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Welcome

Our world map shows some of the bigger future prospects and projects aiming to keep Chevron going strong for decades. Organized by types, they include examples of new business, exploration, potential technology breakthroughs and more. Click on an opportunity type or region to see what the future holds.

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Opportunity

- ☒ Deepwater
- ☒ Discovered Reserves
- ☒ Gas
- ☒ Liquefied Natural Gas (LNG)
- ☒ Shale Gas
- ☒ Technology

Zoom in to View

- ▶ World View
- North America
- South America
- Europe and Eurasia
- Africa
- Middle East
- Asia
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ARCTIC
OCEAN

BEAUFORT
SEA

ALASKA (USA)

CANADA

Canada



Beaufort Sea

Last year, we won a new deepwater tract in Canada's Arctic offshore, where we hold the third-largest lease position and interests in 10 discoveries. Wells are likely several years away; Chevron's Arctic Center in Calgary is providing technical support.

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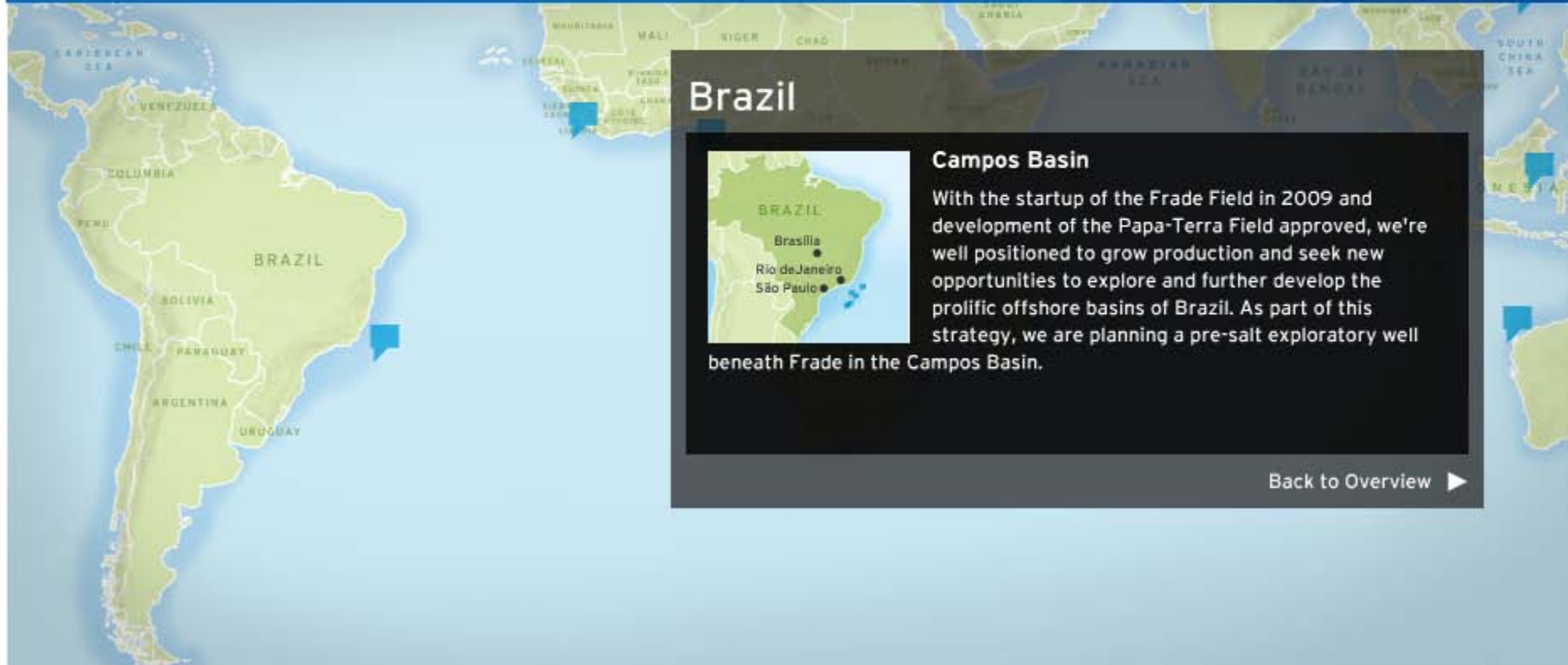
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Brazil



Campos Basin

With the startup of the Frade Field in 2009 and development of the Papa-Terra Field approved, we're well positioned to grow production and seek new opportunities to explore and further develop the prolific offshore basins of Brazil. As part of this strategy, we are planning a pre-salt exploratory well

beneath Frade in the Campos Basin.

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United Kingdom



North Atlantic Margin

In 2004, we employed advanced geophysical methods to identify targets in a difficult geologic setting and discovered the Rosebank oil field. Last October, we began drilling the Lagavulin prospect in waters nearly a mile deep to test another huge, high-potential target in this remote frontier. We plan to drill other wells in this exciting area.

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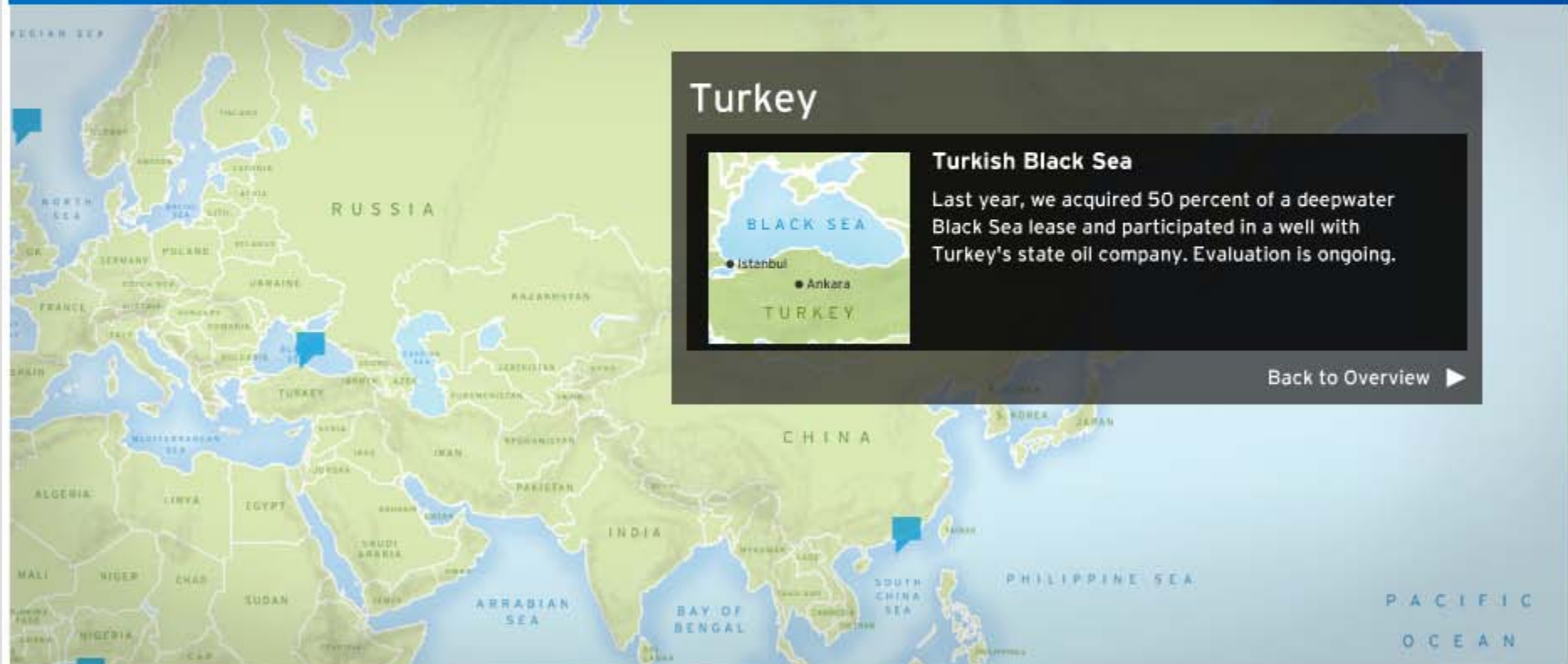
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Turkey



Turkish Black Sea

Last year, we acquired 50 percent of a deepwater Black Sea lease and participated in a well with Turkey's state oil company. Evaluation is ongoing.

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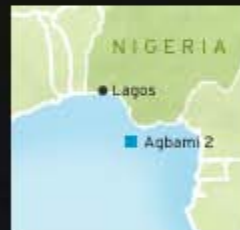
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Nigeria



Nigeria Deep Water

Successful exploration has positioned us to develop and expand production in this important area. Agbami 2, scheduled for first production this year, aims to help keep our giant Agbami project operating at 250,000 barrels of liquids per day. Meanwhile, we're participating in two nonoperated projects to develop other discoveries – one may start producing in 2012 – and drill two exploratory wells in 2011.

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China



Pearl River Mouth Basin

Last year, we acquired exploration rights in the South China Sea from Devon Energy. A large gas deposit was found in 2006 by others probing this major deepwater basin. With new 3-D seismic in hand, we plan our first exploratory well in 2011.

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Indonesia



Gendalo-Gehem-Bangka

Approved last year, the Gendalo-Gehem project off East Kalimantan Province will develop gas and condensate fields in water about 6,000 feet (1,828 m) deep – nearly twice the depth of Chevron's nearby West Seno hub, Indonesia's first deepwater development in 2003. Most of Gendalo-Gehem's projected gas output of 1.1 billion cubic feet per day will flow to the giant Bontang LNG plant nearby. The shallower Bangka project, if approved, would tie another undeveloped field to West Seno.

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Australia



Carnarvon Basin

We continue to acquire blocks and drill exploratory wells in deep waters where we've made 10 major gas discoveries in less than two years, logging new resources to underpin a long-term LNG export strategy anchored by our giant Gorgon project and planned Wheatstone development.

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Venezuela

Carabobo

With our 150,000-barrel-per-day PetroPiar project going strong nearby, we're negotiating terms for three new blocks and potentially larger, similar developments on long-reach horizontal wells and upgrading the extra-heavy oil into a valuable, lighter synthetic crude.

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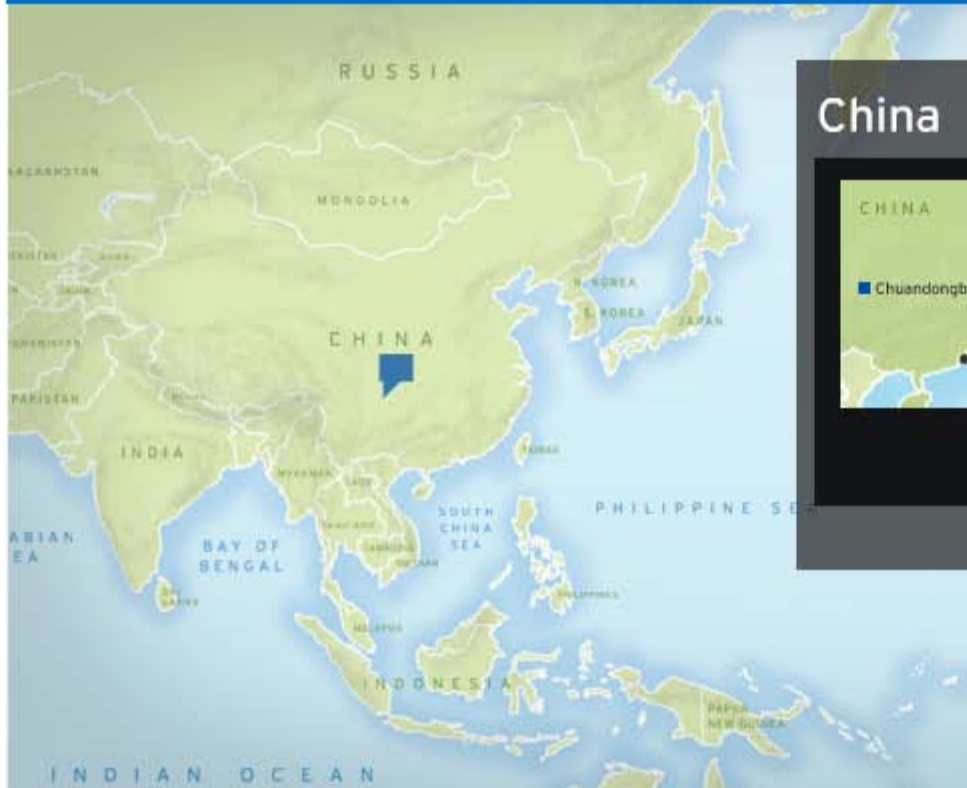
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China



Chuandongbei

Leveraging decades of Chevron experience safely developing "sour gas" in North America and Kazakhstan, we won this opportunity in 2007 to develop a large, geologically complex, sour-gas resource found by the Chinese. We started building the first of two major gas purification plants in 2010.

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United States



Gulf of Mexico Shelf

In a 2010 federal sale, we acquired 46 tracts, mostly in shallow waters and potentially holding big, ultra-deep gas deposits in the vast Wilcox Sand (see also Gulf of Mexico Deep Water). Our 2007 Flatrock discovery on the shelf, 3.5 miles (5.6 km) under our mature Tiger Shoals development, flowed at large volumes. Our latest exploratory well, Bear's Hump, is in progress.

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Nigeria



Escravos Projects

Investment continues in a network of major projects to gather, process and sell more gas and gas liquids to regional and global markets. Further expanding the recently enlarged Escravos processing facilities will allow us to handle more production from multiple fields. A gas-to-liquids facility will export 33,000 barrels per day when completed.

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Australia



Gorgon/Wheatstone LNG

Our largest-ever project at \$37 billion, Gorgon is also Chevron's flagship LNG project, as we work to take our place as a top, global LNG developer and exporter with several projects. Wheatstone, nearly as large, is nearing a final investment decision.

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Poland



development.

Poland Shale Gas

Exploration licenses totaling just under 1.1 million acres (4,433 sq km) were awarded in 2009 and 2010. Seismic work started last year is ongoing, and a multi-well drilling program expected to start this year will help us understand the geology, find the "sweet spots" and evaluate options for commercial gas

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Romania



Romania Shale Gas

The same global teamwork and collaboration that won us our Poland shale opportunity helped us win 670,000 acres (2,700 sq km) of exploration acreage in Romania last year – and a recent acquisition has more than tripled our Romania shale gas acreage. We plan to start seismic surveys this year.

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Kazakhstan



New Tengiz Expansion

Front-end engineering design is planned this year for the Future Growth Project to boost oil output at the giant Tengiz Field between 250,000 and 300,000 barrels per day - roughly a 50 percent increase. The project will leverage the high-pressure, sour-gas injection technology pioneered in the SGI/SGP expansion. Final investment decision is anticipated in 2012.

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Indonesia



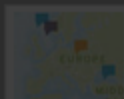
Minas EOR

Since our first pilot test here in the late 1990s, we've been working to perfect polymer/surfactant injection that could scour hundreds of millions of additional barrels of oil from the giant, declining Minas Field, where 4 billion barrels remain unreachable with current technologies.

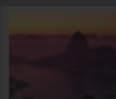
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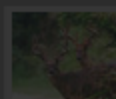
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Cautionary Statement

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CAUTIONARY STATEMENT RELEVANT TO FORWARD-LOOKING INFORMATION FOR THE PURPOSE OF "SAFE HARBOR" PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

This story contains forward-looking statements relating to Chevron's operations that are based on management's current expectations, estimates and projections about the petroleum, chemicals and other energy-related industries. Words such as "anticipates," "expects," "intends," "plans," "targets," "projects," "believes," "seeks," "schedules," "estimates," "budgets" and similar expressions are intended to identify such forward-looking statements. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and other factors, some of which are beyond the company's control and are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed or forecasted in such forward-looking statements. The reader should not place undue reliance on these forward-looking statements, which speak only as of the date of this report. Unless legally required, Chevron undertakes no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

Among the important factors that could cause actual results to differ materially from those in the forward-looking statements are: changing crude oil and natural gas prices; changing refining, marketing and chemical margins; actions of competitors or regulators; timing of exploration expenses; timing of crude oil liftings; the competitiveness of alternate-energy sources or product substitutes; technological developments; the results of operations and financial condition of equity affiliates; the inability or failure of the company's joint-venture partners to fund their share of operations and development activities; the potential failure to achieve expected net production from existing and future crude oil and natural gas development projects; potential delays in the development, construction or start-up of planned projects; the potential disruption or interruption of the company's net production or manufacturing facilities or delivery/transportation networks due to war, accidents, political events, civil unrest, severe weather or crude oil production quotas that might be imposed by the Organization of Petroleum Exporting Countries; the potential liability for remedial actions or assessments under existing or future environmental regulations and litigation; significant investment or product changes under existing or future environmental statutes, regulations and litigation; the potential liability resulting from other pending or future litigation; the company's future acquisition or disposition of assets and gains and losses from asset dispositions or impairments; government-mandated sales, divestitures, recapitalizations, industry-specific taxes, changes in fiscal terms or restrictions on scope of company operations; foreign currency movements compared with the U.S. dollar; the effects of changed accounting rules under generally accepted accounting principles promulgated by rule-setting bodies; and the factors set forth under the heading "Risk Factors" in Chevron's Annual Report on Form 10-K for the year ended December 31, 2010. In addition, such statements could be affected by general domestic and international economic and political conditions. Unpredictable or unknown factors not discussed in Chevron's Annual Report on Form 10-K for the year ended December 31, 2010 could also have material adverse effects on forward-looking statements.



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Brazilian Adventure

Technology transfer between continents brings
boost to production.

In Brazil, a beautiful dance between technology and
collaboration positions Chevron for long-term growth and
production in this key strategic location. The star performer is
the Frade deepwater oil field.



[Read more](#) ►

Left: Rio de Janeiro, home of Chevron's Brazil upstream office.



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Located 75 miles (121 km) off the coast of Brazil, Frade, Chevron's first and only operated field in the country, is overcoming significant challenges to ramp up production. Sharing the stage is another field, the Papa-Terra heavy oil subsea development. Papa-Terra, operated by Brazil's national oil company Petrobras, represents Chevron's largest investment in Brazil, and production is expected to begin in 2013.

Frade and Papa-Terra are both joint-venture projects with Petrobras. Brazil's deepwater fields represented an opportunity to work with a strong business partner to secure a steady flow of crude and natural gas resources to meet future demand.

"We identified Frade as an opportunity back in 2001, but we weren't going to move forward with drilling until the economics made sense for Chevron and for our partners," says Ali

Moshiri, president, Chevron Africa and Latin America Exploration and Production Co. "It is because of the world-class technology, ingenuity and performance of our people and the patience, trust and vision of our partners in Brazil that we were able to develop Frade and get the wells online."



Chevron has interests in Brazil's prolific Campos and Santos basins.

A strong partnership and a highly skilled team of petroleum engineers, earth scientists and geophysicists were necessary components to overcome the technical challenges at Frade.

Chevron was able to position itself as the partner of choice based on its cultural values and rich history of successful partnerships around the world. "We've learned a lot from each other and built a lot of trust with Petrobras by showing that The Chevron Way, more than just words, is a culture of performing with the right behaviors at the right time" says Clive Sharman, manager, non-operated joint ventures (NOJV), Brazil.

Frade's characteristics – deep water (3,700 feet or 1,128 meters), heavy oil and gas, and heterogeneous turbidite reservoirs – all require innovative solutions to maximize production and cost efficiency while maintaining safety standards.



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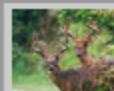
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Where will we go next
to capture new
opportunities?

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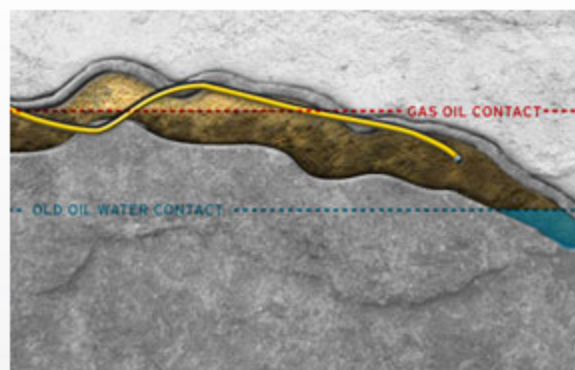
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"The key challenge is the complexity of its reservoirs," says Steve Garrett, manager, Aberdeen Global Technology Center (GTC). "The reservoirs are comprised of deepwater sandstones similar to those of Chevron Upstream Europe's Captain and Alba fields."

The local team in Brazil worked with its cross-functional partners in GTC and Chevron Energy Technology Co. to implement the horizontal sinusoidal pilot (HSP) drilling technology used at Captain and Alba to overcome the reservoir challenges at Frade (see the animation on this page for explanation of HSP).

The Frade team also has to deal with other operating challenges, such as getting equipment and supplies out to the wells and working with a floating production facility. Despite the complexities of the operation, the team safely and successfully achieved first

production in June 2009 and expects to achieve a maximum of 68,000 barrels a day by mid-2011.



How Captain steered wells to the right places. [Click to enlarge.](#)

"I'm proud of the team's ability to persevere through some of the challenges we have

faced and their dedication to ensuring the safety and reliability of our operations," says Glen Edwards, Frade asset manager.

The Frade Field will soon have a neighbor to its south. The Papa-Terra deepwater development, Chevron's second major capital project with joint-venture partner Petrobras in Brazil, is being constructed in the Southern Campos Basin and is expected to begin production in 2013.

Papa-Terra will be operated by Petrobras, with Chevron holding a 37.5 percent interest. The project is in phase 4 of the Chevron Project Development and Execution Process.

Current activities are focused on converting a tanker into the project's floating production storage and offloading vessel (FPSO) and developing the tension leg wellhead platform

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How Captain Steered Wells

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How Captain Steered Wells to the Right Places

Scientists at the Global Technology Center (GTC) in Aberdeen have applied lessons learned in the North Sea Captain and Alba fields, which have similarities to Frade. In addition to a suite of reservoir models, which support reservoir simulation, the GTC offered a drilling solution pioneered at Captain, called Horizontal Sinusoidal Pilots (HSP). An HSP well can hit the top and base of reservoirs many times in many locations, helping to improve understanding of the reservoir's complexity and position producer and injector wells in the right places to maximize production.

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3 Gathering Data

4 Final Producer

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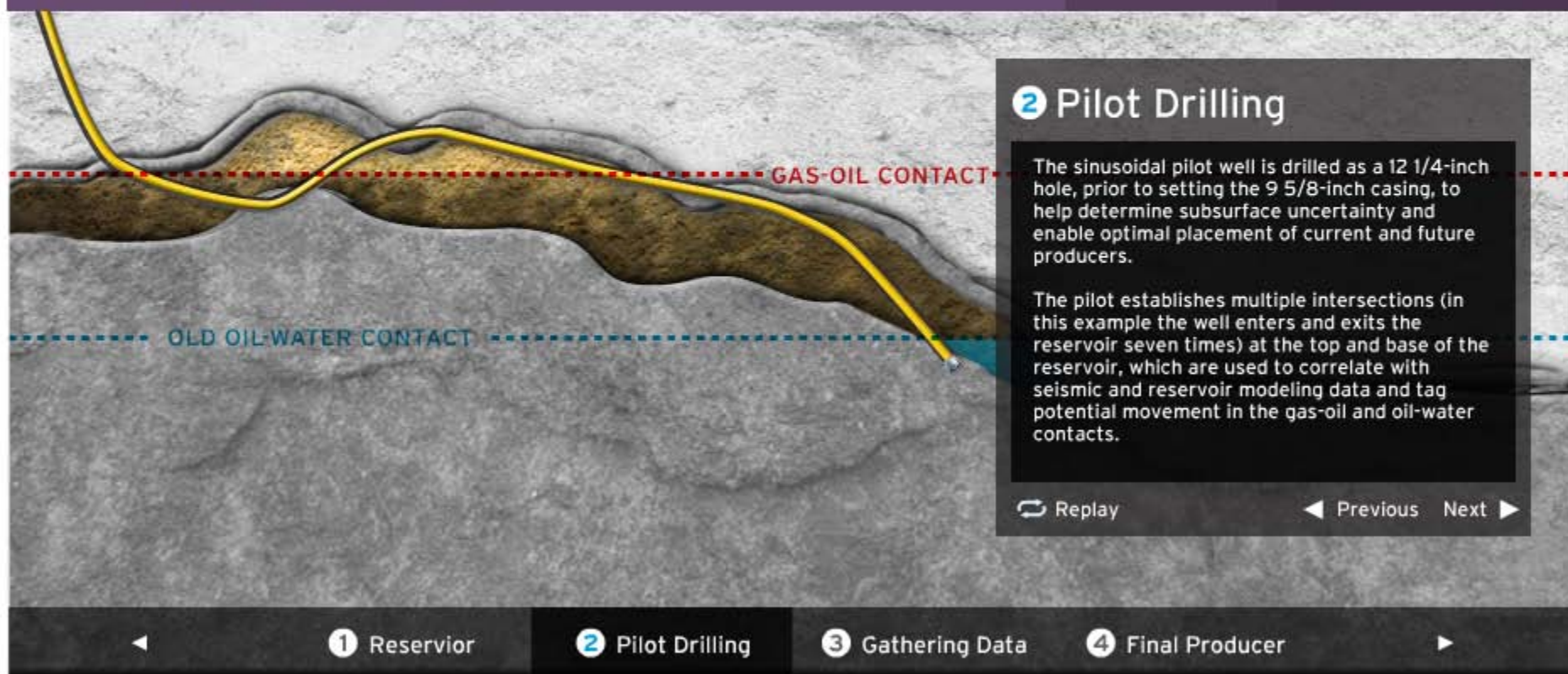
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2 Pilot Drilling

The sinusoidal pilot well is drilled as a 12 1/4-inch hole, prior to setting the 9 5/8-inch casing, to help determine subsurface uncertainty and enable optimal placement of current and future producers.

The pilot establishes multiple intersections (in this example the well enters and exits the reservoir seven times) at the top and base of the reservoir, which are used to correlate with seismic and reservoir modeling data and tag potential movement in the gas-oil and oil-water contacts.

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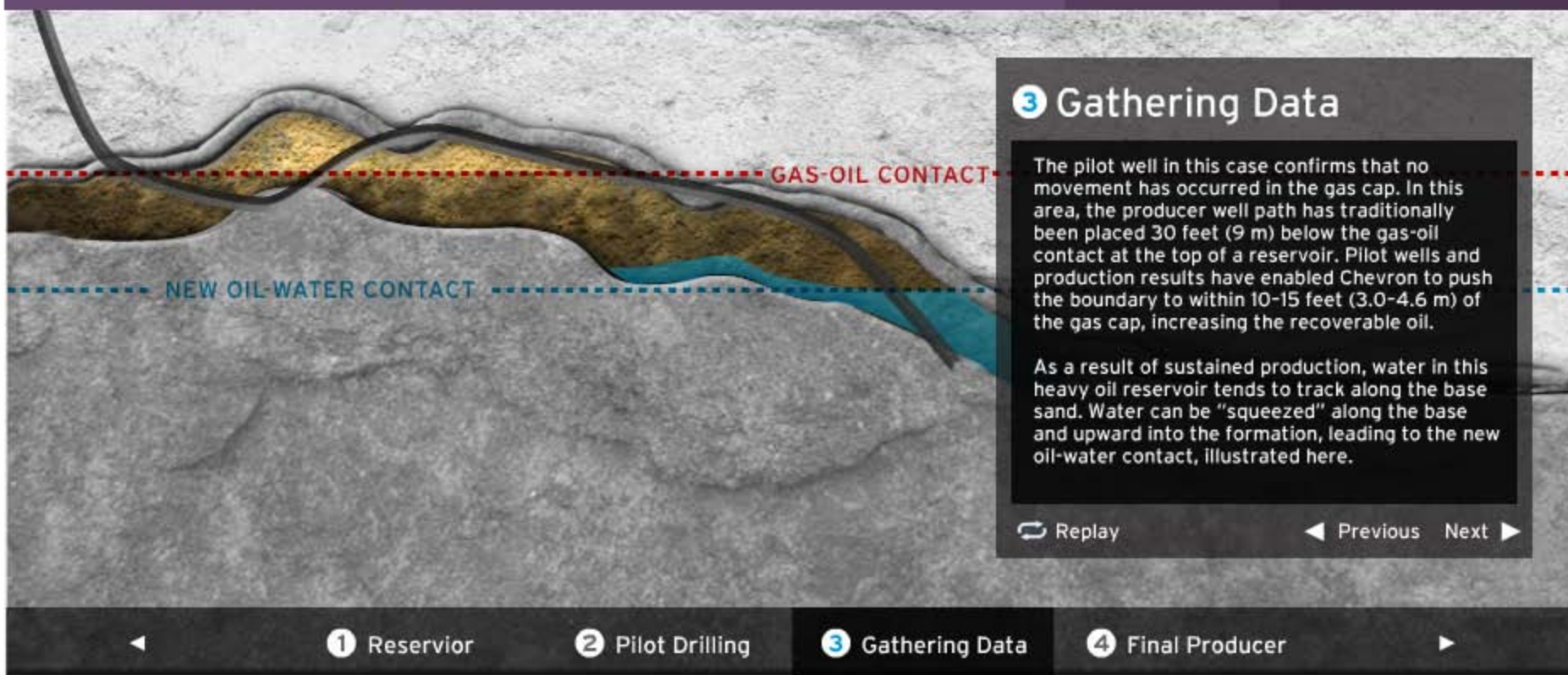
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3 Gathering Data

The pilot well in this case confirms that no movement has occurred in the gas cap. In this area, the producer well path has traditionally been placed 30 feet (9 m) below the gas-oil contact at the top of a reservoir. Pilot wells and production results have enabled Chevron to push the boundary to within 10-15 feet (3.0-4.6 m) of the gas cap, increasing the recoverable oil.

As a result of sustained production, water in this heavy oil reservoir tends to track along the base sand. Water can be "squeezed" along the base and upward into the formation, leading to the new oil-water contact, illustrated here.

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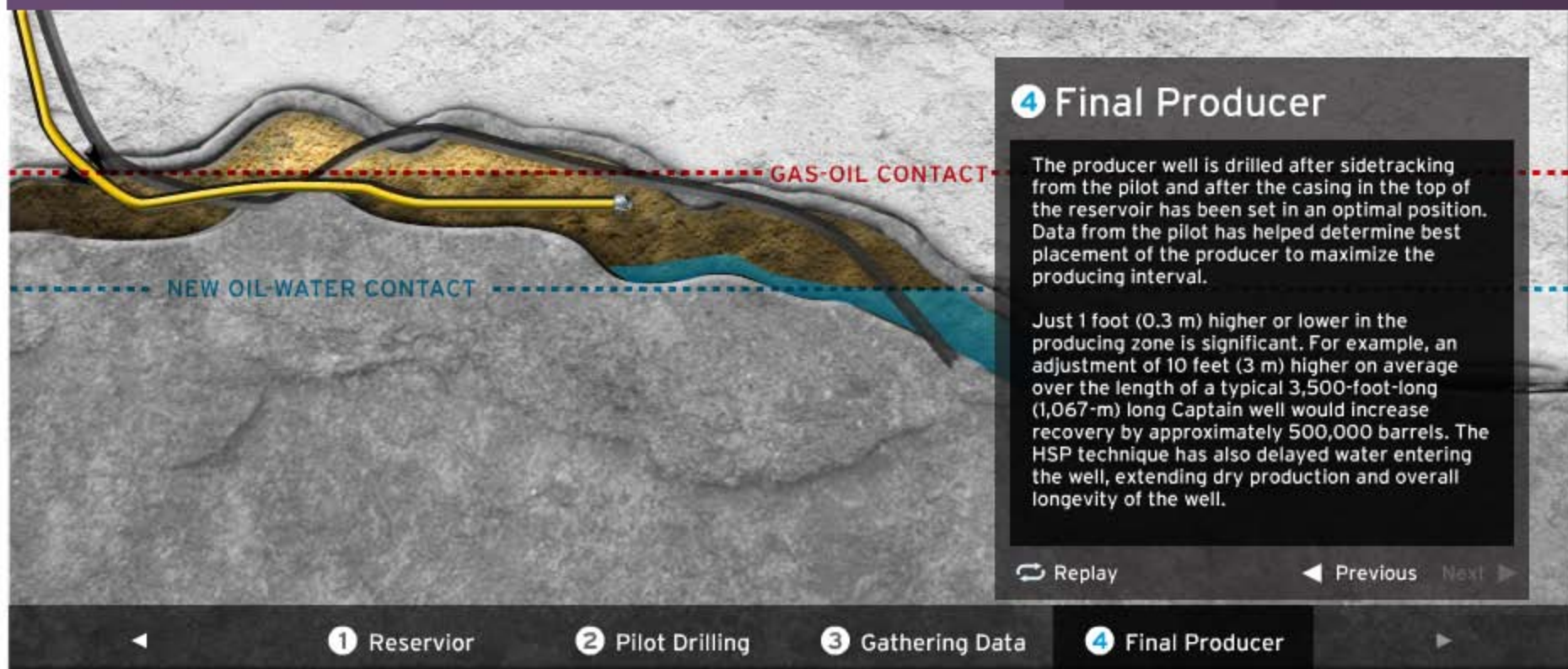
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4 Final Producer

The producer well is drilled after sidetracking from the pilot and after the casing in the top of the reservoir has been set in an optimal position. Data from the pilot has helped determine best placement of the producer to maximize the producing interval.

Just 1 foot (0.3 m) higher or lower in the producing zone is significant. For example, an adjustment of 10 feet (3 m) higher on average over the length of a typical 3,500-foot-long (1,067-m) long Captain well would increase recovery by approximately 500,000 barrels. The HSP technique has also delayed water entering the well, extending dry production and overall longevity of the well.

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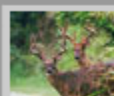
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Part of the engineering team at Chevron's Rio office (from left), subsea engineer Ian Herzog, senior operations advisor Jaime Humberto Martinez Farley and Frade FPSO facilities engineer Erik Woodward.

(TLWP). Construction of the TLWP started in December 2010 and two rigs will begin drilling operations in September.

Like Frade, the Papa-Terra team will have to overcome several logistical and technical challenges before it can reach peak production.

"One of our biggest challenges is the heavy oil," says NOJV manager Sharman. "We are dealing with 14-16 degree API oil in 3,500-4,000 feet (1,067-1,219 m) of very cold water. Keeping the oil flowing under these conditions can be a challenge and has required innovation."

Later in construction, the team will also have to manage the complex hookup and commissioning logistics involving the FPSO, TLWP, mobile drilling rigs and a tender assist rig.

So far, the team has set a great foundation for operational excellence, as it has operated for more than 1 million work hours without an

incident and has leveraged several of Petrobras' existing long-term contracts to contain costs during development and drilling.

For Brazil, the current and future production from Frade and Papa Terra will deliver long-term economic benefits.

George Buck, country manager, Chevron Brazil, sums up the opportunities: "These are exciting projects that require a high degree of technical innovation. They demonstrate Chevron's ability to partner effectively with Petrobras, another industry leader in deepwater production, to deliver new jobs, new facilities and new energy production."

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In our global operations, we're dedicated to conducting our business with environmental responsibility.

Being responsible environmental stewards is an important part of The Chevron Way. Whether in everyday operations or the development of major capital projects, employees continually seek and pursue opportunities to reduce our environmental footprint. Here are just a few examples.

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Left: Deer now inhabit the site of a former refinery.



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Natural Resources: Indonesia's Cleaner Power

Chevron's commercial production of geothermal energy from West Java's Salak and Darajat fields enables us to power millions of Indonesian homes.

A reliable, renewable energy source derived from natural heat within the earth, geothermal energy produces steam, which generates electricity while emitting almost no greenhouse gases.

Chevron has become the world leader in geothermal energy production by leveraging the reservoir management and drilling experience gained from our extensive oil and natural gas operations.

Pictured: Salak geothermal field, located in one of Indonesia's largest national parks. We work with farmers, park rangers and international wildlife groups to protect the park's biodiversity.

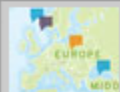
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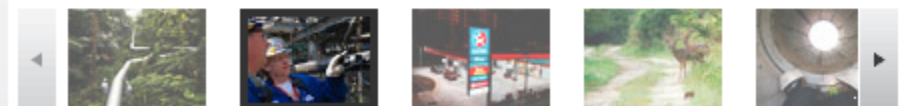
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Air Emissions: Richmond Reduces Flaring

The Richmond Refinery confronted the challenge of reducing flaring during maintenance of its fluid catalytic cracking (FCC) unit.

A dedicated refinery team was tasked to solve the problem. After questioning previous procedures, the team developed a plan that adjusted the shutdown schedule for cleaning equipment and brought in equipment that reduced flow to the recovery system.

These changes virtually eliminated flaring while allowing the refinery's relief equipment to operate normally. Flaring was cut in 2010 by 99.97 percent over the previous shutdown.

Pictured: Rick Smith, cracking complex section head, and FCC operations assistant Karla Salomon.

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Energy Use: Lighting the Way in Singapore

Caltex Clementi service station received the 2009 Green Station Gold Award from the Building and Construction Authority of Singapore. The award recognized local efforts to seek real savings through energy efficiency and by reducing the environmental impact of retail stations.

Designed as a prototype for future Chevron stations in the Asia-Pacific market, the Singapore unit features LED (light-emitting diodes) canopy light and signage. These are calculated to use 31 percent less energy and reduce maintenance costs due to the long life of LED lighting.

More than 100 Caltex-branded stations in Philippines, Singapore and Hong Kong converted to LED lighting in 2010. We expect to install about the same number again in 2011.

Pictured: New efficient signage lights up the Caltex Clementi service station in Singapore.

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Our Legacy: Wildlife Moves In

On the site of the former Cincinnati (Ohio) Refinery, which closed in 1986, Chevron's Environmental Management Company is engaged in a land restoration program that has been commended by the U.S. Environmental Protection Agency and achieved Wildlife at WorkSM recertification from the Wildlife Habitat Council (WHC).

The site, in a state that has lost more than 90 percent of its wetlands over the past 200 years, includes a 19-acre vernal pool system, a sustainable wetlands ecosystem that fosters amphibian egg-laying and tadpole development.

The site is also WHC-certified under the Corporate Lands for Learning program. Through this program, Chevron is helping train the next generation of environmental scientists.

Pictured: Animals roam free in a restored wetlands area where the Cincinnati Refinery once stood.

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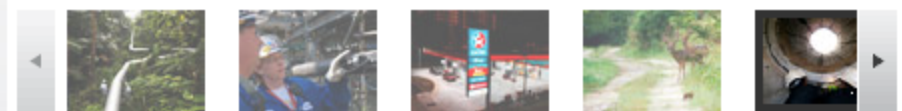
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Waste Disposal: Fired Up in Bangladesh

Existing in-country waste disposal facilities in Bangladesh did not meet Chevron's third-party waste requirements.

To address this issue and safely dispose of waste from our operations, the business unit set up a team to work with outside resources, including Chevron Energy Technology Co.

As a result, the BU replaced the existing incinerator with a rotary kiln that combusts the waste more quickly and efficiently. The design of a smokeless system meets the Global Upstream and Gas Waste Management Environmental Performance Standard, and has reduced air pollutants.

Pictured: Workers inspect one of the rotary kilns.

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Managing Water: Keeping Thailand Seas Clean

The growth of our operations in the Gulf of Thailand led to an inevitable increase in produced water, to 185,000 barrels per day, most of which was once discarded to sea through a treatment system.

In 1997, Chevron introduced its first project to reinject water back into the natural gas reservoirs and, by 2003, implemented full water injection through 13 injection facilities and hundreds of miles of subsea pipeline.

This program enabled Chevron Thailand Exploration and Production to achieve its full injection goal in 2009, two years ahead of its environmental performance standard target.

Chevron Thailand continues to improve the reliability of reinjection systems to ensure sustainability, performance and protection of the environment.

Pictured: Platong production facilities in the Gulf of Thailand.

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Spill Prevention: Redoubling Efforts

Chevron Pipe Line Co. (CPL) established a spill elimination team in early 2010 to recapture previous top-quartile recordable spill performance.

The business unit has enhanced leak detection software to provide an earlier indication of possible leaks and developed streamlined processes to shave valuable time from the analysis of trending data.

CPL continues to proactively remove "dead legs" (sections not in use), abandon and divest of higher-risk lines and accelerate non-required repairs.

Within the next five years, CPL plans to inspect all liquid lines -- almost doubling the number of inspections dictated by U.S. Department of Transportation regulations.

Pictured: Pipeline from the company's Rangely, Colorado, field.

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