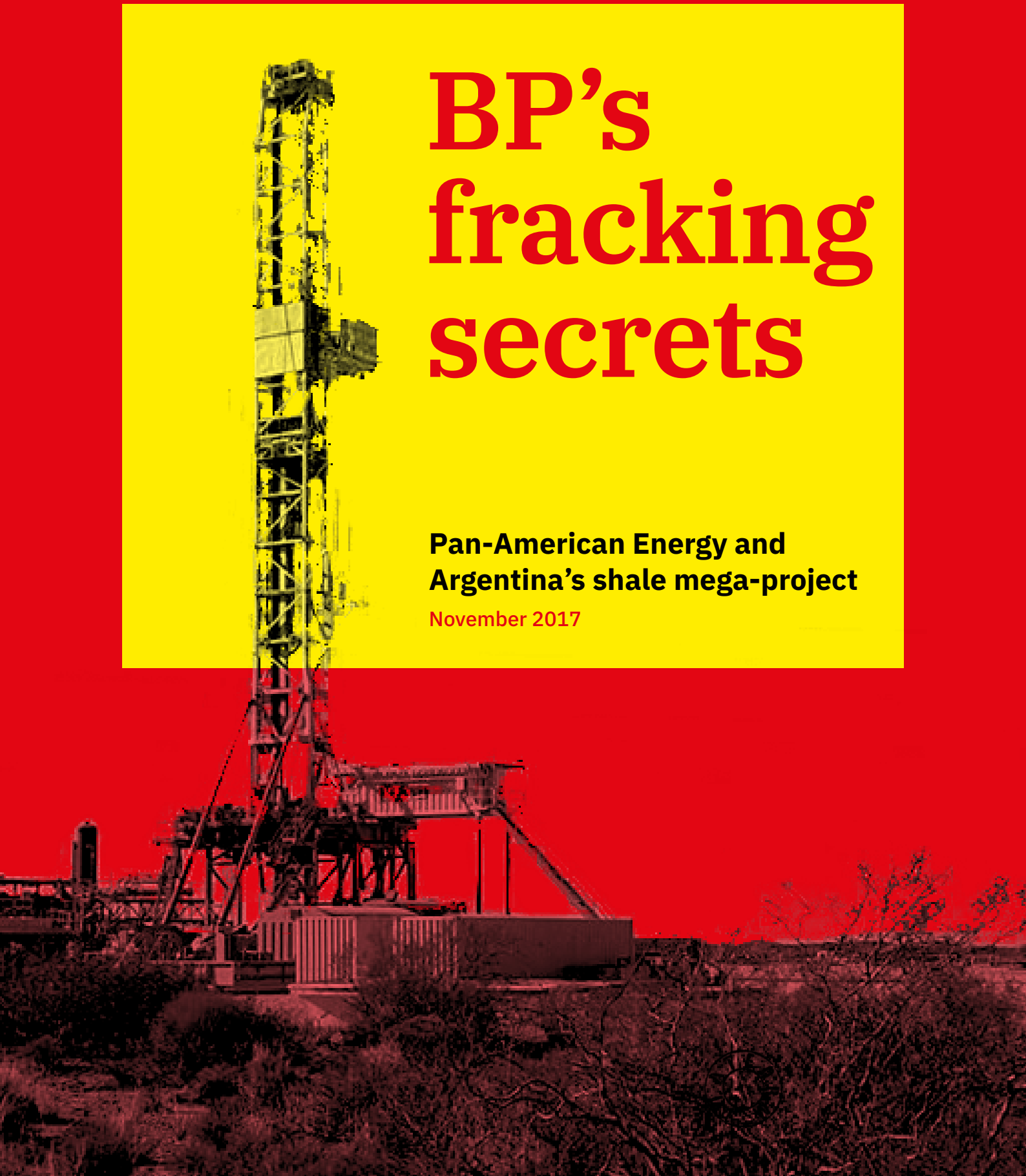




BP's fracking secrets

**Pan-American Energy and
Argentina's shale mega-project**

November 2017



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BP does not carry out fracking in its home country, the UK, because “it would attract the wrong kind of attention”

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Summary

Pan American Energy is billed as Argentina's biggest private oil company. It already runs Argentina's largest existing oilfield (Cerro Dragon) and is responsible for a quarter of the unconventional gas extraction in Neuquen province. Due to be merged with Axion Energy next year, Pan American Energy's dominance will be even greater.

In fact, **Pan-American (PAE) is a unit of the multinational oil company BP** (ex British Petroleum). Owned 60% by BP currently (and 50% after next year's merger), PAE uses its Argentinian minority shareholders – the Bulgheroni family – as its figureheads in Argentina. In reality the Bulgheroni family and the Chinese national oil company CNOOC control the rest of PAE's shareholding in equal measure, through their company Bidas. While BP, as the largest end beneficiary, will derive the largest profit from PAE's drilling, BP conveniently rarely mentions owning PAE.

BP – via Pan-American – plays a leading role in advancing one of the world's biggest carbon bombs, the Vaca Muerta shale gas and oil province in Patagonia.

This briefing provides a breakdown of BP – PAE's role in pushing forward fracking in Patagonia, as well as the company's history and worrying track record on safety and environmental impacts. Our research reveals:

- **By the end of 2017, PAE / BP will have drilled and fracked at least 37 wells on its Vaca Muerta blocks**, in addition to 100 tight gas wells already operating in its flagship block.
- Another 48 wells are planned for the next three years in blocks where PAE operates or participates in drilling.
- Many of these wells require 80-stage fracking (compared to just 16 to 40 fractures per well on average in US shale operations)¹

BP does not carry out fracking in its home country, the UK, because “it would attract the wrong kind of attention”². But in Argentina, BP is pushing forward fracking in a region where:

- 50 local municipalities and one province have passed local regulation against fracking.
- The right of indigenous Mapuche communities to free, prior, informed consent to drilling on their lands is routinely violated, with resistance facing evictions and violent repression.
- Neighbourhoods located next to waste sites and silica mines used for shale gas drilling have expressed concerns about contamination.

Our analysis of BP – PAE's track record reveals:

- involvement in an alleged \$300 million bribe to regional government officials in return for an extended oilfield licence;
- use of an obscure subsidiary to manage the potential of worker unrest;
- large-scale groundwater contamination at Koluel Kaike, where PAE was the last oil company of all operating in the area to introduce remediation measures.

While there is widespread opposition to fracking in the UK, fracking carried out abroad by UK companies rarely hits the spotlight. This briefing shines a light on BP's responsibility. At a time when scientific studies say 80% of already discovered fossil fuels must stay in the ground to avoid runaway climate change,³ BP is attempting to break open one of the most important and most dangerous fossil fuel frontiers in the world.

1

BP and Pan-American Energy

History

Pan-American was founded in 1997 as a Joint Venture between Bidas (then a company completely owned by the Bulgheroni family) and the multinational oil company Amoco. Pan-American receives the licence to operate Cerro Dragón, the largest oilfield in Argentina, which had been operated by Amoco since 1958. Today, Cerro Dragón is responsible for 92% of oil and 54% of gas extracted by PAE,⁴ and PAE itself extracts 18% of Argentina's gas output.⁵

In 1998 Amoco became part of British Petroleum, in 2000 British Petroleum rebranded itself as BP, and in 2007 the Chinese national oil company CNOOC bought 50% of Bidas from the Bulgheroni family. As a result, Pan-American's shareholders today are BP (60%) and Bidas (40%).

The relationship between the shareholders hasn't always been easy.

In 2003 BP took the state of Argentina to international arbitration court for measures introduced during the 2001 economic crisis, that impeded BP's ability to transfer PAE dividends abroad and export the oil and gas extracted among other things. Argentina agreed to pay BP off with an undisclosed sum of money to settle the dispute.⁶

In 2010 BP was selling off its assets in order to pay damages due after its Gulf Of Mexico spill, and agreed to sell its stake in Pan-American (except PAE Bolivia) to Bidas for 7,060 million USD. But the deal collapsed, canceled by Bidas according to a BP press release.⁷

In 2012 BP sued Bidas in the US for the way in which the deal was canceled. According to a *Financial Times* analysis of court documents, according to the contract between BP and Bidas, in case of cancellation, BP would pay Bidas 700 million USD, Bidas would desist from any claims of fraudulent activity on BP's

BP/PAE machinery at Lindero Atravesado block, Neuquén province, Patagonia



Martin Alvarez Mulally

Articles in Argentinian press frequently describe Pan-American as belonging to the Bulgheroni family, some even claiming that the Bulgheroni have successfully bought BP out of the company

part, and both companies would be able to break the exclusivity clause by which they could only conduct extractive activities in certain Latin American countries through Pan-American. Through its court case, BP pushed for these clauses to be respected. It is unknown whether BP wanted to pay the 700 million USD sum for the right to operate in Latin America without PAE, or for the assurance that Bridas would not denounce something about BP's activities.⁸

What's BP's role in Pan-American Energy

Pan-American Energy is incorporated as a Joint Venture between BP and Bridas. Although BP holds a 60% stake and Bridas 40%, BP has 3 out of 5 directors on Pan-American's board, meaning a high degree of control over decisions. After the merger next year, BP will appoint 50% of the directors.

PAE does not list its current board members publicly, but in its 2015 reporting the board includes the following members:⁹

- Marcos Bulgheroni, son of Bridas co-founder Carlos Bulgheroni.

- Liu Yonguie, also a board member at Bridas. No information on Liu Yonguie is publicly available, but we assume that he is a representative of CNOOC on the Board.

- Richard Spies, also CEO of PAE, has worked in Amoco and later BP for most of his 39-year career in the oil industry. Spies managed BP's Russia operations in 2005-2009, during one of BP's most difficult periods in that country.

- John M Easton has worked in BP since 1980 in various countries and positions.

- Alberto Galvis Melo has worked for BP for 21 years and is also regional president for BP Southern Cone.¹⁰

In addition, Bridas co-founder Alejandro Bulgheroni acts as Honorary President.

Hiding the owners

Articles in Argentinian press frequently describe Pan-American as belonging to the Bulgheroni family, some even claiming that the Bulgheroni have successfully bought BP out of the company.¹¹

BP's website doesn't have a single page dedicated to its operations in Argentina. For comparison, in Russia BP only owns 20% of a state-controlled company (Rosneft), but this partnership is covered by an extensive series of articles.¹² Only three press releases about PAE can be found on BP's site: one about its decision to sell shares to Bridas in 2010, one about the cancelation of the same deal, and one announcing the pending merger of PAE with Axion Energy.



San Roque block hydrocarbons plant, Neuquén province, Patagonia. The block is operated by Total and PAE/ BP holds a 16.5% stake

What does BP get out of PAE and Argentina?

PAE is registered in Delaware – a US haven for corporate secrecy – and is accounted as a Joint Venture. This makes it difficult to find out exactly how much profit PAE makes as a whole, or how much it has transfers in dividend to its majority shareholder BP.¹³

However, we are able to access the public accounts of PAE's Argentinian-registered arm, which should account for the majority of its operations. In 2016, PAE's Argentinian arm made profits of 370.73 million USD (5876 million AR\$) and in 2015, 232.23 million USD (1986 million AR\$). These results do not include PAE's operations in Mexico or Bolivia. We have not been able to ascertain whether other subsidiaries, such as PAE's own services company Manpetrol, are included in these financial results.

From the accounts of PAE's Argentinian arm, the transfers between the Argentinian arm and the Delaware-registered parent company appear irregular: for example, in 2015 it received 62 million Argentinian pesos (USD 4.8 million) and in 2016, 241 million pesos (USD 15.2 million) from its parent company. On the other hand, in 2011 PAE Argentina sent 1,679 million (USD 390 million) pesos and in 2012, 716 million pesos (USD 145.8 million) to PAE in Delaware. The majority of these profits can be expected to have been transferred as dividends to BP.

How much BP and PAE contribute to the Argentinian treasury is even more difficult to assess. In 2015 BP directly paid the Argentinian government only US\$200,000 in taxes, as per BP's compulsory reporting on payments to foreign governments.¹⁴ This most likely does not cover any taxes paid by PAE as the company is a Joint Venture. The same year – 2015 – PAE's

From the point of view of BP's future and access to new, unconventional oil and gas fields, PAE is a strategic asset thanks to its position in Vaca Muerta

Argentinian arm paid 6.645 million pesos to the Argentinian government, equivalent to USD 413 million. PAE's annual report does not specify royalties or other payments to the state.

What does Pan-American mean for BP

BP names Argentina among the ten most important countries for its upstream (exploration and extraction) business,¹⁵ and Argentina represents the sixth largest crude oil output by country for BP. According to CEO Richard Spies, with BP shrinking after the Deepwater Horizon and PAE growing, PAE's "weighting is more significant than ever before."¹⁶

According to BP's annual report 2016, BP's share of PAE's extraction activities in Argentina comes to 62,000 barrels per day (bpd) crude oil, 1,000bpd natural gas liquids and 354 thousand cubic feet per day gas. The same figures for Bolivia are 4,000bpd crude oil and 95 tcf/day gas.¹⁷

Argentina is among the top five countries for recent increases in reserves for BP.¹⁸ From the point of view of BP's future and access to new, unconventional oil and gas fields, PAE is a strategic asset thanks to its position in Vaca Muerta.

Restructuring

In September 2017 BP and Bidas announced plans to merge PAE with Bidas's downstream business Axion Energy. If the deal goes ahead after regulatory checks, from 2018 the integrated company PAEG will be owned 50% by BP and 50% by Bidas, with equal board representation and nomination rights over senior management.¹⁹ The merger with Axion will turn the combined company PAEG into Argentina's second largest integrated oil company after the state-owned YPF, with significant influence over the prices of hydrocarbons in Argentina.

Neuquén city outskirts with Comarsa petroleum waste site (used by various companies) seen on top of the hill

Anna Markova



2 What is Vaca Muerta?

The world's second biggest shale gas deposit

Argentina has the world's second largest resources of shale gas and fourth largest of shale oil.²⁰ Vaca Muerta – a shale formation in the highlands of Patagonia, covering the Neuquén, Río Negro, Mendoza, and La Pampa provinces, concentrates almost all of these resources: the biggest shale play outside North America.²¹ The Vaca Muerta and Los Molles shale formations cover an area of 30,000km². The resources are estimated at around 19.9 billion barrels of oil and 583 trillion cubic feet of gas. They represent an estimated 50 billion tons of CO₂ currently locked in the ground. So far unconventional gas (tight gas and shale gas) represents 23% of the gas extracted in the province, and shale oil 8%.

Thirty nine Mapuche indigenous communities find themselves sitting on top of the shale deposits of Vaca Muerta, alongside Argentina's "pear capital" Allen, and several protected natural areas.

Argentina's current President Mauricio Macri has bet on Vaca Muerta ever more aggressively

Apart from drilling wells with the use of hydraulic fracturing (fracking), pumping oil and gas out of them and the risk of groundwater contamination that comes with that, extraction in Vaca Muerta means more than ten waste dumps and oil landfills; three sand extraction mines, plus sand cleaning facilities and associated logistics; national and international pipelines; LNG plants on the Atlantic and Pacific oceans; a 700 km train line for goods transportation; expansion of petrochemicals and refineries; and new roads and highways.

A number of accidents have been registered: Total and YPF have lost radioactive pills, wells have gone up in flames due to gas leaks, truck accidents have caused spills, pipelines have broken, five workers lost their lives, among other incidents.²²

Macri and the multinationals

Almost every global oil major has a presence in Vaca Muerta. Chevron became the first oil multinational to bring a project to commercial exploitation alongside YPF since 2013. Also present through are Shell, BP and CNOOC (through Pan-American), Wintershall, ExxonMobil, Dow Petrochemical, Petronas, Schlumberger, Statoil and Total, alongside Latin American and Argentine transnational companies Petrobras, Pluspetrol, and Tecpetrol. Banks and foreign governments are also backing the drilling – including the US Department of State's Unconventional Gas Technical Engagement Program, and the U.S.-Argentina Binational Energy Working Group,²³ infrastructure loans from the World Bank and the Inter-American Development Bank,²⁴ and private and corporate debt provided by Citibank, ICBC, and Deutsche Bank, among others.

To attract the multinationals, recent Argentinian governments have created a lot of incentives. From 2013, a special economic regime for unconventional fossil fuels gives companies tax breaks, extends their licences from 25 to 35 years, and allows companies to hold unlimited licences (whereas previous anti-monopoly provisions limited their number to five).²⁵

Argentina's current President Mauricio Macri has bet on Vaca Muerta ever more aggressively. A new special labour reform for Vaca Muerta has effectively cut oil workers' wages by 30-40%, as certain rights were removed (e.g. transportation and breaks on the site are deducted from the workday's payment).²⁶ Import taxes on used oil drilling equipment have been removed.

Indigenous and farming communities that say ‘stop’

Over fifty local municipalities and one whole province (Entre Ríos) have enacted local fracking bans. Some of these are located in the Neuquén basin, and place limits to fracking expansion, such as Vista Alegre, an agricultural town overlapping with PAE’s flagship block Lindero Atravesado.

The Mapuche Lof (community) Campo Maripe has been protesting new wells by YPF and Chevron for over two years including occupying drill sites.

In Río Negro a new landfill that covers 300

hectares is being resisted by local population. In the city of Neuquén, community organisations have been pushing to expel oil landfills from cities and succeeded in pressuring city authorities to declare the waste sites must be moved.

Fracking has received criticism and calls for caution by the Nobel Peace Prize winner Adolfo Pérez Esquivel; the Catholic Bishop of Allen; the chamber of small farmers of Río Negro; provincial and national unions (physicians, teachers, public workers, energy workers); the Mapuche Confederation of Neuquen, and some political parties with representatives on local towns, provinces and the national State.

**Well drilling
in Allen**



Alexis Vichich

3 Who is BP?

BP (previously British Petroleum) is a major oil and gas company that grew out of the Anglo-Persian Petroleum Company founded in 1908, 51% nationalised by Britain in 1914, and privatized again in the 1980s. Today it's owned by a mixture of investors that's dominated by large investment banks in the UK and the US. In 2000, BP spent \$200 million on a new brand to position it as a "greener" business. But BP's solar arm was shut down in 2011,²⁷ and today BP's documents barely mention any renewables investments.

Dangerous management

BP is known for the twenty-first century's worst oil spill disaster, in the deep water of the Gulf of Mexico in 2010. The Macondo oil well blew out, setting the Deepwater Horizon oil platform on fire and killing 11 workers. The well, which BP unsuccessfully tried to plug several times, carried on spewing crude into the ocean for 89 days, creating a 10,000 square kilometer stain on the ocean and damaging fish and shrimp stocks depended on by thousands of fisherfolk living in the Gulf of Mexico, as well as wildlife

BP CEO
Bob Dudley



populations, for decades to come.

During the clean-up effort, BP used a chemical substance called Corexit to make the oil slick dissolve in the ocean. The use of the chemical was not widely publicised, and neither were its effects. Thousands of Gulf Coast residents as well as people who had

volunteered to help clean up the spill reported respiratory, neurological, and skin problems. Grave respiratory symptoms are associated with Corexit use by a study published in 2015.²⁸

BP ended up having to pay the largest environmental fine in world history: \$18.7 billion.²⁹ But the spill was not an isolated incident.

A blow-out very similar to the one in the Gulf of Mexico occurred 19 months earlier in an offshore well operated by BP in the Caspian Sea, off the coast of Azerbaijan. 212 workers were evacuated from the oil



Deepwater Horizon offshore drilling unit on fire, 2010

Numerous sources point to BP's aggressive management as a root cause of the Deepwater Horizon disaster

platform and several wells were shut down, but a full-scale disaster was avoided and at the time incident only merited a brief sentence in BP's annual report.³⁰

A fire at a BP refinery in Texas in 2005 killed 15 workers and severely injured 180 more. Investigations showed the refinery had been failing to follow basic safety measures: "broken alarms, thinned pipe, chunks of concrete falling, bolts dropping 60 ft and staff being overcome with fumes."³¹

Numerous sources point to BP's aggressive management as a root cause of the Deepwater Horizon disaster.³² Under the leadership of CEO John Browne, for twelve years the company had been cutting corners as far as it possibly could, giving up on many industry standard safety practices in the process.

Extreme frontiers

Since the accidents, particularly the Gulf of Mexico oil spill, BP has put effort into recovering its image as a "safe" company. Like other oil multinationals, though, BP is continuing to bet on restocking its reserves from ever more extreme sources of oil and gas.

These investments include:

- Shale gas in Argentina and China,
- Deepwater in Angola and Brazil,
- A partnership with Rosneft to access Russia's Arctic oil reserves – currently paused due to US and European sanctions against Russia.

4 Pan-American Energy's dossier

As the operator of Argentina's largest conventional oil field (Cerro Dragon), PAE has been involved in a number of questionable practices: use of an obscure subsidiary to deal with worker unrest, contaminating groundwater, and allegedly paying \$300 million in bribes.

An alleged \$300 million bribe

PAE's licence for Cerro Dragón was due to expire in 2017. Nonetheless, in 2007 the company received a new licence. Unusually, the new licence term allows PAE to continue pumping oil and gas at Cerro Dragon until 2047 – likely past the end of the available reserves at Cerro Dragon – when normally licences are granted by Argentinian provinces for 10 or 15 years.

In 2014, according to press reports,³³ BP declared to the US Securities and Exchange Commission that a bribe of USD 300 million had been paid to have Pan American Energy's licence for Cerro Dragón renewed.

The Securities and Exchange Commission did not respond to requests for comment on the state of its investigation. But the Argentinian federal prosecutor Guillermo Marijuan has

also been investigating the case, meeting with US investigators, and requesting information from PAE, according to reports in Argentinian press.³⁴ PAE has denied the allegations and unsuccessfully asked for the prosecutor's investigative actions to be annulled.³⁵

Repressing oil worker unions

In June 2012 five hundred workers in an independent union faction called Los Dragones occupied facilities and stopped machinery at the Cerro Dragon field.³⁶ Employed as "construction" workers through PAE's outsourcing contracts, the Dragones earned significantly less than their counterparts who worked for PAE directly. Extraction at Cerro Dragon was stopped for two weeks and provincial authorities called in the gendarmes (militarised police).

Since the controversy, PAE dropped contracts with a number of firms where the Dragones were employed, opting instead for a company called Manpetrol, and transferring a number of employees' contracts to Manpetrol. The firm had not disclosed its end

San Roque block hydrocarbons plant, Neuquén province, Patagonia. The block is operated by Total and PAE/BP holds a 16.5% stake



Martin Alvarez Mulally

beneficiaries,³⁷ until in 2012 it was revealed that the majority stake in Manpetrol belongs to PAE itself.³⁸ Provincial officials have accused PAE of using Manpetrol to undermine PAE's contractual obligations for local content – i.e. instead of contracting local firms, PAE had set up an apparently separate business to conduct its own contracts.³⁹

Contaminated groundwater

PAE's contamination of groundwater in an area known as Koluel Kaike resulted in a more than fifteen-year-long, unresolved controversy.

In 1999 an oil worker called Arturo Cárcamo sued PAE for failing to follow standards for treating petroleum residues, and letting them leak into the groundwater. A resulting study done by the Gendarmería's environmental department showed that samples of groundwater “do not satisfy guideline levels for human and animal consumption ... due to excesses in the parameters smell, colour, sulphurs, nitrates, and sulfates”. The company initially denied the problem, though built a water treatment plant that PAE claimed “had nothing to do with petroleum pollution” but was there to treat “salts harmful to the population”.

Another study of the groundwater reservoir – in 2002 – found chlorides levels between 635-6300 mg/l (compared to average levels 93-840 mg/l in the local area), as well as heavy metals, phenolic substances and benzene. PAE's waste pools pools leaked 418 cubic metres of production water into the soil every day, according to a study submitted by PAE quoted by an official.⁴⁰

In 2009 the provincial environmental authority started requiring all oil companies to drill monitoring wells to assess groundwater contamination. According to statements by officials, PAE failed to adequately respond to their requests for information, failed to start remediation works on contaminated sites, and was the last company in the region to start drilling water monitoring wells.



LEFT
Marcos Bulgheroni, member of PAE board and son of Bidas co-founder Carlos Bulgheroni

RIGHT
Alejandro Bulgheroni, member of PAE board and Bidas co-founder

In 2013 the regional environmental authority closed PAE's waste treatment site Repositorio PC-1.200 for failing to process contaminated waste properly.

Coastal spill

PAE is the largest shareholder (with 31.7%) in TERMAP, a hydrocarbons storage and transportation operator in Golfo San Jorge. In December 2007 a spill of at least 300 cubic metres of oil contaminated the shore of Caleta Córdova barrio, spilled from a monobuoy (floating storage facility) operated by TERMAP, resulting in loss of livelihoods for small-scale fisherfolk and a US\$5 million fine for the boat's owner. Caleta Córdova residents have complained since the spill of a surge in chronic skin and respiratory diseases in children and adults. In 2011, eighteen children with various conditions from the neighbourhood were sent for assessment to a regional hospital in the hopes of initiating an epidemiological study, but the results were never published.⁴¹

PAE has been involved in a number of questionable practices: using the gendarmes to suppress worker unrest, contaminating groundwater, and allegedly paying \$300 million in bribes

5 The bet on extreme gas

BP and Pan-American's role in Patagonia

PAE/BP operates six licence blocks in the Vaca Muerta province, and forms part of a consortium in two more.

According to COO Danny Massacese, PAE is drilling unconventional wells at a rate of 1.1 wells per month.⁴² At least 37 wells are planned for fracking on blocks with PAE / BP participation in 2017, and a further 48 wells in the next three years, in addition to 100 tight gas wells that are already operating in PAE's flagship block Lindero Atravesado.

The table below provides a breakdown of PAE/BP's operations in Vaca Muerta.

At least 37 wells are planned for fracking on blocks with PAE / BP participation in 2017, and a further 48 wells in the next three years

San Roque block hydrocarbons plant, Neuquén province, Patagonia. The block is operated by Total and PAE/BP holds a 16.5% stake



Martín Alvarez Mulally

Block name	PAE's role and associated companies	What's happening?	Whose local jurisdiction is it?
Lindero Atravesado	Operator (62.5%), with YPF (37.5%)	23 “unconventional” wells, planned in 2017 targeting tight gas and shale oil, including horizontal wells with 60 to 80 fractures each. Already extracting gas from 100 tight gas wells ⁴³	Overlaps with Vista Alegre, a municipality that has enacted a fracking ban, as well as the communities Chañar, Centenario, and Senillosa, and lake Mari Menuco, main water source for Neuquén city
Coirón Amargo Sur Este	Operator (55%), with Magdalena Austral (35%) and provincial oil co. Gas y Petróleo (10%)	One pilot well has been fracked 37 times ⁴⁴	In provincial control
Aguada Pichana Oeste and Aguada de Castro	Operator (45%), with Total (25%) and YPF (30%) ⁴⁵	24 to 30 horizontal wells planned between 2017-2021 (no data on number of fractures) ⁴⁶	Overlaps significantly with Los Chihuidos development commission (less rights to control than a municipality)
Aguada Cánepa	Operator (90%) under a “carry” agreement with provincial oil co. Gas y Petróleo ⁴⁷	One horizontal well planned with all costs carried by PAE	In provincial control
Bandurria Centro	Operator and 100% licence holder	PAE has drilled a pilot well with 80-stage fracking. ⁴⁸ Expects to drill 9-13 wells in 2017 ⁴⁹	In provincial control
San Roque	16,5% participation, operated by Total (24.7%), with partners Wintershall (24.7%) and YPF (34.1%) ⁵⁰	1 well already fracked in 2013 inside protected area. ⁵¹ No recent fracking activity known	Development commission Aguada San Roque (less rights to control than a municipality)
Aguada Pichana Este	14% participation, operated by Total (41%), with partners Wintershall (22.5%) and YPF (22.5%) ⁵²	Total has begun drilling the first well on the licence block. ⁵³ 48 wells planned by 2021	In provincial control

In a world where BP's future as an oil company is uncertain, BP is putting forward gas extraction as the solution to climate change – and the solution to the questions of its own corporate future

BP – PAE's risks in Vaca Muerta

Municipal action against fracking. PAE's flagship Vaca Muerta licence – Lindero Atravesado – overlaps with several local government entities including Vista Alegre, whose municipal assembly unanimously adopted a ban on fracking on its territory. The government of Neuquen province has taken the municipality to court in a bid to remove the ban, but the population of Vista Alegre are not backing down and have resorted to blocking the highway to call attention to their fight.⁵⁴ Two more local government entities – Los Chihuidos and Aguada San Roque – significantly overlap with other concessions where PAE participates in drilling, however, the powers of their Development Commissions are significantly less extensive than of a municipality.

Indigenous rights. Treaty rights and the right to free prior informed consent for indigenous communities is routinely violated in Neuquen province, in contravention of Article 19 of the The Declaration on the Rights of Indigenous Peoples. This abuse has evidently escalated in the past three years, both against communities directly affected by drilling and those in the provincial capital Neuquén, as federal and provincial governments push to expand the numbers of wells drilled. In 2017 the provincial government has escalated the use of violent tactics against Mapuche indigenous organisations, threatening two communities (Puel Pvjv and Fvta Xayen) with evictions, and bringing in national militarised gendarmerie against a community (Campo Maripe) that was protesting fracking on its land.⁵⁵ While according to 2015 mapping data there are no registered Mapuche communities on the land licenced to PAE, the situation is complicated by the fact that Mapuche communities have historically been disincentivised from applying for official status, and many indigenous communities' lands have not been officially surveyed which is required in Argentinian law for their recognition.⁵⁶

Fracking in protected natural areas. The San Roque block (where PAE holds 16,5%) overlaps covers the natural protected area Auca Mahuida. In addition, a courtcase by a local ranching family successfully forced Total to relocate drill sites.⁵⁷

A toxic supply chain.

■ A petroleum waste site on the outskirts of Neuquen city, used by various companies, contaminated water supplies and air in adjacent neighbourhoods. Community associations in these locations have put pressure on the city administration, forcing the provincial government to declare it would be moved. The same thing happened in Cinco Saltos, Rio Negro province. However, other towns like Añelo and Catriel (Rio Negro) are now in danger from new petroleum waste sites.⁵⁸

■ Fracking relies on the extraction and use of silica sands, at approximately 1500 tons per fracture. Silica mines have been opened up or proposed in neighbouring provinces Entre Ríos and Chubut. Public health concerns have been raised regarding these mines, as microparticles of silica sand can damage lungs, causing silicosis and forms of cancer.⁵⁹ Community associations in Entre Ríos and Stefenelli (Rio Negro) have begun protesting the plans for sand mining and distribution centres.⁶⁰

Conclusion: The strategy

At BP's 2016 Annual General Meeting, CEO Bob Dudley claimed that "if you closed all coal fired power plants tomorrow and replaced them with gas you would reach 2°C warming scenario".⁶¹

There is a growing investor and political pressure over "stranded assets" – the idea that fossil fuel reserves are likely to become unextractable due to restrictions on fossil fuel use thanks to climate regulation. And the demand for oil, according to many analyses, has already peaked in Europe and may do so in the rest of the world in the following decades.⁶²

In a world where BP's future as an oil company is uncertain, **BP is putting forward gas extraction as the solution to climate change – and the solution to the questions of its own corporate future.**

BP's bet on gas includes shale in China and Argentina; offshore gas in Egypt; and gas pipelines that link BP's existing operations in Azerbaijan to European markets.

In turn, **for PAE in Argentina, there are distinct advantages to drilling for gas.** The Argentinian state offers a subsidy for the sales of gas from new gas drilling projects on the domestic market, guaranteeing that the gas can be sold at a fixed price of US\$7.5 per MMBTU, up from the market price of US\$5.8 per MMBTU.⁶³

Richard Spies, the CEO of Pan-American Energy, identifies the drilling for tight gas as the next step in PAE's strategy: "to make further inroads into tight gas development to the point where we are in a position to set about producing in Vaca Muerta".⁶⁴

As this briefing has demonstrated, **BP is a major player pushing forward the Argentina's shale mega project.** BP has plans for 85 new wells requiring complex fracking operations on its concessions, and brings with it a dangerous track record of pollution, alleged bribery, and repressing oil worker unions. Following next year's merger with Axion, BP's unit Pan American Energy will become Argentina's largest private oil company.



Lof Campo
Maripe drilling rig
occupation

At a time when it is clear that we can only prevent catastrophic climate change if we keep new oil and gas in the ground, **Patagonia's shale reserves must be recognised as a no-go zone, the rights of Indigenous communities to free, prior, informed consent guaranteed, and BP's plans for fracking halted.**

Addendum

Pan-American Energy in other countries

Mexico

BP – PAE runs the Hokchi shallow offshore oil block with reserves of approximately 334 million barrels. BP – PAE is the first non-Mexican oil company to start drilling after laws were amended in Mexico to allow multinationals to do so.⁶⁵ After the company claimed “promising” results from the first test drill, on this basis BP’s country manager for Mexico Chris Sladen called on the Mexican government to open up bigger concessions for bidding by the multinational company.⁶⁶

Controlled fire
at BP’s Gulf of
Mexico spill, 2010

Bolivia

Chaco, a gas extracting company and 51% subsidiary of PAE, was nationalised by the Bolivian government in 2009, for which PAE sought compensation in an international arbitration court and won \$357 million in settlement from the Bolivian government.⁶⁷

PAE holds a 25% interest in the Margarita and Huacaya gas fields run by a Repsol-led consortium.⁶⁸ The consortium holds rights to extract gas from the fields up to 2046.⁶⁹



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At a time when scientific studies say 80% of already discovered fossil fuels must stay in the ground to avoid runaway climate change, BP is attempting to break open one of the most important and most dangerous fossil fuel frontiers in the world: the Vaca Muerta deposit in Patagonia, Argentina. This briefing reveals the dangerous track record and the frontier plans of BP's Argentinian arm, Pan-American Energy.



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