

ARPEL Annual Report 2015



February 2016

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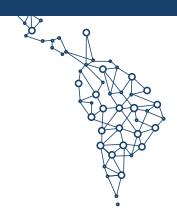




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Governance

Board of Directors

Chairman:

Benito Edgardo Piñeiro (ANCAP)

Vice Chairmen:

Claudio de Diego (PLUSPETROL) Andrés Mantilla (ECOPETROL)

Members

Lenin Armijos (EP PETROECUADOR) Bob Fryklund (IHS) Luis Macías Chapa (PEMEX) João Araújo Figueira (PETROBRAS) María Isabel Fernández (REPSOL) Alex Moody-Stuart (SCHLUMBERGER)

Fiscal Commission

Chairman

Alfredo Coronel (PETROPERU)

Members

Edgar Kyle Chapman (WEATHERFORD) Verónica Rollandi (SPECTRUM)



Membership

Active Members

ANCAP

AXION ENERGY

CENIT

CHEVRON

COGA

ECOPETROL

ENAP

EP PETROECUADOR

EQUION ENERGÍA

OCENSA

PCJ

PDVSA

PEMEX

PETROAMAZONAS EP

PETROBRAS

PETROPAR

PETROPERU

PETROTRIN

PLUSPETROL

RECOPE

REPSOL

STAATSOLIE

TECPETROL

YPF

YPFB

Cooperative Members

IHS

SCHLUMBERGER

SPECTRUM

WEATHERFORD

TEMA

Institutional Members

AIHE

Oil Industry Association of Ecuador

AIPN

Association of International Petroleum Negotiators

CBHE

Bolivian Chamber of Hydrocarbons and Energy

CIER

Regional Energy Integration Commission

ENERCLUB

Spanish Club of Energy

COCATRAM

Central American Commission of Maritime Transportation

IAPG

Argentinean Oil and Gas Institute

IBP

Brazilian Institute of Petroleum, Natural Gas and Biofuels

IOGE

International Association of Oil & Gas Producers

IPIECA

International Petroleum Industry Environmental Conservation

Association

OSRL

Oil Spill Response Limited

RAC/REMPEITC-Caribe

The Regional Marine Pollution Emergency Information and

Training Center for the Wider Caribbean

WPC

World Petroleum Council

SLOM

Latin-American Society of Monobuoy Operators

CCI

Industrial Cybersecurity Center





Letter of the Chairman of the Board of Directors

At the beginning of this new year which promises new challenges for our Association, the Chairman of the Board of Directors would like to convey to all those who are part of ARPEL the best wishes for the year ahead and to thank them for their effort and collaboration during 2015.

The year 2015 was another year of intense work in the Association. We organized several events of regional significance such as the ARPEL Conference, the Round Table on Good Practices in Offshore E&P, the Seminar on Development of Natural Gas Markets and the Workshop Management of Major Refining and Surface Facilities Projects. Our seven Technical Committees have continued with their projects and have launched new areas of work as well, such as cybersecurity at critical facilities. This issue raises very important challenges for the industry, and we are committed to address them in a collaborative manner to achieve the best results. On the other hand, we have placed special emphasis on strengthening the role of ARPEL as a means of articulating the industry with government agencies and inter-governmental organizations, national, regional and international associations of the sector, and R&D centers in order to promote and foster the development of our industry.

In 2015, we also celebrated the 50th anniversary of the Association. On that occasion and in the framework of the Conference ARPEL 2015, the highest representatives of our member companies signed the Statement of Reaffirmation of Commitments. This document establishes a number of strategic projects and lines of action, such as technically advocating the sectoral interests, promoting excellence in management, encouraging investment, and strengthening knowledge management, which will guide the actions of ARPEL in the coming years to continue to contribute with our work to the sustainability of the industry.

In 2015, we also expanded our membership and welcomed Hunt Oil, Axion and COGA. We also strengthened our institutional network through the signing of cooperation agreements with important organizations at the regional and global level, such as the World Energy Council (WEC), the Latin American Energy Organization (OLADE), the Latin American Society of Oil Marine Terminal and SPM Operators (SLOM) and the Industrial Cybersecurity Center (CCI).

We have concluded an intense and prolific 2015, and began 2016 with optimism, which transcends the current scenario of low prices. We will seek to continue to position ourselves as an essential vehicle for facilitating cooperation among companies and dialogue with the stakeholders in the sector in order to address the present and future challenges of the industry.

Benito Edgardo Piñeiro
Chairman of the Board of Directors

Executive Summary

MEMBERSHIP

Affiliations: COGA, HUNT OIL, AXION

PUBLICATIONS

8 new technical publications were completed: 3 best practices guides, 2 benchmarking reports, 1 study, 1 event report and 1 related to database and statistics.

COURSES

8 courses were organized, 3 of them in-company, in which 173 professionals participated. The issues covered were Pipeline Integrity Management, Readiness for Oil Spills RETOS Tool, Environmental Performance Indicators, Indigenous Peoples and the Hydrocarbon Industry and CSR Management.

COOPERATION AGREEMENTS

- World Energy Council (WEC)
- Latin America Energy Organization (OLADE)
- Latin-American Society of Monobuoy Operators (SLOM)
- Industrial Cybersecurity Center (CCI)

EVENTS

CONFERENCE ARPEL 2015

Cooperation and innovation for a sustainable energy development Punta del Este, Uruguay, 7 to April 9 $\,$

Round Table "BEST OPERATIONAL AND MANAGEMENT PRACTICES IN EXPLORATION AND PRODUCTION IN TIMES OF CRISIS"

October 1

50TH ANNIVERSARY OF ARPEL GALA DINNER Montevideo, October 2

Workshop MANAGEMENT OF MAJOR REFINING AND SURFACE FACILITIES PROJECTS

Lima, Peru, 20 to October 22.

Seminar on DEVELOPMENT OF NATURAL GAS MARKETS Santiago, Chile, October 28-29.

MUTUAL ASSISTANCE AND TECHNICAL COOPERATION

Sixteen instances of reciprocal technical cooperation were registered, with the participation of 17 member companies. In addition, two collaborative studies of Benchmarking in Environment, Health and Safety were concluded.

Institutional Relations

ARPEL, in order to expand and enhance regional cooperation networks with other industry stakeholders, signed four new agreements with different referent institutions at regional and international levels.

• WEC: World Energy Council

• OLADE: Latin America Energy Organization

• **SLOM:** Latin-American Society of Monobuoy Operators

• CCI: Industrial Cybersecurity Center





Regional Energy Agenda

During 2015, we continued the coordinated work with ALADI, CAF, ECLAC, OAS, OLADE and WEC. Emphasis was placed on the regional program for the development of the market for energy efficiency projects in Latin America, and the PRESER project.

A webinar was organized for the Regional Program on Energy Efficiency in order to explain the Regional Energy Agenda, the Program and its objectives, the identification, formulation and evaluation of energy efficiency projects, and the funding provided by CAF for this type of projects.

The purpose of the PRESER project is the identification of strategic projects for regional energy security. It seeks to identify a portfolio of strategic projects for South America, and to evaluate their significance and their economic, environmental and social impacts in a horizon of 15 years.

In 2015, the consultant was selected, the project start-up meeting was held and there were three more follow-up meetings. One of the deliverables completed was the General Diagnosis, which includes the global situation and the situation of the region in economic, energy and institutional terms. In addition, the Global Scenario and the Scenario for South America were developed.

Moreover, during the course of the year, ARPEL participated, on behalf of the industry, in several events of regional and international importance.

Argentina O&G 2015

IAPG - Buenos Aires, Argentina

IV Latin American and Caribbean Oil and Gas Seminar

OLADE - Cartagena de Indias, Colombia

V Congress of Oil and Gas

YPFB - Santa Cruz de la Sierra, Bolivia

South American Energy Forum

UNASUR - Quito, Ecuador

XI Conference on Maritime Oil Terminal Operators and Monobuoys

SLOM - Lima, Peru

Governing Energy: The Atlantic Basin and Global Institutions

Spanish Committee of the World Energy Council (CECME) – Madrid, Spain

VII International Forum of Gas and Energy (Figas) 2015

Tarija, Bolivia

Rio Pipeline 2015

IBP - Río de Janeiro, Brasil

4th Latin American and Caribbean Refining Congress

IAPG - Mar del Plata, Argentina





Oil and Gas Conference ARPEL 2015



Under the motto "Cooperation and innovation for a sustainable energy development," the Oil and Gas Conference ARPEL 2015 was held in Punta del Este, Uruguay, from April 7 to April 9.

This event brought together more than 300 senior representatives of the energy sector in Latin America and the Caribbean to conduct an in-depth analysis of the current situation of the oil and gas industry, the challenges and the regional opportunities, and the new global context that will mark the years to come.

There were plenary sessions, seven keynote addresses, six lectures by CEOs, eight concurrent technical sessions, and the mini-LATINVE&P held with the Forum of Hydrocarbons Agencies. More than 90 international speakers participated, addressing a range of topics from the geopolitical analysis and the circumstances of low prices, to the development of new technologies, leadership, human talent, human rights and future global trends.









The Conference ARPEL 2015 was a very important milestone in the celebration of the 50th anniversary of the Association, and reaffirmed once again its role as a forum of convergence of the regional industry.













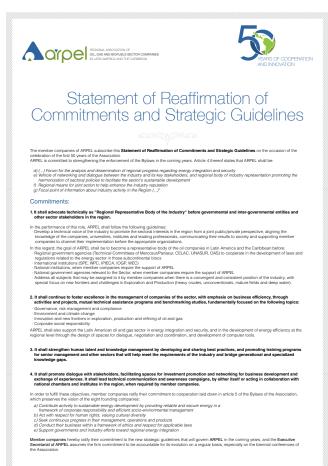
Member companies reaffirm their commitment with ARPEL

In the framework of the Conference ARPEL 2015, the highest representatives of the member companies signed the Statement of Reaffirmation of Commitments on the occasion of the celebration of the first 50 years of existence of the Association.

On October 2, 1965, in Rio de Janeiro, eight state-owned companies (ANCAP, ECOPETROL, ENAP, PDVSA, PETROPERU, PETROBRAS, YPF and YPFB) founded ARPEL on the basis of a strong will for integration.

The document includes the following strategic projects and lines of action for the next years:

- 1. It shall advocate technically as "Regional Chamber of Industry" before governmental and intergovernmental entities and other sector stakeholders in the region.
- 2. It shall continue to foster excellence in the management of companies of the sector, with emphasis on business efficiency, through activities and projects, mutual technical assistance programs and benchmarking studies.
- 3. It shall strengthen human talent and knowledge management by developing and sharing best practices, and promoting training programs for senior management and other sectors that will help meet the requirements of the industry and bridge generational and specialised knowledge gaps.
- 4. It shall promote dialogue with stakeholders, facilitating spaces for investment promotion and networking for business development and exchange of experiences. It shall lead technical communication and awareness campaigns, by either itself or acting in collaboration with national chambers and institutes in the region, when required by member companies.



50th Anniversary

In order to celebrate the 50th anniversary of ARPEL, a gala dinner was organized at a Uruguayan Golf Club (Club de Golf del Uruguay) with the presence of representatives of the diplomatic corps and member institutions and companies, former Chairpersons and Secretaries General of the Association, as well as the members of the Executive Secretariat.

In his opening speech, the Chairman of the Board of Directors of ARPEL, Benito Piñeiro, highlighted that the founding values of the Association, cooperation and mutual assistance, remain in force. "Today we are a unique forum in the region due to our characteristics, and our foundational values remain in full force and effect. In our 50th anniversary, we are working hard to ensure that the following 50 years of the Association will be full of success, as has been its trajectory until now," he said.

Other speakers were the Director of Strategic Affairs of ARPEL, Amanda Pereira, the Vice President of

arpel 50

Quality, Environment, Health and Safety of YPF, Daniel Palomeque; the National Vice President of Operations of YPFB, Gonzalo Saavedra; the Gas and Energy Director of Petrobras, Hugo Repsold; the Vice President of ANCAP, Ruben Barboza; the former Chairman of the Board of Directors of ARPEL, Milton Costa Filho; the former Secretaries General of ARPEL, Álvaro Alves Teixeira and Andrés Tierno Abreu; the Executive Director of CIER, Juan José Carrasco and the current Executive Secretary of ARPEL, Jorge Ciacciarelli.



























TECHNICAL COMMITTEES

Exploration and Production (AEPC)

Pipelines and Terminals (PITECO)

Refining and Fuels (RefCom)

Gas and Energy (AGEC)

Health, Safety and Environment (CASYSIA)

Social Responsibility (SRC)

Human Talent and Knowledge Management (HT&KMC)



Exploration and Production (AEPC)

This Committee focuses on the assessment of the challenges and the promotion of opportunities for the development of upstream business in the region. It also discusses new technologies and develops best management practices with the goal of continuously improving the operational performance of the sector. It also addresses cross-cutting themes, such as environmental, social and occupational issues as they impact on the exploration and production operations and performance.









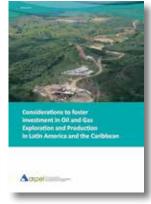


DOCUMENTS

As part of the role of technical advocacy of ARPEL, a White Paper was updated and a new one began to be developed.

Considerations to promote investment in oil and gas exploration and production in Latin America and the Caribbean

Catalog of general points about bidding rounds for consideration by interested governments and other



stakeholders. The objective of ARPEL is to contribute to the success of the round, and thus promote the creation of business opportunities for the oil and gas industry and the sustainable development of the sector in Latin America and the Caribbean (completed)

Opportunities for the development of hydrocarbons resources in low permeability reservoirs in Latin America and the Caribbean

The purpose of this document is sharing with all stakeholders the most significant aspects relating to the exploration and exploitation of unconventional hydrocarbons, as well as the alternatives for the development of these resources in Latin America and the Caribbean in a sustainable manner and for the benefit of the countries in the region (expected to be edited in 2016)

EVENTS

ARPEL-WPC round table "Best Practices in Offshore Exploration and Production in Times of Crisis"

This event was held October 1, 2015, in Montevideo, Uruguay, together with the Uruguayan Delegation to the World Petroleum Congress, and in association with the celebrations of the 50th anniversary of ARPEL

87th Meeting of Experts (RANE) - "Process safety in E&P operations"

This event was launched in 2015 and will be held in Bogotá March 9-10 2016. In addition to the core themes associated with operational areas, the strategic line of action of ARPEL began to be implemented in order to incorporate the I+D topic to operational areas through its inclusion in the agenda of the RANE.

PROJECTS

Impetus to technological innovation through interaction among R&D centers

- A study was carried out on the priorities of member companies in the field of applied research and development to improve efficiency in upstream operations.
- A workshop was organized by AEPC and R&D centers of member companies to identify potential lines of action (April 10, 2015, Uruguay)
- An agreement was reached on the main lines of action to follow in order to bring together professionals of operational E&P areas (AEPC), and the R&D area (R&D centers)

Interaction with hydrocarbons agencies

- Contribution to the development of the agenda of the IV Meeting of State Entities responsible for the regulation, promotion, calls for bids and contracts in the oil and natural gas sector in Latin America and the Caribbean (April 8, 2015, Punta del Este), including topics of interest to member companies and participation of their representatives in the meeting.
- Development of agenda and contribution to the development of the upstream section of the Conference ARPEL 2015

Pipelines and Terminals (PITECO)

This Committee focuses on the development of good practices that facilitate the continuous improvement in the performance of companies in their transportation and logistics operations, particularly as they relate to the integrity of pipelines and terminals, as well as the mitigation of associated risks.



INSTITUTIONAL RELATIONS

ARPEL supported the dissemination of the 2nd International Pipeline Geotechnical Conference - IPG 2015 held July 15 - 17 in Bogotá, Colombia. This Conference is organized by the American Society of Mechanical Engineers (ASME), and in this edition with the support of the Colombian Association of Engineers (ACIEM).

ARPEL supported the dissemination of the 11th Monobuoy and Oil Terminal Operators Conference held November 7-9 in Lima, Peru. This Conference is organized by SLOM (Latin- American Society of Monobuoy Operators), with whom ARPEL also signed a mutual cooperation agreement during the Conference.

ARPEL cooperated with its member institution IBP in the organization of the 10th Rio Pipeline Conference and Exhibition 2015, held September 22 - 24 in Rio de Janeiro, Brazil. ARPEL also coorganized and participated in the Forum "Competency management: challenges for the oil industry in the midstream segment."

PROJECTS, STUDIES AND PUBLICATIONS

Pipeline Integrity Management (PIM)

The second update of the Reference Manual for Pipeline Integrity Management was published. This update comprises a deep review of the document, mostly based on the experience gained from the use of the Manual in the respective courses, and on the implementation of the Manual directly in the operations of our member companies. Specific sections were added to the Manual on pipeline fitness management, assessment of mechanical integrity and pipeline fatigue.

Terminals Operation Management

A survey was performed to evaluate the respective training needs of ARPEL member companies, and based on the results obtained, the development of a Training and Accreditation Program of similar characteristics to that on Pipeline Integrity Management began, whose implementation is estimated for 2017.

At the same time, cross checks were carried out between terminals DOCK SUD of YPF (July 13-17, with the participation of AXION ENERGY, PLUSPETROL, RECOPE, YPFB) and BALAO of EPPETROECUADOR (October 19-23, with YPFB as observer).

Certification of Pipeline Operators

Two international companies of reference that certify pipeline operators were called to submit proposals regarding their certification services for ARPEL member companies, and perform the certification based on ARPEL Guidelines for Certification of Pipeline Operators.





The proposals received will be analyzed comparatively, and on this basis one will be selected to sign an Institutional Agreement (in 2016), to grant additional benefits to ARPEL member companies.

Geotechnics of Pipelines

We continued with the development of the Technical Guidelines for Monitoring and Inspection of Pipeline Integrity Management to Face Geohazards. Its publication was postponed to the beginning of 2016. Moreover, a technical work was presented as an advance of the Guidelines before the IPG Conference 2015.

Fire Protection Systems

The development of the Technical Guidelines on Fire Protection Systems in Oil and Liquid Hydrocarbons Transportation Facilities continued. Its publication and dissemination was postponed to February 2016.

Benchmarking

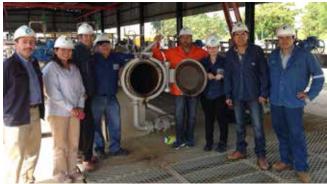
The Committee promoted the participation in the Solomon studies (2015 data) among ARPEL members according to the institutional agreement. Simultaneously, some aspects were agreed upon to be submitted for consideration by Solomon to incorporate them in an addendum to the agreement and thus improve its conditions.

SEMINARS, WORKSHOPS AND COURSES

In the framework of the Training and Accreditation Program of Pipeline Integrity Management Evaluators, the Pipeline Integrity Management Trainers updated the technical content of the courses in alignment with the new updated edition of the respective Manual. The cycle of courses 2015 included the implementation of the following modules:

- Module I: External Corrosion. Held February 23-28 in Lurín, Peru, at the facilities of COGA. Twenty-one students from two countries and four companies of Peru and Uruguay participated.
- Module II: Internal Corrosion. Held from July 29 June to 4 July, in Rio de Janeiro, Brazil, in the facilities of CTDUT. Seven students from three countries and four companies of Peru, Bolivia and Chile participated.
- Module III: Forces of Nature, Operational Errors and Third Party Actions Held August 24-29, in Santa Cruz, Bolivia, in the facilities of YPFB Transporte. Twenty students from three countries and six companies of Peru, Bolivia and Argentina participated.









Refining and Fuels (RefCom)

This Committee seeks to foster and facilitate the sustainable development of oil refining in the region, with a primary focus on the continuous improvement of operational processes and product quality, and optimal environmental and social performance.



INSTITUTIONAL RELATIONS

ARPEL supported the dissemination of the Latin American Refining Congress of IAPG, held in Mar del Plata, Argentina, November 17-20, and also participated with lectures.



PROJECTS, STUDIES AND PUBLICATIONS

Process Safety

The Guidelines on Methodologies and Risk Analysis was published. It contains the best practices on the use of tools to identify process hazards and evaluate the associated risks. The campaign for its respective dissemination was launched, in a first instance addressed to member companies.

Management of Major Refining and Surface Facilities Projects

As a way to respond to the need of the companies to work in the management of large projects, a second Workshop on Exchange of Good Practices was held from October 20 to October 22, in the city of Lima, Peru, with the sponsorship of PETROPERU and PLUS-PETROL. Participants included ninety-eight professionals in oil and gas refining and production, as well as construction companies, engineering companies and companies providing other services to the industry, and companies in the mining sector.

Energy Optimization

The Committee identified the need to work on best practices for optimizing the use of energy both to reduce costs and to reduce the environmental impact, so it set up a team and defined its work plan. It included, among other activities, a Webinar held November 3 on management of flare gas recovery systems, and various exchanges of information on several energy optimization topics.

FCC Operation

A team of professionals from FCC units of different companies was formed and an agenda was defined for a Workshop to be held in 2016 in Chile with the sponsorship of ENAP.



Gas and Energy (AGEC)

The main objective of the Gas and Energy Committee is to promote the exchange of knowledge among professionals and be a space to share good practices and lessons learned in all matters related to processing, transportation, supply, distribution, market development, and new uses and technologies





Seminar on

Development of Natural Gas Markets

In order to analyze the potential of natural gas in the optimization of the energy matrix, and taking into account that several countries in the region are developing infrastructure and liquefied natural gas (LNG) projects, the Gas and Energy Committee promoted the Seminar on "Development of Natural Gas Markets," which was held October 28-29, 2015 in Santiago, Chile.

The event was attended by more than 150 participants of the regional energy sector and prominent speakers from leading companies, consulting firms and institutions in Latin America.

The main issues on the agenda were the current situation and prospects of the natural gas and energy markets in the region; small scale LNG; the development and future viability of natural gas in transport; the regional dynamics of natural gas and energy markets; and energy complementarity and regional integration.



Trends of the Natural Gas Sector in Latin America and the Caribbean

On the basis of the conclusions of the Seminar and other exchange instances of the Committee during the year, the document entitled "Main Trends of the Natural Gas Sector in Latin America and the Caribbean" was developed and it will be published in the first quarter of 2016.





INSTITUTIONAL RELATIONS

Throughout the year, meetings about natural gas were held with institutions of reference at the international level, such as the International Gas Union (IGU) and the Society of International Gas Tanker and Terminal Operators (SIGTTO), in order to establish long term partnership agreements and continue working on them in 2016.

In turn, on the occasion of the Seminar, contact was made with several national associations of natural gas companies, such as the Chilean Association of Distributors of Natural Gas (AGN), to find synergies and promote regional cooperation.

Health, Safety and Environment (CASYSIA)

The work of this Committee pertains to upstream and downstream operations and focuses on the prevention of occupational incidents, the integrity of operations, and the improvement of environmental management performance - with special attention to oil spill preparedness and response - and health management performance.

TECHNICAL PROJECTS

Process Safety:

The Committee agreed on Process Safety as a priority of work for the coming years and developed the ARPEL Process Safety Program (PASP), which was approved by the Chairpersons of the CASYSIA and the Operational Committees (PITECO, RefCom, AEPC and AGEC)

The Process Safety Project Team (EPSP) was set up. This is a working group consisting of members from diverse Committees, whose purpose is to address the issue in a multidisciplinary way, according to the priorities of the industry.

Environment, Health and Safety Benchmarking:

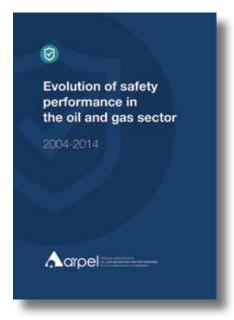
The 2015 Reports (with 2014 data) on "Environmental Benchmarking" and "Safety Benchmarking" were published. In addition, the document entitled "Evolution of Industrial Safety Performance in the Oil and Gas Sector (2004-

2014)" was prepared on the basis of the information gathered by ARPEL in that period, and shows the downward trend in the indicators of accident rates in the industry.

Also in this line of work and in the framework of mutual cooperation and assistance promoted by ARPEL, a tailor-made course was held in October at YPFB by professionals of PEMEX, in order to facilitate the implementation of environmental management indicators.

At the same time, with the purpose of further improving environmental and safety measurement and management, the revision of benchmarking manual was carried out, and it was decided to include process safety and emissions indicators for 2016.

Also along this line of benchmarking, a project team was created with members from multiple Committees to develop in 2016 the methodology to perform comparative evaluations of emergency planning and response to oil spills in operations with tank trucks and marine terminals using RETOSTM as evaluation tool.



Occupational Health

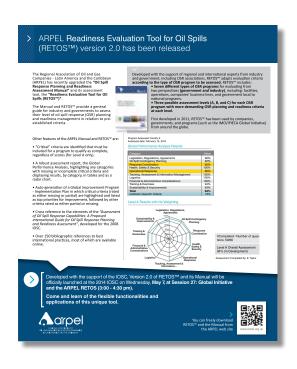
The team worked during the year in the development of practical guidelines for the evaluation and measurement of psychosocial risks in the industry. The document will be published in the first half of 2016. Besides, webinars on toxicology and measurement of psychosocial risks were conducted.



Oil Spill Management

The Emergency Response Planning Project Team developed two project proposals to be carried out in 2016:

- 1. Translation into Portuguese, French and Russian and creation of an App for the tool RETOS™ of ARPEL with funds requested from the International Oil Spill Conference (IOSC).
- 2. Harmonized format of Incident/Command Management Systems with training material at the regional level developed by OSRL Americas



Social Responsibility (SRC)

The objective of this Committee is to enhance understanding of corporate social responsibility issues, and of the challenges and strategies to address those issues, to promote the development of a responsible corporate culture and to further the implementation of adequate social management policies, processes and systems, in order to maximize the performance of companies in this area.

TECHNICAL PROJECTS

Business and Human Rights

The Committee made progress in the development of an online training course on Business and Human Rights, agreeing to the bases and initiating contacts with potential institutions that could develop and give this course. The courses are expected to start in 2016.

Dialogues

The Association cooperated in all the activities organized in the framework of the Energy, Environment and Population Program coordinated by OLADE with the support of COICA and ARPEL. Phase 2 of the Program was completed in November, and during that meeting, recommendations were made to continue the project in its Phase 3.

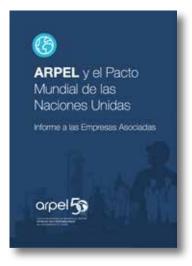


Implementation of ARPEL Corporate Social Responsibility and Community Relations Management Systems

An agreement was reached with YPFB to provide technical assistance for the implementation of ARPEL Corporate Social Responsibility Management System for the Oil and Gas Industry. The working team was established and a Plan of Activities was developed for one year to begin in the first quarter of 2016. Activities include workshops, training and support throughout the process of implementation of the management system.

COE

ARPEL reaffirmed its commitment to the Global Compact issuing its communication of engagement (COE). It is available on the website of the Global Compact,





https://www.unglobalcompact.org/participation/report/coe/create-and-submit/submitted-coe/184411

Human Talent and Knowledge Management (HT&KMC)

The mission of this Committee is to promote the development of human, intellectual and organizational capital of ARPEL members, fostering sustainable strategies and the exchange of experiences and best practices in human talent and knowledge management to meet the challenges of the industry.

TECHNICAL PROJECTS

Benchmarking Study on Practices in Human Talent Management

The content of the study was defined for the collection of the information.

Benchmarking Report on Knowledge Management and Innovation

The content of the survey was prepared and information was collected and processed. The first draft report was developed.

Training Programs for Senior Management

The Project Team was set up, the profile of the participants of the program and the objectives were defined, and a first thematic proposal was made and is currently under review.

E-Learning

In order to reduce costs, it was decided to use the methodology of Petrobras that was revised in order to request a new proposal. On this basis, a proposal for virtual learning environments was requested from a consultant that was evaluated and accepted. The project will start in fiscal year 2016.







GROUP OF EXPERTS ON CLIMATE CHANGE

In September, ARPEL relaunched the issue of Climate Change by means of the creation of a permanent and specific Working Group: the Climate Change Working Group (GTCC), whose members are experts on this issue.

With members from seven companies, the GTCC began to work by agreeing on its goal and strategic guidelines, and preparing a report on the Conference of the Parties (COP21), which will be published in February 2016.

COMMUNICATIONS WORKING GROUP

The Communications Working Group was set up in April 2015; to date, its members are the Communications Managers of the following member companies and institutions: ANCAP, AXION ENERGY, ENAP, EQUION, IAPG, PDVSA, PETROAMAZONAS EP, PETROBRAS, PETROPAR, PETROPERÚ, PLUSPETROL, RECOPE, REPSOL, TECPETROL, YPF, and by the Communications Area of ARPEL. The Communications Working Group drew preliminary lines of work, which will be part of the Action Plan to be developed in the coming years.

CYBERSECURITY WORKING GROUP

In view of the growing concern at the global level about protection against cyber attacks, mainly in companies that manage industrial infrastructures, ARPEL established a working group to address the issue of Cybersecurity at critical facilities.

This group, which began its activities in the last weeks of the year, currently consists of members from ANCAP, YPF and the Center of Industrial Cybersecurity of Spain (CCI, under its acronym in Spanish), an institution with which it signed a cooperation agreement that is highly valuable for ARPEL and its member companies. There are plans to organize an event in 2016, and also to carry out a gap analysis study among member companies.



Mutual Assistance

YPF / PETROAMAZONAS

Optimum production rates in crude oil wells

ANCAP/ EQUION / YPF / OCENSA

Health consequences of rotating shifts

ECOPETROL / PETROBRAS / REPSOL

Occupational health, industrial clothes washing

PETROBRAS / PETROPERU

Dispersants

WEATHERFORD / ANCAP

QHSE Legislation

STAATSOLIE / EQUION / PLUSPETROL

Impact mitigation of H2S in venting

YPFB / EQUION / YPF / REPSOL

Matrices of risk analysis

YPF / AXION / PLUSPETROL / RECOPE / YPFB

Cross-check at Terminal Dock

EP PETROECUADOR / YPFB

Cross-check at Terminal of Puerto Balao ECOPETROL / PETROBRAS

Assistance in emergency oil spills in pipelines

ANCAP / YPF

Market schemes of fuel distribution

RECOPE /
EP PETROECUADOR

Best Practices in download of Fuel Oil in ports

ENAP / REPSOL

Visit to Puertollano Refinery, Spain

YPF / ECOPETROL

Operative benchmarking

ENAP / YPF

Energy Optimization

AXION / ECOPETROL

Conservation and maintenance of equipment in cold reserve

MEMBER COMPANIES SHARING SYSTEMATIZED INFORMATION

ANCAP, CHEVRON, ECOPETROL, ENAP, EP PETROECUADOR, EQUIÓN, HUNT OIL, OCENSA, PCJ, PEMEX, PETROAMAZONAS EP, PETROBRAS, PETROPERU, PETROTRIN, PLUSPETROL, RECOPE, REPSOL, STAATSOLIE, TECPETROL, YPF, YPFB

ANCAP, ECOPETROL, ENAP, EP PETROECUADOR, EQUION, OCENSA, PEMEX, PETROAMAZONAS EP, PETROBRAS, PETROPERU, PETROTRIN, PLUSPETROL, RECOPE, REPSOL, STAATSOLIE, TECPETROL, YPF, YPFB

FOR DATABASES OF:

Industrial Safety Benchmarking

Environmental Performance Benchmarking

Communications

Continuing with the commitment to be a vehicle for the dissemination of tangible progress in the sector in the region, efforts in the area of communications of ARPEL focused mainly on strengthening the relationship with the media and with the companies and institutions in the industry, and on increasingly work together with the Communications Departments of member companies. Below are the main actions promoted during 2015:

50th Anniversary of ARPEL

Development of an institutional video with the great contribution of member companies (uploaded in YouTube channel and in ARPEL website); creation of a new section in the website with the main achievements and the most relevant events of each decade; updating of institutional brochures with the image depicting the 50th anniversary of the Association; booth at AOG 2015 with timeline and infographics with highlights since 1965.







New editions of ARPEL Newsletter.

Growing relationship with specialized media and with national media of Latin America.

Strong presence in media based on the organization of different events, such as the Conference ARPEL 2015, the round table ARPEL-WPC, and the Seminar on Development of Natural Gas Markets.

Work with **Communication Departments of member companies and institutions** to promote
the dissemination of topics of interest to the industry
and of the activities and products developed by
ARPEL.

Increase in the number of contacts of technicians and executives of the industry, who receive press releases and ARPEL Newsletter.





Publications



STUDIES

Evolution of Safety Performance in the Oil and Gas Sector (2004-2014)



BEST PRACTICES

- ARPEL Reference Manual for Pipeline Integrity Management (2nd Ed. 2015)
- ACTOR

 JANE Belevence Market for feedback intergrity Management
- MTIS Project of OCIMF as a tool for improving operational efficiency and safety of terminals of oil and derivatives
- Risk Analysis Process Guide Information and Statistics

INFORMATION AND STATISTICS

End User Fuels Prices 2015

BENCHMARKING

- Environmental benchmarking report 2015 (2014 data)
- Safety benchmarking in

the oil and gas industry in Latin America and the Caribbean (2014 data)



Courses

9 Total of courses

3 In-company courses

173
Participants

86%
Overall Participants' Satisfaction Rate

Host countries:

Peru, Brazil, Bolivia, Argentina, Ecuador and Mexico

Topics:

- Pipelines Integrity Management
- Oil Spill RETOS Tool
- Environmental Performance Indicators
- Indigenous Peoples and Oil Industry
- CSR Management













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ARPEL Annual Report 2015



ARPEL is a non-profit association gathering oil, gas and biofuels sector companies and institutions

in Latin America and the Caribbean. Founded in 1965 as a vehicle of cooperation and reciprocal assistance among sector companies, its main purpose is to actively contribute to industry integration and competitive growth, and to sustainable energy development in the region.

Its membership currently represents over 90% of the upstream and downstream activities in the region and includes national, international and independent operating companies, providers of technology, goods and services for the value chain, and national and international sector institutions.



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