



2009 ARPEL CONFERENCE

Sustainable Development

The role of the Oil and Gas
industry in Latin America
and the Caribbean

Punta del Este, Uruguay - April 22-24, 2009

Report



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Milton Costa Filho



Introduction

The energy industry, and especially the oil and gas industry, faces important challenges in very dynamic disciplines, such as technology, economy, environment and the social area. The civil society also increases its participation, and its expectations grow with respect to the role of companies. They -and especially energy companies- are expected to perform with social responsibility and respect for the environment.

Social responsibility, ethics, transparency and accountability, human rights, climate change, biofuels, biodiversity, economic development and local content, renewable energies, training and technology are some of the pillars for growth and transformation of a fundamental sector in the sustainable development of Latin America and the Caribbean.

The oil and gas industry is constantly transforming to face the challenges implied by sustainable

development on the basis of a new ethics in business. In this new paradigm, it is sought to integrate the economic, social and environmental aspects efficiently in all levels of management.

Under this managerial scheme, the companies should administer not only their financial risks but also their environmental and social risks, risks related to occupational health and safety, technological and political risks, among others. In this way, the 2009 ARPEL Conference - "Sustainable Development - The role of the oil and gas industry in Latin America and the Caribbean" proposed an analysis of the most significant issues of the sector, from a strategic and comprehensive perspective.

The Conference promoted the dialogue with all the stakeholders related to the value chain of the industry, including governments, goods and service providers,

financial institutions, consulting firms, universities and non-governmental organizations. The aim was to contribute to a better understanding of the expectations of all the energy industry players through the exchange of information, experiences and management tools.

The Conference had the following objectives

- Promoting dialogue and interaction with all the sectors related to the value chain of the energy industry
- Raising awareness of the participants about the interrelation among the economic, environmental and social issues, and highlighting its significance for the sustainability of the industry.
- Providing a complete strategic vision of the most important issues in the agenda of the energy industry
- Exchanging experiences and best practices on specific issues of the industry with a comprehensive vision and under the perspective of the different players.
- Promoting the development of globally responsible leaders.

Prior to the Conference, ARPEL's community participated in seminars on specific issues and held meetings of its Committees, its Integration Team and its Board of Directors to analyze the progress made in the work plans and the situation of the industry as a result of the global financial crisis.

These activities - along with the Conference and the survey to high executives made - were a valuable contribution for all the participants, and allowed ARPEL to determine relevant issues and the need for future actions, such as:

- holding a workshop on the reduction of costs in diverse areas of the industry, one of the most discussed topics during the conference;
- creating a committee to work on aspects linked to human development, training, technology, innovation and intercultural relations, and
- the opportunity to develop the vision of an energy agenda for the region with the participation of all players.

We hope that our experience with this series of ARPEL Conferences on sustainable development opens a space for understanding and dialogue, and allows us to grow together with all the parties engaged in energy issues in the path towards sustainability.

Current and future situation of the oil and gas industry in Latin America and the Caribbean

Geopolitics and impact of the global financial crisis

Global geopolitics is immersed in a complex situation unseen since World War II. The lack of leadership causes uncertainty about the future, with consequences at the level of the oil and gas industry.

The global financial crisis causes economic changes. These add to the changes in the energy sector, as a result of the pressures on the environment generated by the climate change.

Within this new global context, the Latin American and Caribbean region will have to find its place and be prepared for the impact of these changes.

"The region will require a sustainable development

not only in environmental and social terms, but also in the diversification of the energy matrix. Latin America has an important role to play in the new global energy matrix, and must take advantage of the fact that the United States and Asia are turning to it as a future energy supplier as a way to be less dependent on the Middle East. The region has grown substantially in the last few years, and has learned the lessons of successive crisis, implementing diverse policies that have allowed it to mitigate the impact of the global crisis, and have made it look a much more positive region when compared with others", emphasized **Fareed Mohamedi**, Partner and Head of Markets & Country Strategies Group of PFC Energy Consultants.

Although the crisis has caused an important restriction of the credit, with the consequential threat of paralysis of new projects, emphasis was placed on the importance of maintaining investments and energy



Milton Costa Filho and Fareed Mohamedi



Raúl Sendic



José Félix García

development policies as a way to be prepared for the future demand. The crisis leads the companies in the sector to think carefully before making decisions, but the society will continue growing and consuming energy, emphasized **Raúl Sendic**, President of ANCAP, and **Milton Costa Filho**, Chairman of the ARPEL Board of Directors.

Enrique Iglesias, Executive Secretary of the Ibero-American General Secretariat, analyzed the importance of maintaining investments in times of crisis, reducing



carbon emissions and monitoring the good practices when outsourcing activities. After summarizing the characteristics of the global economic crisis, which he defined as "unprecedented, unforeseeable, unexpected and rebellious", Iglesias said that it was necessary to recover the ethical values stated by Adam Smith to complement the economic values. He also warned about the intervention of the state as a tool to recover from the crisis. He asserted, "the tendency to protectionism is an irresistible temptation, but it is the worst remedy in the world to solve the problems".

José Félix García, Executive Secretary of ARPEL, stated that transforming the energy matrix is "the only possible way" in the industry and recalled that the strategy of sustainability applied by ARPEL "is not an invention, but the evolution of a constructive process" toward the vision of ARPEL of being recognized as

a prominent actor in the sustainable development of the region. It develops activities for the improvement of the management of its member companies and promotes the exchange of experiences and best practices through its Committees involved in the issues related to the sustainability of the industry: energy integration, social responsibility, environment, health and safety, climate change and energy efficiency, refining, pipelines and terminals, and exploration and production. The organization proposes an integrative approach that materializes through the integration team, the Sustainability Report and ARPEL Conference on Sustainable Development. Finally, García also stated that it was necessary to maintain the levels of investment despite the global crisis.

William Kimble, partner in charge of Renewable Energies for the Americas of KPMG United States, stated that the region has the perfect coverage as it has various sources of energy in different countries. He also highlighted the smaller impact of the crisis on the region than on other parts of the world and that direct foreign investment did not decrease so drastically as in other regions. On the other hand, he alerted as to the impact on deep-water wells, since drilling is usually done when prices of commodities are high. Finally, he said that progress is being made toward a sustainable market; however, an analysis is to be made on how to finance it with the prices of commodities.



William Kimble

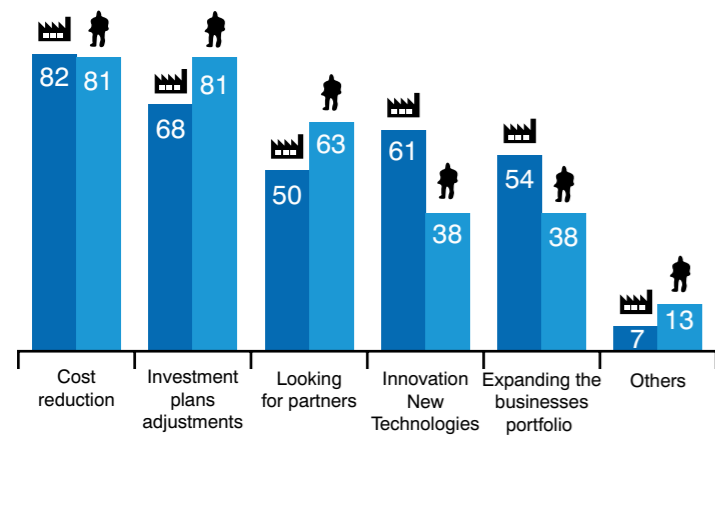
A survey carried out among high executives of companies, governmental and non-governmental organizations, consulting firms and international organizations, who participated in the Conference, points out the reduction of costs as the main measure undertaken by the sector as a consequence of the crisis.

However, while the group that excludes businessmen emphasizes the adjustments in the investment plans and the search for partners, the executives of companies placed greater emphasis on the adjustments of the investment plans, the innovation and new technologies,

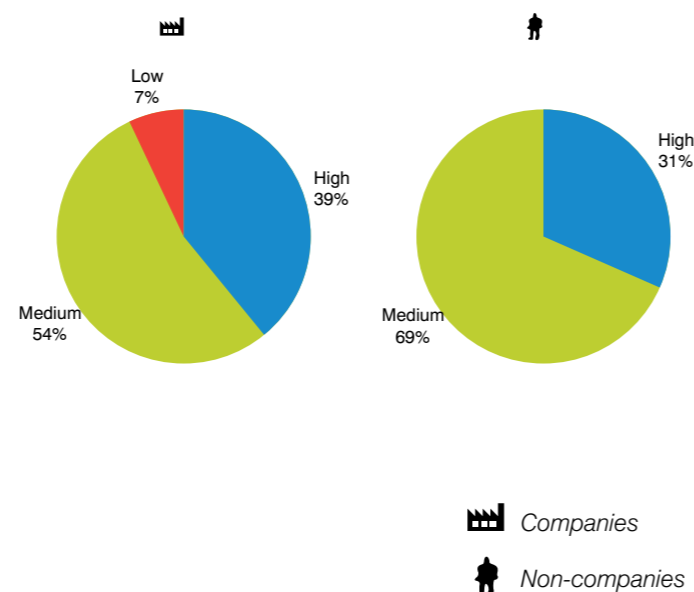
and the expansion of the business portfolio as the most important measures taken by the sector when faced with the crisis.

As regards the vision of the future of the sector, the first group is clearly confident in the near future. In the second group, however, the vision is polarized among those who predict improvements and those who believe that the situation will get worse.

Measures taken by companies of the sector in the view of the crisis



Confidence in the near future



James Burkhard, Managing Director of CERA, pointed out the consequences of the impact in the long term and the possibility that over half of the potential growth in the oil supply in the world face the risk of being postponed. However, he said that the sector was in good condition and that the following phase would be positive. That is to say, there was a possibility that the oil prices increased in the next couple of years at the level of the global economy. He added that he believed that at the global level, the costs of the industry would continue decreasing in 2009, but not at the same pace as the oil price, so many projects would not be so attractive throughout 2009 and 2010.



James Burkhard



Carlos Florez

Security of energy supply

Carlos Florez, Executive Secretary of OLADE, proposed to resume the strategic planning with policies and programs. The security of energy supply is a responsibility of the State, and planning is necessary so that the energy sector does not depend so much on the particular political situation. He underlined that much has been done to raise awareness about integration, complementarity and solidarity among neighboring countries, but there is a lot to be done on energy efficiency. He concluded, "the cheapest energy is that which is not consumed, and the most expensive energy is that which one does not have".

Gary Ward, Director for the Western Hemisphere of the U.S. Department of Energy, emphasized the importance that the Barack Obama administration assigns to the Western Hemisphere in energy security and stated that it was necessary to have an association

of Latin America and the Caribbean with the United States in that area. "We don't want single-size solutions about this. It is essential that the countries in the region participate and share their ideas and thoughts regarding such association". Besides, he announced a Declaration of the Energy Summit to be subscribed in June in Lima, Peru. He stated that the document would cover biofuels, energy efficiency, renewable energy, energy matrix and other issues.

Peter Fontana, Vice-President of Weatherford for Latin America, said that there is a change from the point of view of the exploration and the production caused by the change in prices. Within this framework, he considered that international oil companies must keep the economy going on and prepare for the future. In addition, he recommended, "it is necessary to achieve an aggressive contraction in the operating scale, to find the just dimension of companies but also to invest in technology, training and infrastructure".



Gary Ward



Peter Fontana



Oil and gas industry and society

Social and ethical responsibility and human rights

Social responsibility is the basis of sustainable development. In the survey conducted during the Conference on the issues that are relevant for the companies, these responded that social responsibility is in the first place. It is followed by integrated environmental management, health and safety, human capital and retention of talents.

Within this context, human rights become increasingly important, as highlighted by Víctor Rodríguez Rescia, Director of the Center for Human Rights in the Americas of the DePaul University, Chicago. He demanded a social contract and a different State, from the point of view of Human Rights for the people, but also for the companies and corporations. He said, "we have to

revise this social contract, we are in a crisis that has to be improved in terms of opportunities and that allows us to review processes"

By way of example, he said that the governments should not attract investors without warning them about the risks that such investments involve, and that the companies must be responsible in order to operate with legal certainty.

For Rodríguez, this requires the development of "national forums where companies and corporations participate in social responsibility" and a "symbiotic relation between the State and the civil society under the umbrella of common interest".

He stated that the culture of response to Human Rights implies designing State policies, contributing to development policies and seeking social dialogue.



Víctor Rodríguez Rescia



Mercedes de Freitas



Eduardo García Moreno



Francisco Paris

Finally, he emphasized that "the social contract should result in international obligations and protection. Corporations must know these systems of human rights." "Corporate social responsibility should be implicit in any particular proposal of a company that is proud of having a code of ethics, in addition to processes, a mission and a vision oriented in this direction. Any corporation that does not apply a social responsibility policy will be left outside of the business. Complying with labor and environmental certifications is a permanent task".

Corporate governance and transparency

Mercedes de Freitas, Executive Director of Transparencia Venezuela, stated, "the concepts of corporate governance plus sustainable development result in sustainable governance. It is necessary to begin to work on this sustainable governance".

In this respect, she stated, "corporate governance in extractive companies requires changes and new action methods. All companies have stated important commitments, have codes of ethics and are raising awareness about transparency issues; as yet, however, those statements have not turned into results".

Freitas warned about the risks of corruption and stated that the development of the extractive companies in Latin America is "very uneven, there are different levels and realities in control systems, accountability systems and control mechanisms".

Therefore, it is necessary to develop management models with transparency and sustainability contents that benefit good practices with good economic results.

She further stated, "sustainable development requires changes, because the impact of the oil and gas companies on the environment is very important. All the changes and decisions must be considered with innovative transparency instruments".

Eduardo García Moreno, Director of Corporate Responsibility and International Affairs of Repsol, stated that it is reasonable to establish guidelines that reinforce the continuity of the companies along time and prevent the risks of dysfunction. "The way to respond to these concerns is the concept of responsible company, which entails a change in the traditionally economic business paradigm", he warned.

He pointed out that good corporate governance is fundamental at least in three aspects:

- the disclosure of true and comparable financial and non-financial information;
- the guarantee that the authorities of the company protect the interests of the owners; and
- a system that allows shareholders to intervene if they consider that the authorities of the company are not acting properly.

Francisco Paris, Regional Director for Latin America (Extractive Industries Transparency Initiative-EITI), explained that this institution is a coalition of governments, companies and the civil society "which focus is to use transparency as a tool to turn mineral wealth into sustainable development and into less poverty in numerous countries that are rich in natural resources".



Joao Félix

He further stated that the initiative is a globally developed standard to ensure that collective actions consolidate transparency as a rule of the game of the extractive industry. He said that although this is an international standard, it makes sense if implemented at the local level. Only Peru has formally implemented this tool in Latin America.

Paris concluded that the EITI is an institutional platform for the dialogue among the sectors associated with the value chain of the industry as well as for the dialogue with the community.

Human capital as a crucial factor for sustainable development

Another fundamental element for Sustainable Development is the development of human capital and its impact on the industry.

Joao Félix, Vice-President of Marketing of Schlumberger for Latin America, listed the following challenges in the area of human resources in the industry:

- shortage of qualified personnel,
- attraction, development and retention of talents, and
- social responsibility in the construction of the future through educational development.



Aldo Siri

He stated that the strategy in the company to face the challenges related to human resources comprises three levels:

- the diversity at the time of recruitment, (international recruitment network, program of relations with universities, among others),
- training and development, and
- a dynamic culture that maximizes the potential through knowledge management.

Aldo Siri, Executive Director of the Center for Innovation and Knowledge of ENAP, proposed that ARPEL coordinates knowledge and training centers for its member companies in order to face the challenges of the industry regarding human resources and innovation.

Izeusse Dias Braga, Manager of International Communication of PETROBRAS, emphasized the importance of training “globally responsible leaders”. The solution to inequality between the richest and the poorest, due to the velocity of the technological changes of the productive systems, lies in the training of human resources. He emphasized that companies around the world are committing themselves to issues concerning corporate social and environmental responsibility. They are also promoting the dialogue with stakeholders in order to know the expectations of the society. This shows the need for leadership to implement these processes in the organization.



Izeusse Dias Braga

Dialogue with stakeholders

The dialogue with stakeholders was discussed in the Round Table on Social Responsibility and Value Chain of the Industry –suppliers and contractors. It was stated that the best practices of social responsibility adopted by the companies will not be sufficient unless the suppliers, mainly the small and medium ones, are fully integrated to the system and adopt those best practices. Only in this way will they be able to contribute effectively to the objectives presented.

It is also very important to consider how the processes of civil participation and socio-environmental license develop. In the pre-conference seminar on this issue, several elements were mentioned, such as the need to define participatory and intercultural codes of conduct, the importance of the incorporation of human rights as part of social management, social monitoring as a tool for conflict prevention and management, and the need to define the responsibilities of the State in the countries of consultation.

In the specific case of the oil industry and its relation with the rights of indigenous peoples, the following aspects were mentioned:

- the need to promote early disclosure and consultation,
- the existence of successful experiences that must be disseminated and applied,
- the lack of a legal framework and the role of ARPEL as facilitator in the relations with the governments to respond to requests that give stability to the companies and
- the security to indigenous peoples.



Progress and challenges of the oil and gas industry management in Latin American and the Caribbean

The support of the oil and gas industry to attain sustainable development comes together with its own challenges to achieve sustainability. In this regard, society has demands and expectations from the industry, among which, environmental performance and its contribution to environmentally-sound technological development are a priority.

Four out of ten companies define corporate responsibility as the consideration of the interests of the society when making business decisions. Six out of ten of those companies assign a high or very high priority to corporate responsibility, which includes the respect for the environment and the promotion of good labor conditions and practices.

Eight out of the ten major global environmental issues are directly or indirectly linked to the oil and gas industry: climate change, energy, water, biodiversity and land use, chemical and toxic substances, heavy metals, air pollution, waste management and oceans and fishing. Depletion of the ozone layer and deforestation are the other two global environmental issues.

In order to address these global challenges while achieving sustainability, industry is trying to reduce its atmospheric emissions. It is also developing energy efficiency programs and annually reducing flared gases, in order to contribute to the reduction of greenhouse gases.

These actions are complemented with technological development:

- Through new products that help to decrease the emissions of local pollutants,
- Through the use of renewable energies that enable a reestablishment of the energy matrix, and
- Through the capture and storage of carbon in order to reinject the carbon dioxide emissions into energy production sources. This enables a mitigation of the climate consequences of the emissions of the industry while at the same time ensuring the energy supply.

In line with the above-mentioned actions, biofuels are inserted in the energy matrix and generate new business opportunities for oil companies, strong commitments with all their production lines, and the logistic and operational challenge of incorporating them efficiently into the traditional fuel production line.

The sustainable production of biofuels and the use of renewable energy sources in our region are possible if adequate programs are developed, which include regulations and policies to promote the use of local sources, and ensure, among others, high quality standards.

Industry is implementing new technological and management processes to achieve excellence in its risk management. This is reflected in the following aspects:

- Better performance in preparing and addressing oil spill contingencies and industrial emergencies,
- Optimization in the use of process water, and
- A new approach to the study and assessment of socially and environmentally-sensitive ecosystems in order to minimize impacts.

This approach is also used to improve the control of effluents and reduce the generation of waste, and to develop new technologies for their treatment.

Industry is strongly promoting the best environmental management of its productive chain, which involves greater transparency with its stakeholders and a more active participation in the dialogue and formulation of national and international policies.

It considers that it has made significant progress in the implementation of integrated operational management systems (IOMS). The IOMSs offer a framework to manage occupational health and safety risks, as well as social and environmental risks in the company facilities.

An IOMS ensures the required combination of policies, resources, staff and procedures, whose components interact in an organized manner to guarantee an adequate performance regarding Environment, Health and Safety (EH&S) in the short and long term and to integrate their effective management into the corporate culture.

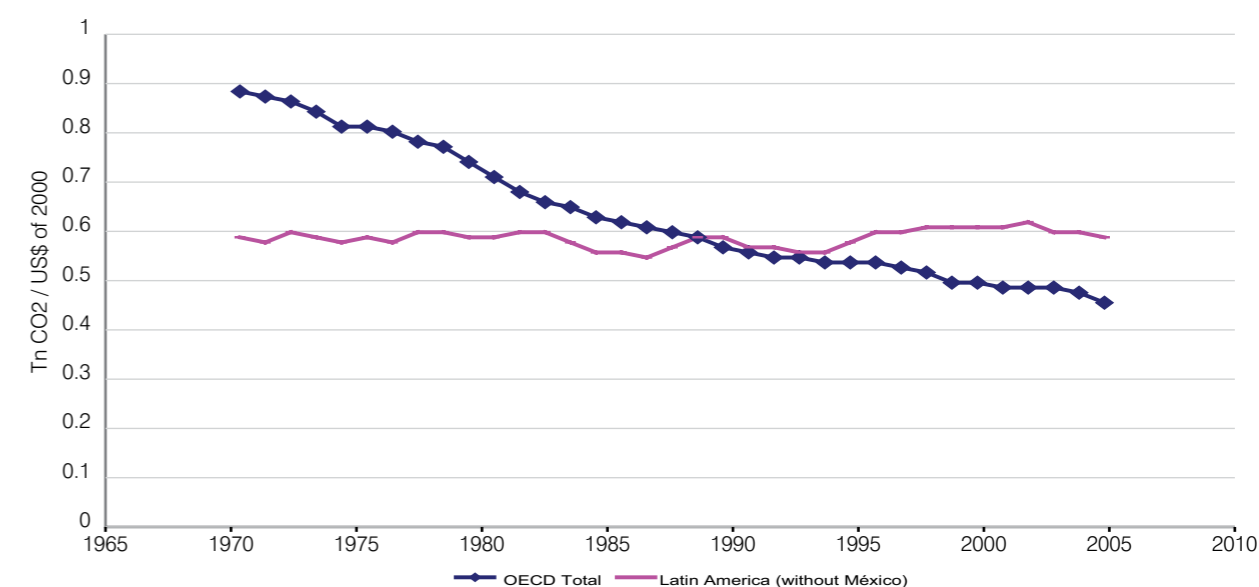
In order to meet the international excellence standards in EH&S through the implementation of the IOMSs, companies should consolidate EH&S as their own values; therefore, they are working on the organizational culture and in the individual behavior.



“The future without oil is not very near, and it is necessary to search for formulas to be more efficient. The industry and Latin American and Caribbean countries are under great pressure because decision-making will be required between 2012 and 2030 in a region which is greatly falling behind” (Alicia Bárcena, Executive Secretary of ECLAC)

Evolution of CO₂ emissions by product unit

(carbon intensity) 1970-2005 - Emissions by product unit



institutional capacity. At the same time, the sustained growth of the emerging Asian economies reinforces the need to ensure energy supply and maximize its efficient use.

A strong and proactive positioning of the region in the international system to fight climate change would allow the region to capture the funds and technology required to promote the implementation of energy efficiency projects, addressing, at the same time, those aspects of the regional energy agenda that were fallen behind.

Probably, the Copenhagen agreements imply that some countries in the region undertake GHG emission reduction commitments, which will require an additional financial, technological and institutional effort.

The importance of climate change and energy efficiency

On the eve of the 15th Conference of Parties to the Kyoto Protocol (December 7-8, 2009, Copenhagen, Denmark), the world is ready to assume new commitments for the period 2012-2030 to fight climate change, one of the most important challenges currently faced by humankind.

The oil and natural gas industry, governments and the civil society share the responsibility to fight it and to use energy in the most efficient manner in favor of sustainable development. Particularly, Latin America and the Caribbean face strong pressures to contribute with specific commitments in this respect

1. Energy efficiency: the engine to reduce GHG emissions and to mitigate climate change

The oil and natural gas industry accounts for approximately 10% of the total greenhouse gas (GHG) emissions worldwide. Latin America and the Caribbean also represent a low relative contribution to CO₂ global emissions associated with the combustion of fossil fuels in the energy sector: 3.5% as of 2005 and 3.9% projected as of 2030 under the assumption - business as usual -.

However, in the period 1997-2005, CO₂ emissions by product unit in the region were maintained practically constant, while in OECD countries they decreased almost 50%. The region is substantially falling behind in investments in infrastructure, access to energy, and



2. Energy efficiency and climate change as fundamental elements of the culture and priorities of the oil and natural gas business.

In view of the above, the region has the chance to promote energy efficiency in all the sectors (electric generation, transportation, industry, buildings, among others), but especially from the point of view of energy supply. The relevant net investments saved would be higher than the net additional investments required to increase efficiency in the energy demand.

In order to achieve this, governments should apply effective policies of efficiency in the use and the production of energy. The private sector should promote and implement GHG emission reduction projects. An important challenge faced by companies of the oil and natural gas sector is awareness in their organizations about the importance of the efficiency in the energy production as a measure to mitigate climate change and the development of capacities to identify and execute GHG emission reduction projects.

3. Synergies among companies to facilitate the implementation of GHG emission reduction projects associated with carbon markets

The carbon markets can provide companies in the region an additional financial benefit derived from the implementation of GHG emission reduction projects in their facilities. Participating in these markets also involves certain risks (of regulatory nature, associated with the host country, related to the project, and inherent to the market). It also implies complexities in the documentation, validation and registration process, and uncertainties about the impact of international negotiations on climate change and the financial crisis. It also demands the compliance with strict requirements, especially additionality.

In order to face all these aspects successfully and to be able to participate in the carbon markets, the companies of the sector should seek joint mechanisms to identify, manage and finance projects.



Opportunity to develop a Regional Energy Agenda

Mr. Milton Costa Filho, President of ARPEL, placed emphasis on the Regional Energy Agenda developed by ARPEL as a result of the 2009 ARPEL Conference as a contribution to integration in Latin America. The Conference covered all the subjects pertaining to an agenda on sustainable development. All regional players should participate in the development of the energy agenda, and it should reflect the interests of the energy sector.

In her presentation in the panel on energy efficiency and climate change, the Executive Secretary of ECLAC, Alicia Bárcena, emphasized that Latin America and the Caribbean feel the pressure of decisions to be taken between 2012 and 2030 to reduce the greenhouse gas emissions, and that investment in energy infrastructure, security of supply, demand growth management, diversification of sources and improvement of access should be the current priorities of the countries. In her opinion, Latin America should take climate change as an opportunity, which must

also be aligned with our own regional energy policy agenda.

That Regional Energy Agenda should consider issues such as energy matrix and energy security, climate change and energy efficiency, renewable energies, sustainable social development, technology and sustainability, and investments, among others. They are challenges faced by the sector that should be discussed with all the players in order to seek consensus that allow advancing in this agenda.

ARPEL, as an organization interested in the sustainable development of the oil and gas industry in Latin America and the Caribbean, has defined clearly in its strategic guidelines the course that its actions and work should follow to support the sustainability of the industry in the region and thus contribute to the Regional Energy Agenda.

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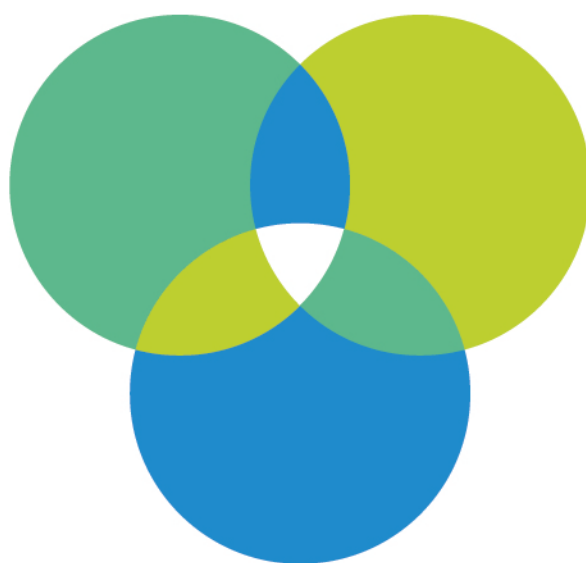
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