologies has been in place for decades, new investigations are under way to use commercially known oil extraction technologies more efficiently.

The adequate technology required to increase oil recovery is chosen based on proper assessment of oil deposits and their fluids. Reservoir simulation is equally important, as it helps forecast reservoir performance in terms of drilling assemblies, production strategies or a specific technology.

In PDVSA's experience, in the case of the FPO, oil in the area has an advantage: it has low viscosity compared to others with a similar density. This is the reason why it is possible to pump oil from the reservoir, thus producing some hundred barrels without thermal technologies. However, to obtain greater value from the major investments that were required to develop the fields, it was necessary to pump a higher volume of oil, hence the importance of implementing new techniques.

Better technology, greater recovery

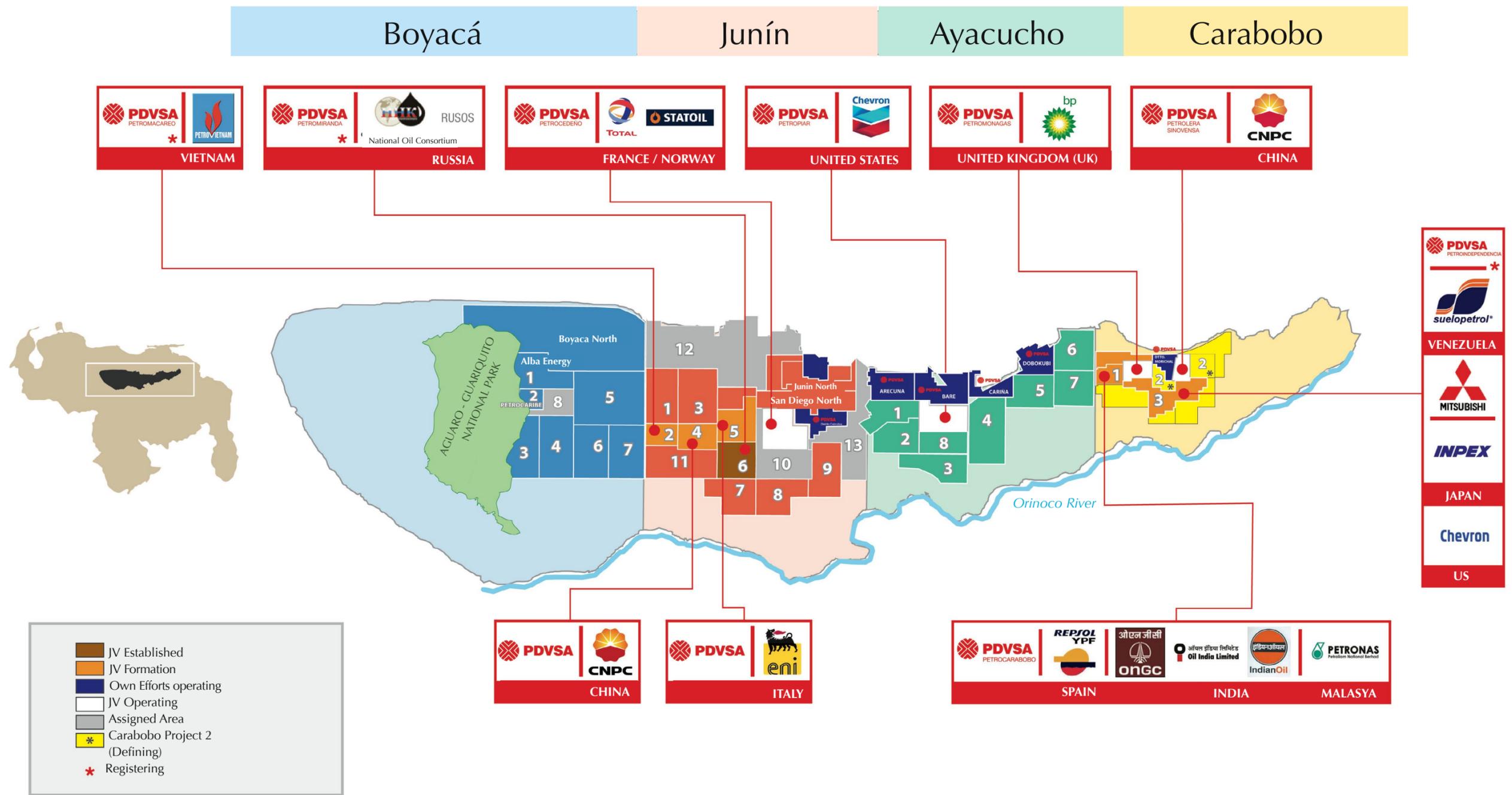
Failing to consider enhanced recovery technologies leads to a decrease in the ultimate recovery factor of reservoirs. Recovery factor in new projects in the FPO is expected to hit at least 20 percent of Original Oil In Place, which represents around 60 percent of total proven reserves of Venezuela. An efficient long-term operation plan in the area will favor its optimal use.



- Basic principles of the technologies and adequacy for incorporation into development plans.
- Estimated recovery factors related to each technology.
- Reservoir and geological factors that control the technology implementation.
- Surface conditions allowing for technology implementation.
- Technology implementation feasibility based on environmental constraints and the legal framework.
- Establishing what is the best strategy for implementation of technologies sequentially in time and the proper preparation for future implementation at field level.
- Hands-on expertise and development of new technology products.
- Level of reservoir characterization.
- Economic considerations.
- Implementation of pilot projects to verify the feasibility of the technologies developed at sites under different conditions.

Orinoco Oil Belt

Joint Ventures



Beyond Petroleum

Orinoco Oil Belt:

Oil Sowing Plan

This Plan envisages a new business scheme for projects in the Orinoco Oil Belt. It includes mixed companies where the Venezuelan State owns a majority stake of 60 percent, and partners own a 40 percent stake. Royalties stand at 33.33 percent, and the income tax rate is 50 percent. The scheme also includes a special tax on extraordinary high oil prices; consolidation of integrated projects (production, high-severity upgrade, ranging from 30 and 42 ° API and segregation from 19- 26 ° API). Further, it seeks to maximize synergies between liquid and solid handling, storage and common services; possibility of developing other businesses with 34 percent income tax in gasification and hydrogen, among others.

Orinoco Socialist Project

This is one of the building blocks of the Oil Sowing Plan and promotes comprehensive social, economic and productive development of the Orinoco - Apure Axis. This project encompasses six strategic areas: Magna Reserva Project, business development, technology development, social development, oil and non-oil infrastructure and socialist productive projects.

Magna Reserva Project

This project, with a geopolitical vision and involving 22 countries, will help increase Venezuelan reserves to 316 billion barrels of oil, thus reaffirming Venezuela's standing as the country with the largest reserves of liquid hydrocarbons worldwide.

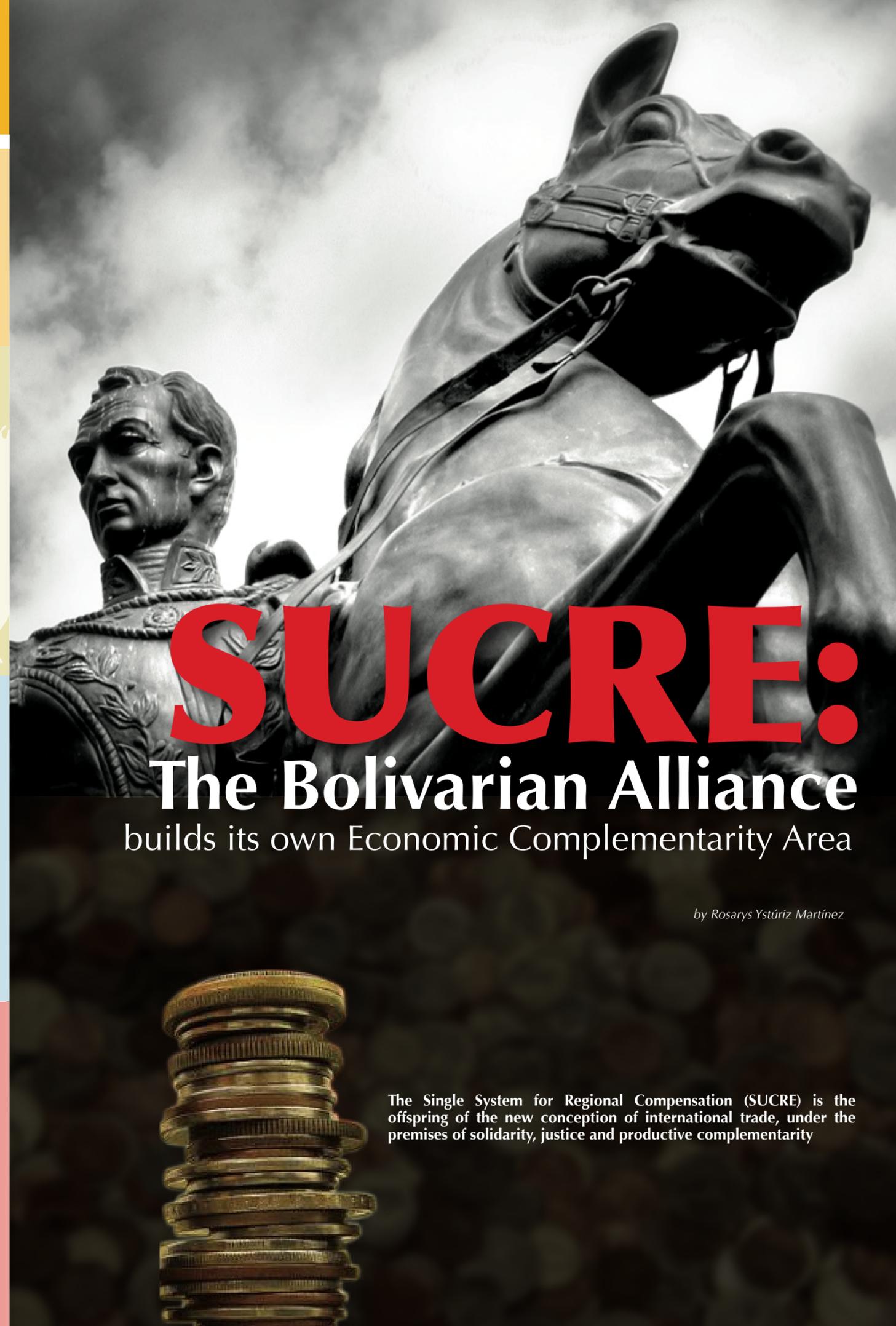
The strategy for the development of this project focuses on the assessment and certification of existing hydrocarbon reserves in the four fields that make up the Orinoco Oil Belt.

In 2008, through the Magna Reserva project, PDVSA set a record in the history of the Venezuelan oil industry by adding 74 billion barrels of oil to total oil reserves. In December 2009, Venezuela's total reserves stood at 211,2 billion barrels.

This area also comprises a significant volume of Original Gas in place. This suggests the possibility of gas self-sufficiency in future development strategies in the Orinoco Oil Belt, as steam drive will require large amounts of gas for generation.

Over the next 15 years, with the new development of the Orinoco Oil Belt, cumulative production is estimated at approximately 3 billion barrels per project.

Carabobo Project was launched in 2008 and includes extra-heavy oil production in this area of the Orinoco Oil Belt and the construction of two upgraders to generate high-quality crude.



SUCRE:

The Bolivarian Alliance

builds its own Economic Complementarity Area

by Rosarys Ystúriz Martínez

The Single System for Regional Compensation (SUCRE) is the offspring of the new conception of international trade, under the premises of solidarity, justice and productive complementarity

SUCRE
Single System for Regional Compensation

ISO Code
X995

Exchange rate
USD 1.25 per sucre

Countries included in the system
Cuba, Bolivia, Ecuador, Nicaragua and Venezuela.

Composition
The Sucre comprises a basket of currencies of the party States and a basket of foreign currencies (yen, dollar, euro and pound)
Cuba Cuban convertible peso (CUC)
Venezuela Bolívar
Nicaragua Cordoba
Bolivia Bolivian peso
Ecuador US dollar

Quotas of sucres
Each country is assigned a quota of sucres based on the size of its economy. These sucres are backed by securities denominated in local currency and registered in the relevant Central Bank's balance sheet as a liability with the Regional Monetary Council.

Much water has passed under the bridge since December 14, 2004, when revolutionary commanders Hugo Chávez and Fidel Castro announced to the world the creation of the Bolivarian Alternative (now Alliance) for the Peoples of Our America (ALBA) and charted directions for integration in our America:

"1.- Trade and investment should not be ends in themselves, but tools to achieve fair and sustainable development (...) 2.- Special and differential treatment, that takes into account the development degree of the different countries and the sizes of their economies, and guarantees access to all nations that are benefited by the integration process 3.- Economic complementarity and cooperation among countries and productions, so that a productive, efficient, and competitive specialization is promoted that is consistent with each country's balanced economic development (...) 4.- Cooperation and solidarity that are expressed in special plans aimed at the least developed countries in the region (...)"

A myriad of plans, projects and concrete actions in the political, social, economic, energy, scientific and cultural fields have stemmed from the ALBA. The Alliance now includes not only Cuba and Venezuela, but also the governments and peoples of Bolivia, Nicaragua, Dominica, Saint Vincent and the Grenadines, Antigua and Barbuda and Ecuador.

On the economic front, the ALBA - TCP (People's Trade Agreement) has begun to walk the path

towards a regional economic complementarity area. For the member countries of this new supportive and fair cooperation model, the current global crisis facing capitalism has evidenced the need to establish a new financial architecture.

Thus, ALBA member countries have voiced their conviction that it is necessary to establish mechanisms to curb economic vulnerability to foreign factors, boost the productive capacity of the region, promote trade and contribute to the reduction of asymmetries among countries.

Therefore, after many working sessions, the Alliance has a common unit of account that facilitates fair trade transactions: the Single System for Regional Compensation (SUCRE).

The first transaction with this system was completed in February 2010, with Venezuela buying 300 metric tons of rice from Cuba at a cost of USD 135,000, equivalent to 108,000 sucres.

Saving foreign currency

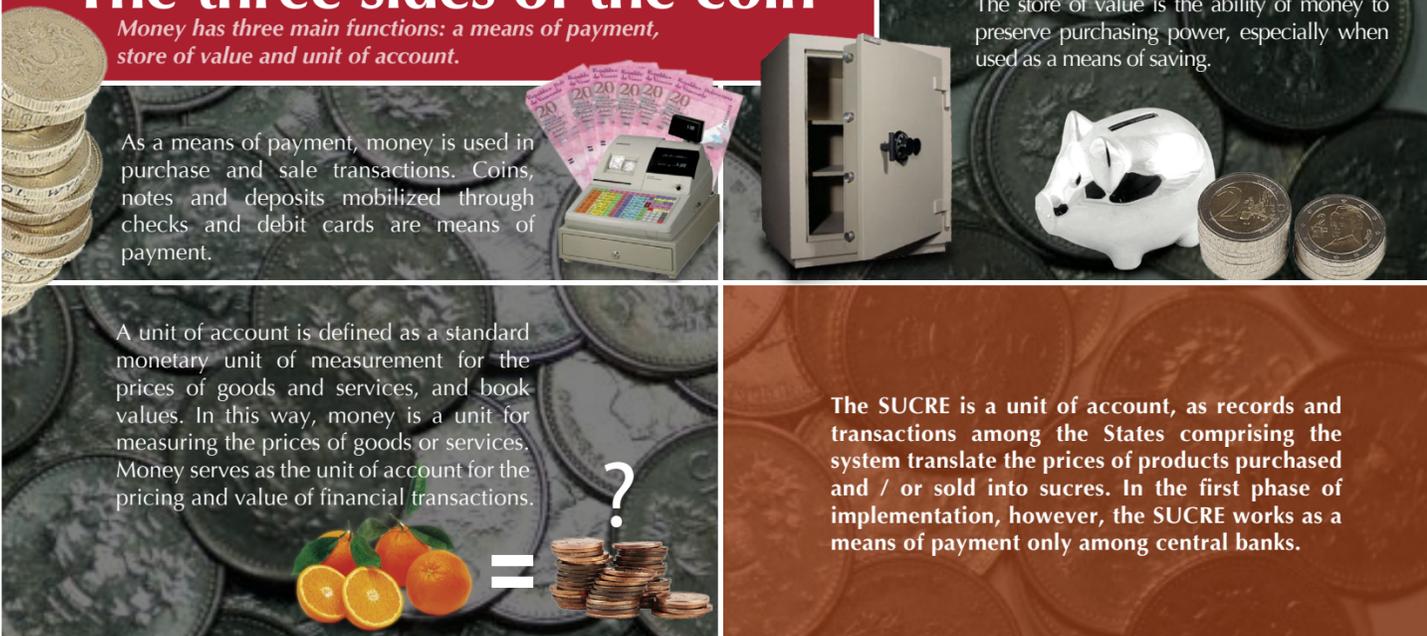
The SUCRE mechanism involves foreign exchange savings and a relief for the foreign reserves of the member countries of the system, as it helps central banks not to exchange US dollars on a daily basis. Every six months, the countries will pay in dollars or euros only the net balance of the semester. This practice moves the countries away from the so-called seigniorage, which is the price paid to a government (the United States in the case of the dollar) for its monopoly over the issue of paper money.

The three sides of the coin

Money has three main functions: a means of payment, store of value and unit of account.

As a means of payment, money is used in purchase and sale transactions. Coins, notes and deposits mobilized through checks and debit cards are means of payment.

A unit of account is defined as a standard monetary unit of measurement for the prices of goods and services, and book values. In this way, money is a unit for measuring the prices of goods or services. Money serves as the unit of account for the pricing and value of financial transactions.



The store of value is the ability of money to preserve purchasing power, especially when used as a means of saving.

The SUCRE is a unit of account, as records and transactions among the States comprising the system translate the prices of products purchased and / or sold into sucres. In the first phase of implementation, however, the SUCRE works as a means of payment only among central banks.

From a political standpoint, this aspect of the system seeks to vindicate the Marxist principle under which the use value of a currency is limited only to its exchange value, i.e. it has no value in itself for human welfare.

This explanation leads to the question: how much is a Sucre? The SUCRE Regional Monetary Council determined that, basically, a Sucre equals to USD 1.25.

This value was set based on a basket of currencies (the Bolivian peso, dollar, cordoba, convertible peso, bolivar, euro, yen) and their relative weight on domestic and foreign trade, as well as the size of the economies of the countries. This estimate is favorable for all countries and is adjusted from time to time.

The SUCRE from the inside

The SUCRE organizational structure is defined in the Articles of Agreement initiated during the Seventh Summit of Heads of State and Government of the ALBA-TCP, which was held

in Cochabamba on October 17, 2009. In this meeting, guidelines were set up for the Regional Monetary Council, the Common Unit of Account SUCRE, the Central Clearing House and the Reserve and Emergency Fund.

The Regional Monetary Council is the highest decision-making and governing body. The roles of the Council include issuing policies and standards, issuing and assigning sucres to each party State. Further, it suggests ways and mechanisms of coordination of macroeconomic policies in order to pave the way for the consolidation of a regional economic complementarity area.

The Regional Monetary Council operates with an Executive Board composed of one representative from each country, one of whom serves as president. It also includes an Executive Secretariat, which is the technical and administrative body.

The Regional Monetary Council is exclusively

responsible for the common unit of account SUCRE, the necessary moves to bolster SUCRE development and implementation, administration and publication of the exchange rates of the national currencies of the party States with respect to the SUCRE, thus making sure that the latter remains stable over time.

The Central Clearing House is the body responsible for settlement of transactions authorized by the Regional Monetary Council. The management and administration of the Central Clearing House shall be the responsibility of the agent banks appointed by the Regional Monetary Council and agreed by the Central Bank of each country.

The Reserve and Emergency Fund has a role to finance temporary liquidity shortfalls that may arise in the Central Clearing House. Further, it aims to reduce trade imbalances among party States through funding mechanisms that encourage production and exports.

The path from ALBA to SUCRE



13 months, 6 countries and a UNIT of account

Venezuelan economist Eudomar Tovar has participated in the definition of the Single System for Regional Compensation. Now, he is the president of the Regional Monetary Council and one of the most qualified experts to address the issue.

- How would you describe the debates preceding the creation of the SUCRE?

As in any process of creation, talks were not easy. Even though we share similar cultural situations, each country has its own interests. However, we were very happy that in 13 months we designed a unit of account that will allow us to boost trade. This process was marked by integration and harmony, which led to timely completion of the system.

- Is it possible to reach a balance when some countries have a large purchasing power and little exports and vice versa?

- One of the advantages of the SUCRE is that it always tends to seek a balance, i.e. the idea is not that one country takes advantage of another country. For example, what is the current status of industrialized countries in world markets? They have huge export capacity. And what about weak countries? They usually have a deficit and are in a bad situation compared to big countries.

With the SUCRE, we are precisely trying to avoid that and rather seeking a balance in trade flows among countries. The SUCRE is a new model that moves away from traditional payment systems in terms of compensation. The SUCRE is not only a unit of account, but it also intends to facilitate and increase trade among member countries.

Further, we designed a mechanism to strengthen the SUCRE in case of liquidity problems in the Clearing House during payments. This resulted in the creation of the Reserve and Emergency Fund of SUCRE, which finances investment projects in nations with low levels of exports, for purposes of increasing the supply of exportable goods.

That means that if I am making a transaction with a particular country and I realize that the country cannot export, but has great potential to produce an item, the fund can finance projects to expand the exportable supply of that country.

- Have you completed any study to determine the strengths and advantages of each member country related to a given item?

- We are precisely in the process of identifying the advantages. For example, as regards Venezuela, for the purposes of the SUCRE we have not considered oil, but non-traditional products. We are prioritizing the possibility to strengthen other sectors that are necessary for our country. Further, there are oil-related agreements with other countries of ALBA. The SUCRE is based on the principles of cooperation, complementarity and respect for the sovereignty of peoples, and that is very important. This is not about a country taking advantage of another, but all countries having the same advantages to strengthen their economies.

- Sometimes the domestic industry requires foreign currency to expand production capacity. Such expansion would be funded with foreign currency?

- No, because funding is granted within the country. If any country requires so, the Fund may grant loans in foreign currency, but the important thing here is achieving trade expansion by taking advantage of the strengths of the domestic economy. Under SUCRE, our goal is phasing out foreign currency and embrace domestic currencies for funding and transactions. We intend to bolster trade, thus improving our peoples' welfare.

- Is it possible to get rid of the dollar?

- Not only of the dollar but also any foreign currency. The problem facing our economies is that they generally require foreign exchange to import raw materials, inputs for productive activities. In this particular case, payments are not made in dollars but in Sucres.

We will save foreign exchange as trade increases. In short, foreign exchange that used to be allocated to trade can be used for other significant projects. That is an advantage and that is why we have talked about moving away from the dollar or others foreign currencies progressively. We intend to save foreign exchange in order to invest in larger projects and address other needs. Further, we are to strengthen our economies domestically with this integration process that will create jobs, increase most people's income to purchase goods and services. Obviously, this will take place within the framework of complementarity and solidarity among peoples.

- What are the future prospects of the Sucre?

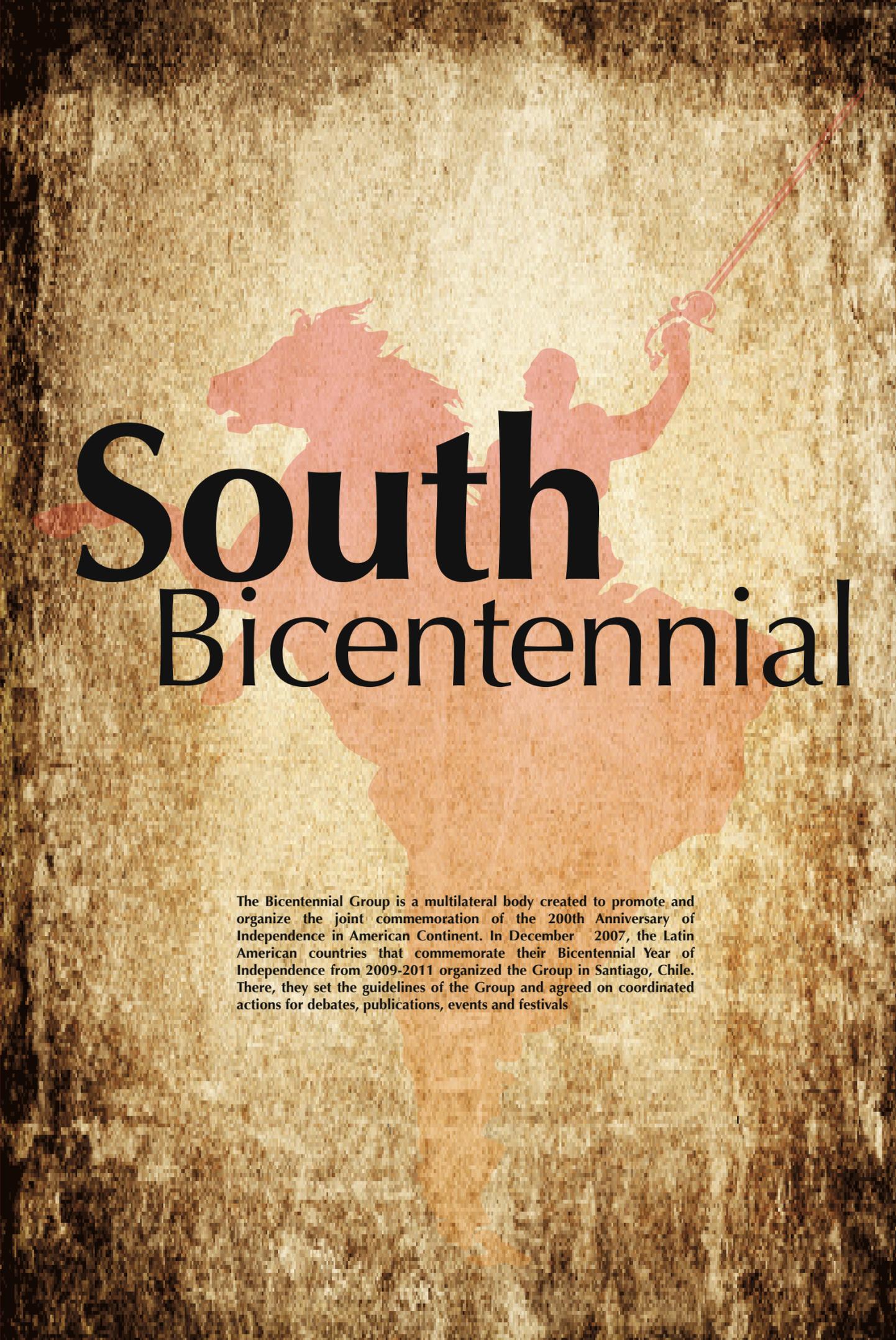
- Since trade of traditional and non-traditional products amounts to USD 10 billion, there is no doubt that the Sucre has many prospects for growth among the members of the ALBA. Obviously, the Sucre will grow as long as there is trade and in that sense we are making significant efforts with import and export agencies in all member countries, particularly with exporters, in order to expand exports further.

Once ratified by the parliaments of all member nations, the Sucre will begin to operate fully and trade will increase.

- Can we make a comparison between the Sucre and the Euro?

- The European Union had a unit of account called ECU for 30 years. Obviously, as integration has made significant progress they have created a physical currency, the Euro. That physical currency has been important for the European economy. It began at an exchange rate to the dollar of 1 and has hit 1.50.

As regards the Sucre, in only 13 months, six countries reached consensus and implemented a unit of account, and that is extremely important.



South Bicentennial

The Bicentennial Group is a multilateral body created to promote and organize the joint commemoration of the 200th Anniversary of Independence in American Continent. In December 2007, the Latin American countries that commemorate their Bicentennial Year of Independence from 2009-2011 organized the Group in Santiago, Chile. There, they set the guidelines of the Group and agreed on coordinated actions for debates, publications, events and festivals

Bicentennial Year of Independence in South American Countries



Urban spaces heritage Revamped

by José Castillo Machalskys

PDVSA La Estancia, along with other government agencies, is revamping long-cherished works of art Esfera Caracas, Abra Solar, Fisicromía en Honor a Don Andrés Bello, and Los Cerritos, as well as the areas of Plaza Venezuela Fountain, the Carabobo Park square and the Sabana Grande Boulevard, for everybody to enjoy

Under a dynamic, experience-based, inclusive and expansive approach, PDVSA La Estancia made an unprecedented work of human and community development as prescribed in its Social, Cultural and Heritage Rescue axes of action.

With free, high-quality and education-centered activities, PDVSA La Estancia —the social and cultural arm of the Venezuelan oil industry— provides a wide array of activities on a weekly basis at its three venues: in the cities of Caracas, Paraguaná and Maracaibo, as well as in alternative urban spaces.

Additionally, PDVSA La Estancia's Heritage Rescue plans are gaining ground as an increasing number of areas of architectural, artistic and historical significance have been revamped for Venezuelans and foreigners to enjoy.

Recovering the Historical Memory

The Heritage Rescue axis keeps making headway among the multidisciplinary activities of PDVSA La Estancia. "It was not possible to continue to spread culture in an impersonal and exclusive manner, as if it were endangered. On the contrary, we determined that we had to mirror culture as an everyday fact, as a real heritage asset. Thus, we rescued iconic cultural spaces, where art and history speak for themselves," says Beatrice Sansó de Ramírez, the Managing Director of PDVSA La Estancia.

"Revitalizing an architectural icon or urban landmark is a big responsibility, for its image remains in the collective historical memory. Alteration thereof could put and end to a part of us that will never recover. Therefore,

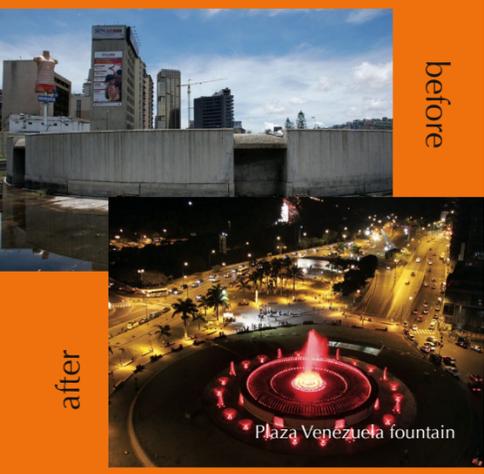
whenever PDVSA La Estancia undertakes to restore any heritage asset, we contact the relevant authors and designers, to ensure the most reliable image of the original work," adds Sansó de Ramírez.

Based on the Bolivarian Government's principles of shared responsibility, cooperation and integration, the social and cultural arm of PDVSA coordinates these efforts with other government bodies such as the Bolivarian Mayoralty of the Libertador Municipality, the Government of the Capital District, C.A. Metro de Caracas, Electricidad de Caracas and others.

In 2006, PDVSA La Estancia undertook the challenge to restore Esfera Caracas, a masterpiece authored by Jesús Soto, the Master of Kinetic Art, located on Francisco Fajardo Highway, Caracas, Venezuela.

Through the Fundación Jesús Soto, PDVSA La Estancia contacted engineer Víctor Guzmán, who was in charge of the original installation of the structure in 1996. Based on the first blueprints, sketches and documents related to the artwork, reconstruction began in February 2006. The new rods were manufactured in the same aluminum alloy that was originally used in the 2,000 rods that make up the sphere. The rods were measured, cut, polished, screwed and painted by hand, just like the upper grids to which the rods are attached.

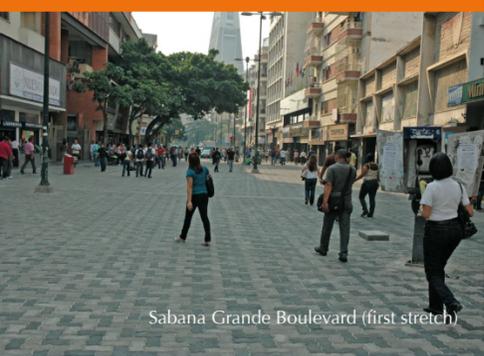
In September 2006, with an investment of USD 280,000, the landmark orange light mirage, inspired by the sunsets in Venezuelan plains, came back to life and now lights the way of those who are going to work or return home amidst dense traffic in the southeastern area of Caracas.



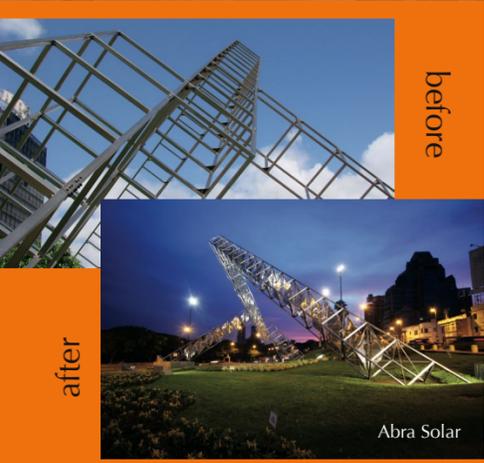
before

after

Plaza Venezuela fountain



Sabana Grande Boulevard (first stretch)



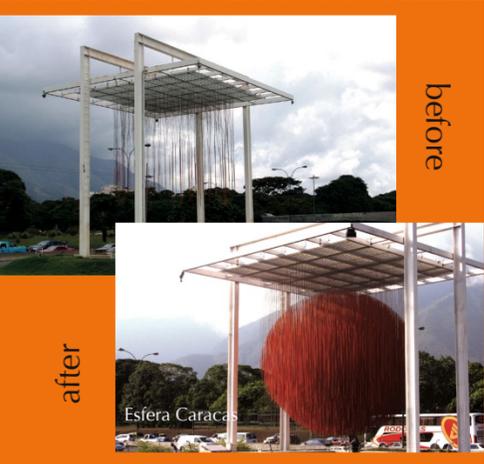
before

after

Abra Solar



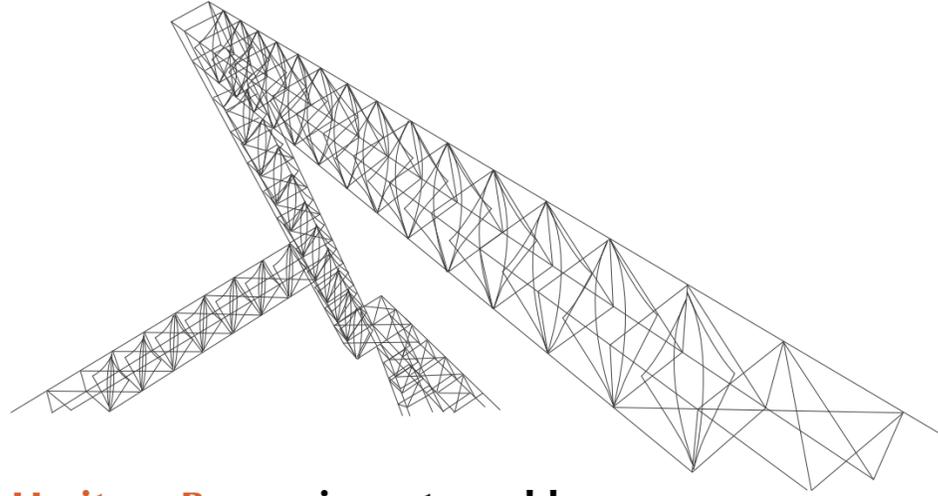
Narváez fountain in Carabobo Park



before

after

Esfera Caracas



Heritage Rescue is unstoppable

Following successful restoration of Esfera Caracas, an even bigger challenge emerged: recovering the splendor of the Monumental Complex of Plaza Venezuela square.

The experience gained with Esfera Caracas was very helpful in restoring the Abra Solar, a masterpiece by Alejandro Otero, the Master of Abstract Art, located in Plaza Venezuela square. Gil Otero, a graphic designer and the son of Alejandro Otero, played a role in the restoration. Experts involved in this work also included engineer Mikel Arbeloa, the original project engineer of Abra Solar.

“To rebuild the Abra Solar, we had to resort to the Aguja Solar, another work of my father that is located in Guyana, to copy the model of the rotating blades that are inside the cubicles, for we had no iconographic reference of the original work,” said Gil Otero.

During months of hard work, 33 replicas of the cubicles and blades were manufactured. The blades are 10.5-feet long and weigh 265 lb. Finally, in November 2007, following an investment of USD 792,200, the Abra Solar started to shine in the wind again.

The reconstruction of the Fisicromía en Honor a Don Andrés Bello, a work authored by Carlos Cruz Diez and located in Plaza Venezuela square, was also a big challenge. Restoration works were led by artist José Armando “Nanín” García, an expert in Cruz Diez’s work, his pupil and friend. Raúl Colters, a teacher of metallurgy at the Simón Bolívar University, participated in the project as well.

The Fisicromía en Honor a Don Andrés Bello is a 4,305 square feet work made in three-color ceramic in 1982 with a technique that is

currently discontinued. Therefore, it was necessary to manufacture the material again with the ancient painting technique to achieve the same finish. A total of 660 anodized aluminum cross sections and wings, 330 rectangular wings, 660 aluminum parts, 5,280 stainless steel screws, and 330 iron hooks were manufactured. The kaleidoscopic combination of color variations started to delight Caracas again in March 2008, following an investment of USD 512,000.

Gil Otero participated in the reconstruction of Los Cerritos, a monumental creation of his parents, Alejandro Otero and Mercedes Pardo. Los Cerritos is located in western Caracas, specifically in the area of Catia. Restoration included the dismantling of its 79 wind vanes, renewing the original colors and sandblasting. These works required an investment of USD 326,200 and were completed in December 2008.

As regards the iconic Plaza Venezuela fountain, its fifth version was inaugurated in August 2009, following restoration works that were closely monitored by local media. During the process, PDVSA La Estancia was advised by engineer Santos Michelena Carcaño, the developer of the fountain. Michelena Carcaño set the guidelines to preserve the usual structure of the fountain. Further, state-of-the-art elements were added, including a lighting system featuring 16-million color combinations, with up to 95-percent energy saving; a sound system that creates a show of music, light and vibration, controlled by an electronic brain that automates these and other features. The restoration cost USD 4.66 million.

The space is its people

A key aspect addressed by the Heritage Rescue axis of PDVSA La Estancia are the relationships between urban spaces and their inhabitants.

“As part of restoration works of these pieces and places of great historic interest, PDVSA La Estancia has a Social Development team. They work closely with the communities that live in these areas, while supporting and monitoring their initiatives. This allows us to share responsibilities with people, while people get actively involved in reconstruction works, thus improving their quality of life. Architectural heritage is inhabited by the people; it is not isolated or untouchable,” says Sansó de Ramírez.

Systematic execution of the Sabana Grande Boulevard Comprehensive Restoration Project, promoted by PDVSA La Estancia since 2007, attests to this. A contest for an urban restoration plan of the Sabana Grande Boulevard took place in late 2006. Subsequently, a multi-disciplinary team was created which comprises various government agencies that listen to suggestions from the residents of the pedestrian street.

“Every week, we hold meetings with residents and business owners to design strategies, discuss their problems and find solutions that favor everyone. And the results could not have been better,” says Virginia Vivas, PDVSA La Estancia’s representative in this project.

In this way, with people’s support and effort, it has been possible to complete the stages that will lead to total refitting of the Sabana Grande Boulevard.

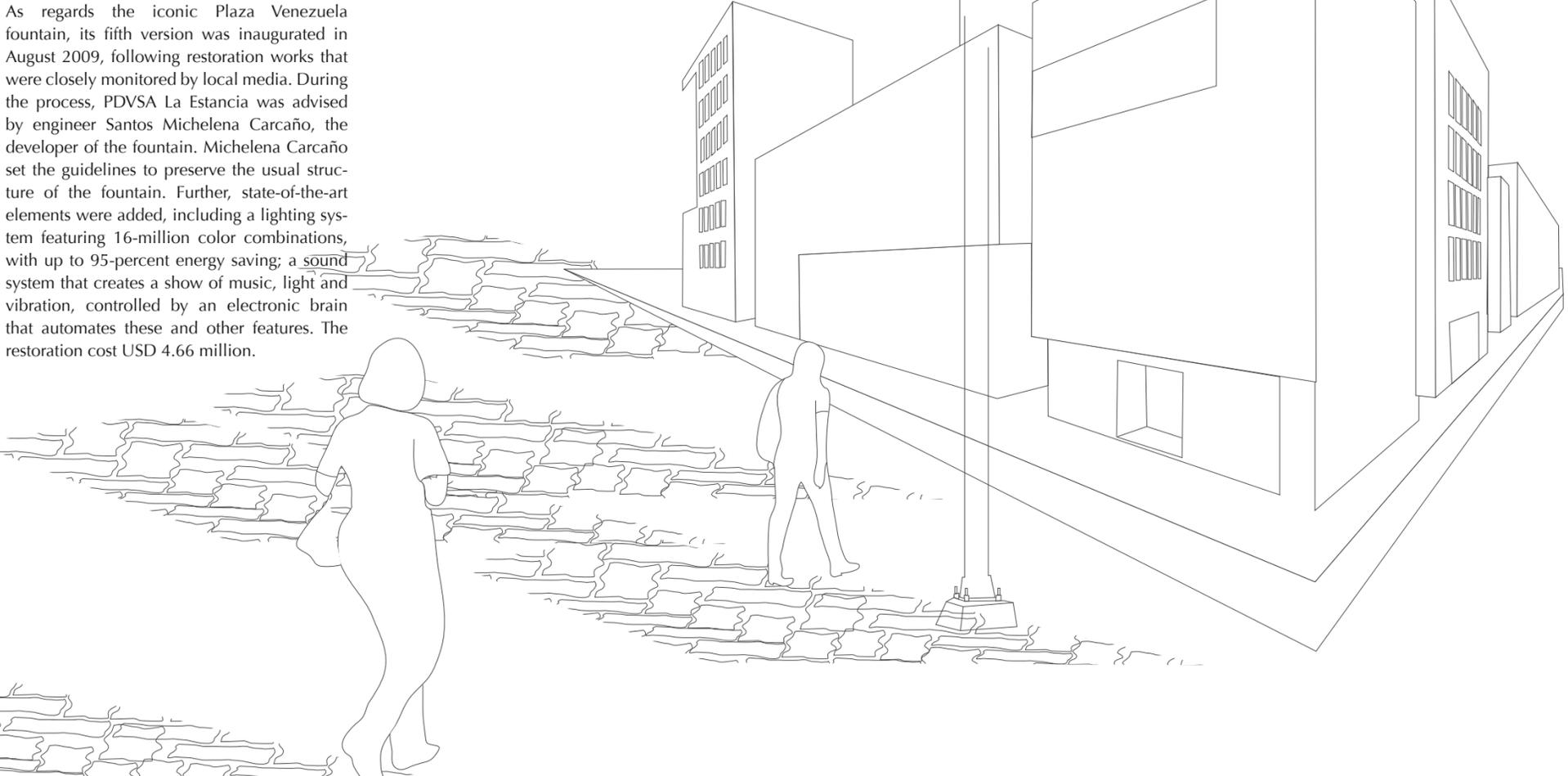
In 2007, 77 light poles were installed. Further, peddlers were moved out of the boulevard, which resulted in pedestrians and visitors coming back to the area. In 2008, the boulevard was paved and 125 light poles were installed in its 26 cross streets. In 2009, light poles were installed in Casanova and Solano avenues, while works began on the model stretch, from the Villalor and San Gerónimo streets to the church.

Now, the rest of the project is being completed at a steady pace. Total removal and replacement of old cobblestones, relocation of illegal kiosks and installation of city appliances are under way.

“That goes for physical appearance, but as regards the social field, we have focused on the neighbors of the sector Hoyo de Las Delicias. Further, we have bolstered street cultural activities, including musical performances and theater for children and adults on weekends. This unique approach to people is what has allowed us to coordinate this work with minimal impact on trade and activities in general,” stresses Vivas.

Another major project that is moving forward with people’s support is the Parque Carabobo Comprehensive Refitting Project. In Parque Carabobo there is a sculpture erected in 1936 by artist Francisco Narváez, born in Margarita Island. Its importance lies in that it was the first urban beautification project conceived in the 20th Century in Venezuela. Further, this sculpture highlights the nativist character of the great figures represented by Narváez, with his bold combination of curves and straight lines, which marked a turning point in figurative sculpture. Neighbor and businessmen associations of this picturesque area of Caracas have become aware of the positive impact of the restoration of this artistic legacy and have actively supported the initiative.

“With people’s involvement, either directly, or as witnesses of the works, PDVSA La Estancia also aims to encourage a better sense of care and belonging. In all the areas revamped, we have launched campaigns encouraging people to make a proper use of spaces, to throw waste in trash cans, not to damage the areas rescued, to safeguard the historical memory of many works that once were taken away from us, for future generations to know and behold,” concludes Sansó de Ramírez.



How Much Oil has Venezuela Really Been Producing



Por Juan Carlos Boué

Dr Boué is Senior Advisor to Venezuela's Ministry of Energy and Petroleum

At the 101st meeting of the OPEC Conference in November 1996, it was decided that, from then on, the output of crude oil of the member countries for the purpose of assessing compliance with their respective quotas would be determined on the basis of production estimates published by six secondary sources, to wit: Cambridge Energy Research Associates (CERA), the Centre for Global Energy Studies (CGES), the Energy Information Agency of the US Department of Energy (EIA), the International Energy Agency (IEA), Petroleum Intelligence Weekly (PIW) and Platts.

This roundabout mechanism was meant to address the situation whereby certain member countries were producing oil in excess of their assigned quota, and then communicating to the OPEC Secretariat output figures which did not reflect this violation of quota.

Since 1986, OPEC has just had the one meaningful policy lever to pursue its objectives

(the quota system), and this mechanism was tantamount to abandoning this lever in the hands of organizations whose opinion about the whole OPEC set-up ranged from the uncompromisingly and institutionally hostile (EIA, IEA), to the almost-but-not-quite neutral (Platts), by way of the dismissive bordering on the contemptuous (CERA, CGES and PIW).

At the time when this mechanism was introduced, the OPEC member country exceeding its production quota in the most blatant and brazen fashion was Venezuela. After November 1996, Venezuela did not betray any inclination to curb its oil output to collaborate with other member countries in stabilizing oil prices. The only discernible change in the prevailing market situation was that it was left to the secondary sources (rather than the OPEC Secretariat) to highlight the gaping gulf between Venezuela's output, on the one hand, and its quota commitments, on the other. And this the secondary sources did with mounting glee.

Why Rely On Secondary Sources Of Data



Given the thrust of Venezuelan output policy at the time, it is somewhat surprising to see that it was precisely representatives of this country, which came up with the idea of using output estimates culled from secondary sources as an alternative form of production monitoring. Furthermore, Venezuela was also instrumental in the nomination and selection of the six secondary sources mentioned above.

These facts beg an obvious question: why would Venezuela espouse this oversight mechanism in the first place, when it was this country's behavior that was contributing in a major way to market instability, not least by hamstringing OPEC's ability to restrict supplies? The answer to this question is counterintuitive: the idea that quota compliance be assessed on the basis of estimates from secondary sources was an important plank in a long-term strategy devised by the top management of the Venezuelan national oil company (in cahoots with some major international oil companies and supra-national institutions), to make the country withdraw from OPEC.

Two factors were largely responsible for shaping the political interaction between Venezuela and other OPEC member countries during much of the 1990s. The first one was that the terminal decay of the Venezuelan political system had allowed *Petróleos de Venezuela* (PDVSA) to dismantle the institutional framework of the country's oil industry and to take charge of all aspects of oil policy, including the handling of its relationships with OPEC (a body which PDVSA always saw as an Arab-led cabal whose main goal was to deprive Venezuela of its rightful place in the oil firmament). The second one was the knowledge that extra-heavy crude oils from the Orinoco Oil Belt would, in the

not too distant future, account for the bulk of Venezuelan oil output

In this regard, it is worth recalling that, by late 1996, extra-heavy crude production for blending into commercial segregations such as *Merey* or *Leona* was already running at around 300,000 b/d, and a further 60,000 b/d or so was being transformed into *Orimulsion*, a boiler fuel for oil-fired power stations (sold at a delivered price on a par with that of steam coal). Even more importantly, the Venezuelan Congress had either approved, or was in the process of approving, four upgrading joint ventures with international oil companies (with a joint expected output of more than 650,000 b/d by 2005), as well as two more ventures to produce around 200,000 b/d of crude to transform into *Orimulsion*. And to cap all of this off, the short and medium term prospects for additional upgrading (and even *Orimulsion*) ventures appeared to be very promising.

PDVSA's leadership accepted that, even though their policy of producing oil à outrance might very well succeed in rending OPEC asunder, the outright and formal withdrawal of Venezuela from OPEC was not a proposition that they would be able to force on the country's political leadership, despite the latter's chronic weakness. But there was a way in which they could make Venezuela leave OPEC piecemeal, albeit with less noise and political fallout and, hence, greater probabilities of success. For this to happen, however, oil from the Orinoco Oil Belt would have to be excluded from the Venezuelan quota by some means. Thus, as production of such oil rose in time, a progressively smaller –and ultimately irrelevant– proportion of Venezuela's output would be involved in the OPEC quota system.



The foundations for this subterfuge had been carefully laid down a few years before, with the commercial launch of Orimulsion. Venezuela (or rather, PDVSA) claimed that this fuel was prepared by emulsifying Orinoco natural bitumen in water. This claim was never more than a fabrication, though.

Venezuelan extra-heavy crudes and Canadian natural bitumens are remarkably similar in terms of their respective densities, sulfur content and general chemical compositions, which helped give credence to PDVSA's assertion that the former were also natural bitumens. Moreover, since natural bitumens are universally considered to be non-conventional hydrocarbons, PDVSA argued by analogy that this name should be applied to the Orinoco extra-heavy crudes as well, particularly since the latter did not satisfy the definition of crude oil informally used by OPEC since 1983 (the OPEC Conference has never formally adopted a definition of crude oil, only of condensate, but from that year onwards, its Statistical Annual has incorporated a formulation taken over from the American Petroleum Institute, whereby crude oil is said to be a liquid not only underground but above ground as well, at standard conditions of temperature and pressure).

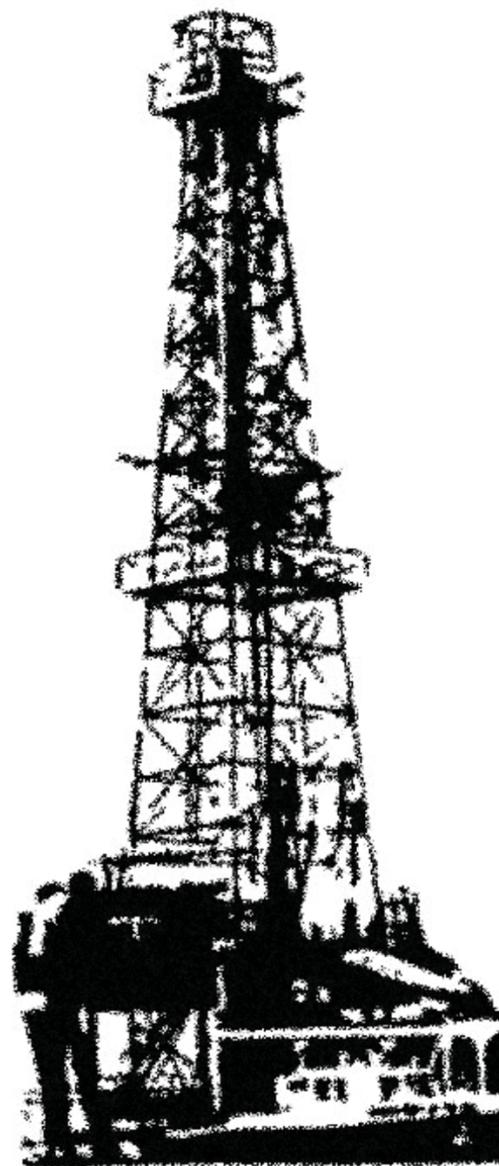
The Orimulsion boondoggle served to establish an all-important precedent in terms

of the long-term anti-OPEC objectives of the PDVSA leadership, namely that production of non-conventional oil is not subject to quota. OPEC's acquiescence towards Orimulsion at the time of the latter's gestation doubtless owed as much to the marginal volumes initially involved as to the organization's aversion to unpleasant political discussions.

Unfortunately, OPEC's "decision through non-decision" allowed PDVSA to drive a thin wedge through the heart of the quota system. The idea was that this breach would be relentlessly widened as the upgrading projects came on stream. However, since volumes from these large projects would have a non-negligible impact on the oil price, PDVSA naturally did not want to leave it up to OPEC to decide whether or not they should be covered by the quota system.

It would be much preferable if someone could be relied upon to report Venezuela's oil output "correctly" to OPEC (i.e. the production of 'conventional oil' subject to quota), and this is precisely where the secondary sources came in. It is no accident that the secondary sources that OPEC chose in 1996 (at the instigation of Venezuela), all hold as a matter of dogma that 'non-conventional' is fully synonymous to 'not subject to quota,' even though the OPEC Conference has never issued any pronouncement whatsoever in this sense.

Impact of Oil Industry Strike



The strike that paralyzed the Venezuelan oil industry between November 2002 and March 2003 wrought untold damage on many of its oil fields, especially those around Lake Maracaibo. During the recovery period after the strike, for obvious reasons, Venezuela was not in a position to fulfill its OPEC quota.

Come May 2003, however, Venezuelan total crude production had more or less recovered to pre-strike levels, thanks in no small part to a very significant increase in the production of Orinoco extra-heavy oil that compensated for the accelerated decline in output from other areas (in other words, after the strike, Orinoco extra-heavy production was responsible for a much higher share of Venezuelan production than before the strike: currently, it accounts for more than a quarter of crude oil output).

However, the secondary sources persisted in reporting that Venezuela was producing way below quota, claiming that the country's oil industry had not recovered from the sabotage (a situation for which they readily blamed the Chávez government). Nary a mention was made of their accounting changes or their effect, however, beyond notes in footnotes explaining that upgraded crude oil output was not considered towards Venezuela's "crude target compliance calculation."

By the by, since synthetic/upgraded crude is, strictly speaking, a refined product, its exclusion from these statistics is understandable, indeed justifiable. But, the same cannot be said for the exclusion from the statistics of the extra-heavy crude from which such synthetic/upgraded crude is derived.

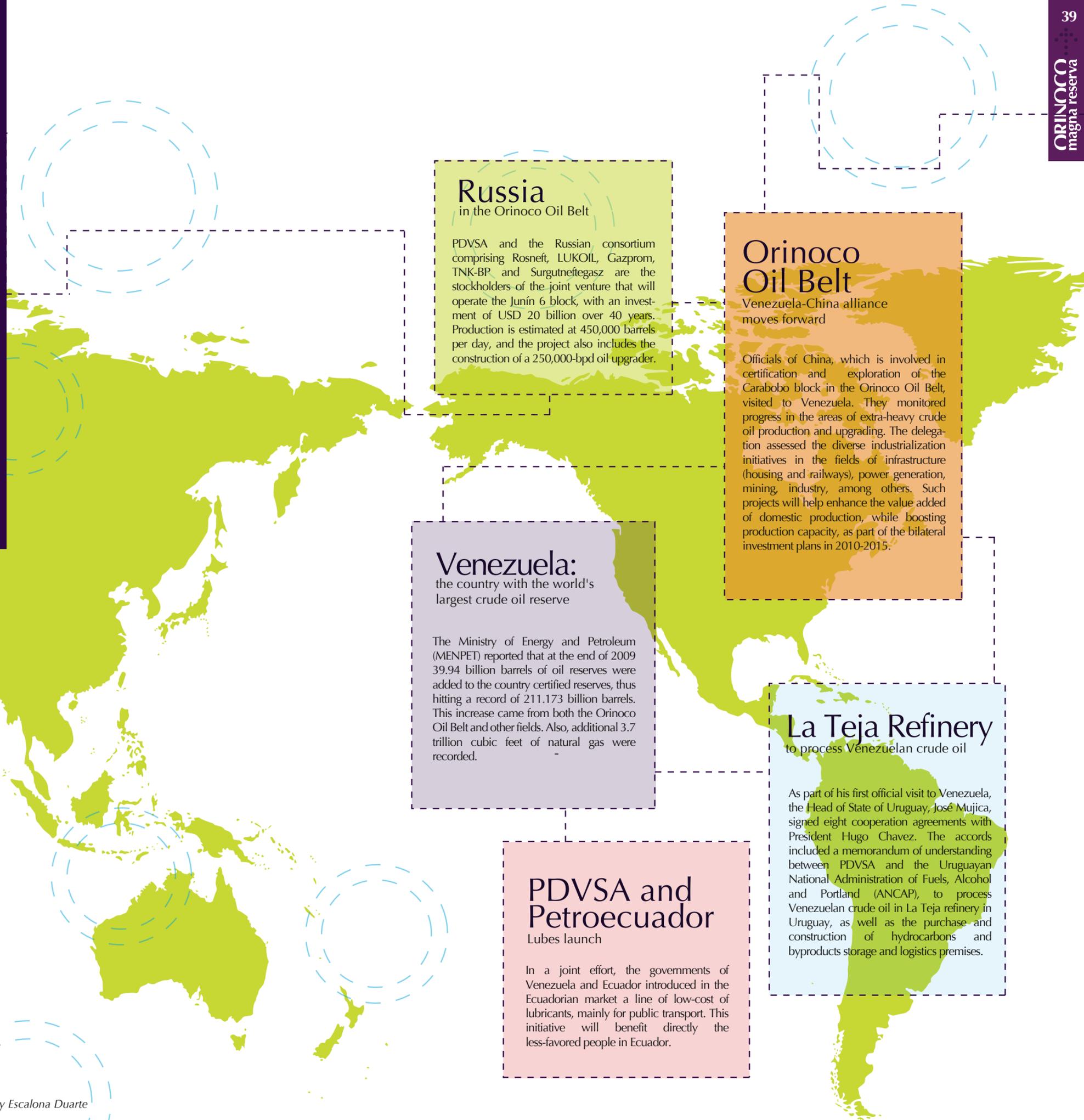
What is the source of the information that the IEA and other secondary sources are using in order to arrive at their production estimates? Up until the 2002-03 strike, PDVSA maintai-

ned informal but very strong bonds with certain secondary sources. After the strike, the latter maintained their strong links with the PDVSA faction that unsuccessfully tried to topple the Chávez government. And given that the strike severed the flow of detailed information that PDVSA used to make available to them, these secondary sources resorted to sourcing unofficial information from "tertiary sources" consisting of individuals belonging to the defeated PDVSA faction. And the information on output that these tertiary sources make available simply does not include Orinoco crude volumes, partly as a matter of ideological principle (these individuals were the very ones who set the whole thing up in order that such crudes be excluded from the quota, after all) and, increasingly, on grounds of political expediency.

This latter angle is easy to grasp. These individuals use the data published by the IEA and other secondary sources (and, paradoxically, legitimized by OPEC itself, through its use of the secondary sources in quota monitoring) as 'proof' that the Chávez administration has been responsible for a calamitous collapse in Venezuelan oil output.

The inherent inaccuracy of global stock data would make it quite easy for the currently unreported Venezuelan barrels to be lost among all the statistical noise. In this regard, it is worthwhile to point out that the spread between the highest and the lowest estimated stockbuild figures for 2009 in the major market tracking publications is currently running at the equivalent of 1 million b/d. A far more pertinent question for the market, as well as energy policymakers everywhere, would appear to be the following: what would the price of oil had been in September 2008 had Venezuela really been producing what the IEA and other secondary sources claimed it was producing?

by Betty Escalona Duarte



Russia

in the Orinoco Oil Belt

PDVSA and the Russian consortium comprising Rosneft, LUKOIL, Gazprom, TNK-BP and Surgutneftegasz are the stockholders of the joint venture that will operate the Junín 6 block, with an investment of USD 20 billion over 40 years. Production is estimated at 450,000 barrels per day, and the project also includes the construction of a 250,000-bpd oil upgrader.

Orinoco Oil Belt

Venezuela-China alliance moves forward

Officials of China, which is involved in certification and exploration of the Carabobo block in the Orinoco Oil Belt, visited to Venezuela. They monitored progress in the areas of extra-heavy crude oil production and upgrading. The delegation assessed the diverse industrialization initiatives in the fields of infrastructure (housing and railways), power generation, mining, industry, among others. Such projects will help enhance the value added of domestic production, while boosting production capacity, as part of the bilateral investment plans in 2010-2015.

Venezuela:

the country with the world's largest crude oil reserve

The Ministry of Energy and Petroleum (MENPET) reported that at the end of 2009 39.94 billion barrels of oil reserves were added to the country certified reserves, thus hitting a record of 211.173 billion barrels. This increase came from both the Orinoco Oil Belt and other fields. Also, additional 3.7 trillion cubic feet of natural gas were recorded.

La Teja Refinery

to process Venezuelan crude oil

As part of his first official visit to Venezuela, the Head of State of Uruguay, José Mujica, signed eight cooperation agreements with President Hugo Chavez. The accords included a memorandum of understanding between PDVSA and the Uruguayan National Administration of Fuels, Alcohol and Portland (ANCAP), to process Venezuelan crude oil in La Teja refinery in Uruguay, as well as the purchase and construction of hydrocarbons and byproducts storage and logistics premises.

PDVSA and Petroecuador

Lubes launch

In a joint effort, the governments of Venezuela and Ecuador introduced in the Ecuadorian market a line of low-cost of lubricants, mainly for public transport. This initiative will benefit directly the less-favored people in Ecuador.



THE **OIL WORKING** CLASS
IS TRUE

TO **CHAVEZ**
AND **SOCIALISM**



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