

► Enable films cut waste, save energy

R&D and technology bring competitive advantages



Next-generation energy

New technologies – and the scientists and engineers who develop them – are essential to our energy future.

If you met someone who had a Ph.D. in computer science, would you be surprised to learn that he or she worked for an oil and gas company?

You shouldn't be. Providing the energy for the world's 6.6 billion people requires an astonishing level of technology and innovation.

Many still don't think of the energy industry as "hightech." Unlike a laptop or a cell phone, a gallon of gasoline doesn't look particularly innovative. Yet that single product embodies a myriad of sophisticated technologies that go into finding, producing, refining and delivering every gallon of fuel we use.

In fact, ExxonMobil employs more than 14,000 scientists and engineers, over 1,000 of them with Ph.D.s. Their expertise is not only in geology, chemistry and physics, but also oceanography, paleontology, microbiology, computer science, environmental science and medical science.

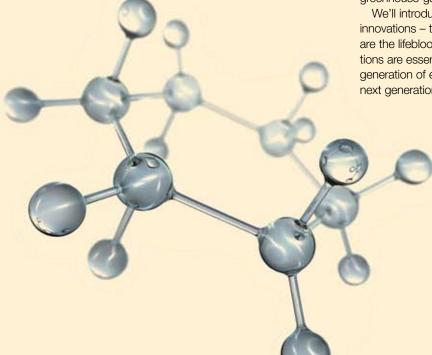
Backed by our industry-leading investments in research and development (more than \$1 billion in R&D and technology applications annually), these men and women are developing amazing new technologies for finding and deliv-

ering energy, as well as innovations that will allow us to use energy more efficiently. For example:

- ▶ An exploration technology called R3M, which uses electromagnetic "listening" devices to detect undersea oil and gas deposits with minimum impact to the environment;
- ▶ A lithium-ion battery breakthrough that greatly improves the safety, power and reliability of larger batteries for hybrid vehicles, thereby helping promote their use to improve fuel economy and reduce emissions;
- ▶ Advanced vehicle and fuel technologies that will improve the fuel economy – and reduce the emissions – of today's automobiles.

By 2030, global energy demand will be about 30 percent higher than it is today, even with substantial efficiency gains. Like today, oil and natural gas will be called upon to meet approximately 60 percent of the world's energy requirements. Emerging technologies will help us meet the world's growing energy needs of oil and natural gas, while also reducing the impact on our environment. And they can provide solutions to address the risks posed by rising greenhouse-gas emissions.

We'll introduce you to some of the people behind these innovations – the scientists and researchers whose ideas are the lifeblood of the energy industry, and whose innovations are essential to our energy future. It is the current generation of energy professionals that is developing the next generation of energy.



ExonMobil

Taking on the world's toughest energy challenges."



The Sakhalin-1 project

With the Orlan offshore platform in the background, the winter waters of the Sea of Okhotsk become interlocked with flowing ice six feet thick.

Cover photo by Elena Karpova



Lamp

Rex W. Tillerson Chairman and CEO

Mark W. Albers

Senior Vice President

Michael J. Dolan Senior Vice President

Donald D. Humphreys Senior Vice President

Kenneth P. Cohen Vice President-Public Affairs

Henry H. Hubble

Vice President-Investor Relations and Secretary

Bob Davis Editor

Patrick Gabriel GCG

Art Director

Len Shelton Photography Coordinator

Cynthia Solomon Production Coordinator

Frances Bruscino

Distribution Coordinator

Please address all *Lamp* correspondence, including requests to reproduce any portion of the magazine, to the editor at Exxon Mobil Corporation, 5959 Las Colinas Blvd., Irving, TX 75039-2298.

Upfront

The Sakhalin-1 project offshore Russia is a technological show-case. From the world's most powerful land-based drilling rig, to wells more than seven miles in horizontal length, to operations in seas with ice six feet thick, this complex development is a testament to international cooperation, safety and environmental respect. Our cover story on page 3 presents an update on how ExxonMobil and its co-venturers are supplying energy to the world from this challenging arctic region.

ExxonMobil is not immune to increased energy costs, spending more than \$10 billion a year to power its facilities. But cogeneration helps provide that power while

saving energy and cutting emissions equivalent to taking several million cars off the roads. Read more about this highly efficient process starting on page 13.

And while cogeneration reduces greenhouse-gas emissions, so does a new lightweight, strong and recyclable film from ExxonMobil Chemical called Enable mPE. Because Enable mPE is 20 percent lighter than conventional films, less material is used and less energy is needed to produce and transport it – saving enough energy to power 900,000 homes. The story begins on page 7.

Plus, this issue contains an interview with Rich Pisarczyk,

president of ExxonMobil Research and Engineering Company, discussing how ExxonMobil's research activities help consumers conserve energy and control fuel costs. In a second feature, ExxonMobil Exploration Company President Tim Cejka tells how the corporation evaluates exploration opportunities, delivering investors maximum value – now and in the years to come.

We hope you enjoy this issue of *The Lamp*.



Bob Davis Editor

In this issue



Viewpoint

Next-generation energy



An arctic success story

Operating in one of the world's toughest energy environments



New films offer big potential

Enable mPE cuts waste, saves energy and reduces emissions



Research commitment creates competitive cornerstone

An interview with EMRE President Rich Pisarczyk



Viewpoint

"Hearing" oil and gas beneath the ocean floor



High-efficiency cogeneration plants

How cogeneration creates cost and environmental benefits



Capturing new opportunities

Technology toolkit unlocks additional energy reservoirs



Energy research program reaches milestone

GCEP promotes new energy technologies



New Malaysia agreement

115-year relationship is a great success story



A man for all seasons

Meet Larry R. Faulkner, ExxonMobil's newest director



Ad program gives inside look

Employees are featured in technology-themed series



Panorama

Business highlights from around the world

30

ExxonMobil quarterly financial summary



Sakhalin Island, rising off
Russia's eastern coast, is a
gem of rolling green meadows,
thickly forested mountains and
sparkling seas. It boasts brief
but glorious summers, harsh
winters, subtle springs, brightred falls – and huge, offshore
hydrocarbon reserves.

While exploration began off the island in the 1970s, technological and development challenges kept those reserves locked in place for many years, and oil companies have only recently begun to tap those resources. In 2005, only four years after the project was announced to be commercially viable, ExxonMobil subsidiary and operator Exxon Neftegas Limited (ENL), along with its co-venturers from Japan,

India and Russia, celebrated as the first production flowed from the Sakhalin-1 project (ExxonMobil interest, 30 percent).

ENL achieved another milestone early in 2007 when the project reached its targeted peak production rate of 250,000 barrels of oil a day from its offshore Chayvo field in the Sea of Okhotsk. This is just the first phase of a multiphased development that also includes drilling of the offshore Odoptu and Arkutun-Dagi fields. All told, the project is expected to yield more than 5 billion oil-equivalent barrels of energy and should sustain production until 2050.

Sakhalin-1 represents one of ExxonMobil's first ventures in Russia and is the company's largest investment in the country, with direct revenues to Russia during the life of the project expected to exceed \$50 billion. In addition, the company is committed to capacity building through workforce and supplier development, and strategic community investments.

"Russia is the second-largest oil producer after Saudi Arabia," says Mike Flynn, vice president of ExxonMobil Development Co. "Its reserves are vital to helping fuel an increasingly energy-hungry world. Our success at Sakhalin has helped to establish important relationships with government organizations, the community and our co-venturers in the region. This success provides a solid foundation for the future."



Drilling success in the arctic

The Chayvo field sits more than six miles offshore in the Sea of Okhotsk, which in winter can become a sea of moving ice up to six feet thick. It's also subject to gale-force winds and seismic activity as well as negative-digit temperatures throughout much of the winter.

"We've had to face every challenge imaginable in this project – from the harsh conditions, to the remote location with very little infrastructure, to the complex regulatory structure," says Steve Terni, chairman of ENL. "But we've assembled truly multifaceted, international project and production teams to take on these challenges, including our drilling organization, whose performance

has been truly outstanding."

To reach Chayvo's offshore oil, ENL has drilled horizontally from the land, a technique known as extended-reach drilling, which, although technologically challenging, uses a smaller environmental footprint and is more efficient and cost-effective than depending solely on offshore drilling platforms, Terni says.

One key to ENL's success is the towering blue edifice named Yastreb, the Russian word for hawk. It is the world's most powerful land-based drilling rig. By June 2008, Yastreb had drilled 28 wells ranging from five to more than seven miles in total depth. Seven of these broke the world record for the longest extended-reach wells ever drilled.



The Chayvo field reached peak production of 250,000 barrels a day of oil last year. Future developments include the Odoptu and Arkutun-Dagi fields, shown in the map above. None of this has been easy. Terni likens drilling six miles from land beneath frigid waters and floating icepack to "threading the needle in the proverbial haystack, from way across the farm, in a blizzard."

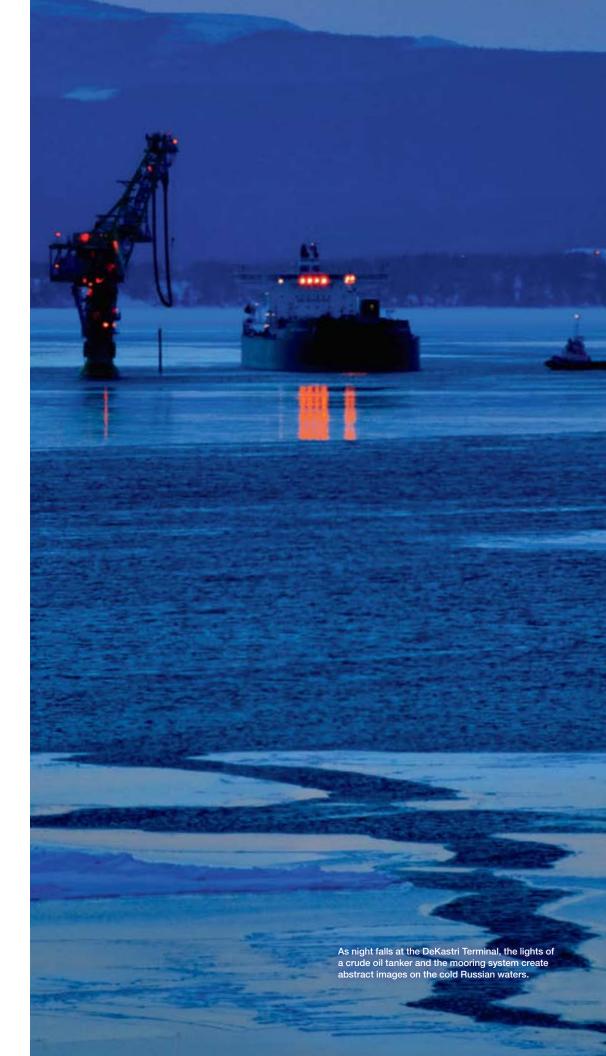
To tap the outer reaches of the field, ENL has also used an off-shore platform, the Orlan, named after the Russian sea eagle, which was retrofitted to withstand the area's turbulent storms and seismic activities.

Through the application of cutting-edge technology, including the combination of ExxonMobil's extended-reach drilling and the company's Fast Drill Process, ENL has been able to drill wells in nearly half the time anticipated.

Chayvo's oil is transported and processed onshore, then transferred by a 140-mile-long pipeline across the island and under the Tatar Strait to the DeKastri Terminal on the Russian mainland, where it is loaded through a single-point mooring facility onto specially built, double-hulled oil tankers. Icebreakers escort the tankers out to sea, ensuring a safe voyage as the oil is delivered to international buyers. A portion of the field's natural gas is sold for domestic use and provides a stable supply of gas to the area.

Meeting environmental and social challenges

One of the constant challenges in developing oil and gas projects in arctic conditions is managing costs



"Drilling six miles from land beneath frigid waters and floating icepack is like threading the needle in the proverbial haystack, from way across the farm, in a blizzard."

> Steve Terni Chairman of Exxon Neftegas Limited

and meeting project schedules. Jim Flood, Sakhalin-1 project executive, says ENL has accomplished this, in part, by using modular construction for its massive onshore facilities. Thirty-six pre-assembled modules, which accounted for more than 44,000 tons of fabricated facilities, were shipped and installed in the summers of 2005 and 2006, he says.

"This greatly helped offset the development challenges of working in a remote arctic environment with such a short construction window," Flood says. "Our goal during project execution was to manage through winter conditions. We've done that in the first Chayvo phase, and we'll continue to apply what we've learned to the future Odoptu and Arkutun-Dagi development phases."

A phased approach has the added benefit of allowing the company to gain experience and apply lessons learned to subsequent projects. "From our Chayvo experience," Flood says, "we have worked hard to develop and enhance the capabilities of local contractors and vendors, and have also learned the best ways to successfully achieve outstanding results in safety, environmental management and operational performance in a harsh environment."

Steve Terni agrees that new technology and the disciplined and phased-management

approaches account for much of the company's current and expected future success. But he also attributes that achievement to ENL's reputation as a company of integrity that emphasizes safety, environmental protection and unwavering ethics, and that embraces strong relationships with local residents, and the Russian and Sakhalin governments.

"Through it all, we've followed rules and regulations to the letter," Terni says. "That has reinforced our reputation for being a sound, thorough company, and has contributed to the support we have with the local and national authorities."

Another value ExxonMobil embraces is a commitment to supporting Sakhalin's communities. This has included building roads, bridges, airport and seaport facilities, and medical facilities as well as funding local education, health and environmental protection programs. The company also is dedicated to hiring and training Russian nationals, which has given many workers the opportunity to put their skills to use and to receive training at ExxonMobil operations around the world. The number of direct and indirect jobs created during the life of the project will total more than 13,000.

Jim Taylor is ENL's president and has made his home on Sakhalin Island. He thinks he's



Yastreb, the world's most powerful land-based drilling rig, had drilled 28 wells by June 2008, ranging from five to nearly seven miles in horizontal length.

Photo by Elena Karpova

got the best job in one of the most beautiful corners of the globe, with some of the best workers in the world. Now he's thinking about the next generation. "One of my life's goals was to get this job. Now one of my goals is to see one of the young people we've trained here replace me," Taylor says.

Arctic dreams

Sakhalin is not ExxonMobil's first experience in the arctic. The company pioneered an ice-breaking supertanker, the S.S. Manhattan, in 1969, provided significant research and engineering for the Prudhoe Bay field in Alaska, and has done extensive work in Canada, where ExxonMobil operates the Hibernia platform off Newfoundland – the first and only iceberg-resistant offshore structure in the world. But Sakhalin has pre-

sented some of the most extraordinarily extreme work conditions the company has ever undertaken.

Mike Flynn says the company's experience at Sakhalin is preparing it for future exploration and challenging new developments in arctic conditions.

"As we push farther out into the arctic frontier,

To learn more exxonmobil.com/sakhalin

we'll be facing much deeper and colder conditions," says Flynn. "To work in these challenging regions requires outstanding technology, project management discipline and highly effective execution skills.

"In Sakhalin, we've proven we have those attributes," he adds. "We've broken industry records, and we've done so while conducting our activities with the utmost respect for the people of Russia and for the environment."

theLamp

New flexible films cut waste, save energy and reduce greenhouse-gas emissions

Films made with ExxonMobil Chemical's *Enable* metallocene polyethylene polymer are thin, lightweight, strong and recyclable. That makes them good for film manufacturers, good for consumers and good for the environment.

▶ ExxonMobil Chemical Company has introduced a unique polymer that produces flexible films 20 percent lighter than conventional films. The result is less material used, and less energy consumed to manufacture and transport the polymer and finished film products. It also has the potential to significantly reduce greenhouse-gas emissions.

"This is breakthrough technology," says Jim Harris, senior vice president of ExxonMobil Chemical Company. "The new product, Enable metallocene polyethylene (mPE), is designed to help our customers meet changing market needs and create higher-valued film products. It's far superior to conventional polyethylene polymers, as it incorporates both toughness and processing benefits in a single, unique resin. Development of Enable mPE is one more example of the benefits of our significant investment in technology. And it's also consistent with our environmental responsibility and our support for sustainable development of natural resources."

Using Enable mPE allows film manufacturers (also known as film converters) to reduce the thickness and weight of films, while maintaining strength. The reduced weight translates to energy sav-

ings and reduced greenhouse gases every time film products are transported. And because *Enable mPE* polymers can be manufactured at lower temperatures and pressures, less energy is used, creating additional savings and emission reductions.

Lower emissions, less energy, less waste

"The potential environmental benefits of *Enable mPE* are impressive. This new product can yield significant greenhouse-gas reductions while saving enough energy to power 900,000 homes," says Harris. "There's also less landfill waste. So the overall environmental contributions are noteworthy."

Film converters typically blend different polymers in order to balance the ease of manufacturing and film strength. By using *Enable mPE*, converters can eliminate these blends, simplify their business and lower their extrusion costs.

"That's the key to making films thinner and lighter while also saving energy," explains Dave McConville, ExxonMobil Chemical Company's polyethylene global market development manager. "A thinner film that maintains strength reduces the converters' and end-users'

costs. That advantage is what's pulling *Enable mPE* into the marketplace so quickly.

"For example, beverage bottlers see great benefits in reducing packaging weight. A bottler using millions of pounds of shrink wrap film annually to package beverages can achieve large savings by using lighter films; less packaging is used and the cost to transport the films is reduced. In other words, fewer natural resources are used, creating less emissions, while still maintaining performance."

Big potential for greenhouses

In addition to packaging applications such as shrink wrap, pallet wrap, stretch hand wrap and heavy-duty bags, another major market for *Enable mPE* is the agricultural greenhouse industry. Greenhouses used to grow crops are prevalent in Asia and are also found in the Americas and Europe, particularly in cooler climates and higher altitudes where growing seasons are short.

A typical commercial agricultural greenhouse in China is about 50 feet wide and 150 feet long. Large sheets of polyethylene film are draped over a metal structure and the film is strapped down. Because the film spans such





The case for plastics packaging

Plastics have largely replaced glass, aluminum and paper as packaging material. That's because plastics are lighter – which reduces transportation costs – are less costly and are manufactured using less energy. Plastics also generate less air emissions, water pollutants and waste during manufacturing. Plastics provide toughness, excellent sealability and optical qualities, and consume far less material than glass, metal or paper containers.

According to research by waste management consultants Franklin Associates, paper bags generate four times more greenhouse-gas emissions than plastics, and paper occupies more than nine times as much landfill space as plastics.

Taken together, these advantages make plastics packaging a sensible choice for sustainable development.

a large area, it is substantially thicker than most packaging films.

"The converters who make greenhouse films are excited about Enable mPE because a thinner film can yield a tremendous savings for them and their customers, the farmers," says John Verity, ExxonMobil Chemical Company vice president for polyethylene business. "If the entire agricultural greenhouse industry used Enable mPE film products, the converters could produce 200,000 fewer tons of film annually and still meet demand and performance requirements. Also, Enable mPE-based films transmit more light than conventional films, so temperatures inside greenhouses rise faster. That's one more advantage that Enable mPE brings to the market."

Showcased in China

Enable mPE was introduced last March and showcased in April at Chinaplas 2008 in Shanghai, China. The event drew more than 72,000 visitors from throughout the world who gathered to learn about innovative products and technologies.

"Some ExxonMobil Chemical

customers displayed their Enable mPE-based films at Chinaplas, and the market reaction was quite positive," says Dave McConville. "The new films were highlighted as innovative step-out products, which is precisely what they are. Film converters learned that with Enable mPE they can produce more film from existing facilities, reduce waste and cut operating costs all at once. And their customers benefit from the packaging's reduced weight. This product really takes flexible film production to a new level of performance."

Enable mPE is being manufactured at ExxonMobil Chemical's Mont Belvieu, Texas, plant. When expansion of ExxonMobil's Singapore refinery and chemical complex is complete in 2011,

Enable mPE will be produced there along with Exceed mPE. Together they provide a portfolio of metallocene produced mPE.

of metallocene products that deliver sustainable benefits and cost reduction to the flexible film

industry. the Lamp

To learn more

An interview with

Rich Pisarczyk, president of ExxonMobil Research and Engineering

Research commitment provides competitive cornerstone.

Consumers are increasingly concerned about greenhousegas emissions, energy conservation and, above all, today's rising oil prices and fuel costs. More than ever, people wonder what the world's major energy companies are doing to mitigate the impacts on their finances, their lifestyles and their world. ExxonMobil Research and Engineering Company (EMRE) President Rich Pisarczyk describes how research and development at ExxonMobil, and at EMRE in particular, are addressing these issues.

Broadly, how would you characterize ExxonMobil's key research and development strengths and challenges?

There are many activities we do exceptionally well at ExxonMobil – things that are difficult for our competitors to match. Our commitment to R&D is a disciplined and sustained commitment. It's steady and continuous, and that's very important. Research isn't something you can turn off today and then suddenly turn back on tomorrow. Another one of our strengths is the integration and close collaboration between our R&D organizations and their ExxonMobil business partners. Each R&D unit is located

A path from refining to research

From a summer internship at an oil refinery to the presidency of EMRE, Rich Pisarczyk has traveled a long, diverse path through the energy industry. After joining Mobil in 1968, the young engineer rose through a range of responsibilities in manufacturing, planning and supply. He managed refineries in Washington and Louisiana. He held senior positions in petrochemicals and planning. He served as chairman of Mobil Oil Australia. Before assuming his present role in yet another arena – technology – in September 2005, Pisarczyk was senior vice president of ExxonMobil Chemical Company.



Rich Pisarczyk, president of ExxonMobil Research and Engineering Company, manages an organization of 2,100 worldwide employees primarily supporting the corporation's refining, supply and marketing operations.

in close proximity to its business partners – the upstream R&D people are close to the upstream businesses, and so on. That collaboration goes a long way in helping researchers understand and meet their clients' needs.

Our challenges include the speed at which today's world changes and the need to implement new technologies as close to real time as possible. We have

to develop as well as monitor and understand game-changing technologies being developed by others; ExxonMobil recognizes that "not invented here" is no basis for ignoring good ideas. Thus we must effectively manage our collaborations. These aspects are key as we further the development of both high-potential alternate energy sources and frontier, or nontraditional, hydrocarbon

EMRE at a glance

ExxonMobil Research and Engineering Company (EMRE) is much more than a research and development organization. EMRE's portfolio covers a broad range of activities and services, chiefly in support of the company's refining, supply and marketing operations. EMRE has responsibility for some 2,100 ExxonMobil employees worldwide at major laboratories and other key facilities in the United States, Canada, Japan, Singapore and the United Kingdom.

Areas of activity include:

▶ Research and Development oversees product development as well as manufacturing process technologies. The function is also home to the corporate strategic research group, whose focus is longer range – including "breakthrough" innovations. "Many of the corporation's core technical competencies reside in the Corporate Strategic Research group and are available for use across all of the technology organizations," says EMRE President Rich Pisarczyk.

- ➤ **Projects** plans, develops and implements capital engineering projects, such as refinery expansions and upgrades.
- ▶ Engineering supports operational "best practices" e.g., cost reductions, environmental compliance, reliability and plant automation. "Plant automation is a key focus going forward," says Pisarczyk. "People think of oil refineries as old Rust Belt facilities, but we have a huge array of advanced control technologies that are increasing their efficiency and reliability."
- ▶ Technology Sales and Licensing makes selected ExxonMobil technologies available to third parties, helping ExxonMobil recover development costs "and giving us a bigger window on the marketplace," says Pisarczyk.
- ▶ Biomedical Sciences is a companywide function that ensures the safe use of ExxonMobil products throughout the supply chain and the marketplace.

resources such as tar sands and shale gas.

Finally, we have to continue to find and attract skilled people, even though fewer U.S. students are pursuing math and science degrees today. We need to excel in knowledge management so that we can effectively hand over our knowledge base to those who replace us.

With such a focus on energy prices today, are any of ExxonMobil's R&D activities helping conserve energy at your facilities or helping consumers control fuel costs? We've improved the energy efficiencies at our company's manufacturing operations, and that's a big focus for us. These initiatives have lowered our carbon dioxide emissions and overall carbon footprint as well, which reduces the impact of our operations on the environment.

They're also lowering manufacturing costs, and that ultimately cuts the price of our products in the marketplace.

ExxonMobil has been a recognized leader in lubricant technologies for decades, and we continue to develop lubes that are more effective, more environmentally friendly and better at boosting fuel efficiency. Our latest synthetic lube formulation – *Mobil 1* Advanced Fuel Economy engine oil – can improve fuel efficiency for motorists by up to two percent.

We also have several substantial, ongoing research collaborations with engine builders and other third parties such as Toyota and Caterpillar. These collaborations have steadily improved the fuel efficiency and emissions of the current generation of passenger and commercial vehicles.

Rich Pisarczyk, center, discusses a technical issue with Alexandra Noel and Michael Davis from the company's Technology Sales and Licensing group.

What about building new refineries – wouldn't that help lower fuel costs?

It's a very expensive proposition to build new grassroots refineries, especially in mature markets such as the United States and Europe. However, since 1995 we've added the equivalent of one new refinery into the system every three years by improving catalysts and process technologies that boost refining capacities. In this manner, we are doing our part to provide incremental fuel supplies to meet the growing demand that contributes to rising costs at the gas pump.

What other R&D contributions can consumers look forward to in the foreseeable future?

There continues to be tremendous opportunity for us to improve the fuel economy and efficiency of conventional gasoline and diesel engines through our third-party collaborations. We've developed an



ExxonMobil Research and Engineering is the recipient of awards from these and other organizations

American Chemical Society

American Institute of Chemical Engineers

American Physical Society

American Society for Testing and Materials

American Society of Mechanical Engineers

Chemical Heritage Foundation

Environmental Protection Agency

International Society of Offshore and Polar Engineers

International Zeolite Association

Los Alamos National Laboratory

Microsoft Corporation

National Academy of Engineering

National Institutes of Health

Nature Conservancy

Society of Automotive Engineering

Society of Industrial and Applied Mathematics

Tulane University

YMCA

ency ore on ony ering ering

"ExxonMobil's commitment to research and development is a disciplined and sustained commitment. It's steady and continuous, and that's very important."

> Rich Pisarczyk, president of ExxonMobil Research and Engineering Company

extremely robust synthetic lubricant for other alternative energy sources such as wind turbines. Since these turbines operate high in the air and, in some instances, offshore, they require lubes that can withstand extended service intervals. We also are doing an extensive amount of work to develop new, more efficient energy formulations for a variety of industrial applications.

Hydrogen fuel cells may become a viable energy source for vehicles, and we're working on a technology that will take conventional fuels and convert them to hydrogen on board the vehicle. This technology would considerably reduce the infrastructure costs of introducing hydrogen fuel cells in the marketplace on a widespread basis.

What about ahead-ofthe-curve research?

Within EMRE, we have a sustained breakthrough research program that's dedicated to the development of ahead-of-the-curve initiatives. There might not be a high probability of success in any one initiative, but if we do succeed, it would result in a major step change and competitive advantage for ExxonMobil.

We're looking at opportunities in the area of renewables and biofuels. In coal and heavy-oil conversion, we're working on gasification technologies that improve conversion at significantly lower capital cost. Improved gasification, coupled with carbon capture and storage technologies that have the potential to reduce carbon emissions as much as 90 percent, would make coal a more viable alternative if carbon restrictions are implemented. We're also looking at the potential for gasification and other conversion options for biomass fuels such

as wood and charcoal. Gasoline and diesel will continue to be the automotive fuels of choice for an extended period of time, but novel fuels may become significant alternatives in the next 10 to 20 years, and that means the time to look at them is now.

Overall, how has the development of new technologies contributed to the profitability of ExxonMobil's downstream businesses?

New and improved technologies have contributed a substantial amount to the more than \$1.3 billion after tax of annual savings the downstream has averaged over the last five years. This has widened our competitive lead. Our molecule management program, for example, is a suite of technologies that helps us optimize the use of cheaper advantaged crudes, maximizes the value of every hydrocarbon molecule and contributes to our continued increase in refining capacity. It's just one of the ways EMRE plays a tremendous role in partnership with the various ExxonMobil businesses.

What would you say to those who contend that energy companies should invest even more money back into R&D initiatives in areas like energy conservation and environmental protection?

Again, we have a sustained commitment to pursue R&D opportunities within ExxonMobil. If we see a good opportunity

for additional research and development that is aligned

To learn more exxonmobil.com/afe exxonmobil.com/consumers

with our business and corporate goals, we will pursue it. the Lamp

Ears to the ground

R3M technology can help remotely detect oil and gas – and reduce drilling.

► How can you "hear" oil and gas hidden miles beneath the ocean floor? Len Srnka, chief research geoscientist at ExxonMobil, is part of a team that is perfecting a new technology called R3M that does just that.

R3M stands for Remote Reservoir Resistivity Mapping. It is a sophisticated technology based on a simple fact: that oil and gas are poor conductors of electricity. R3M uses extremely low-frequency electromagnetic waves to discern these resistive deposits – remotely "mapping" undersea oil and gas reservoirs with accuracy.

"The R3M technology we developed allows us to listen to the Earth's response to electromagnetic fields," says Srnka. "So we not only find deposits we might not have seen, we also reduce the number of wells we drill, mitigating environmental impact."

As a child, Srnka's interest in science and engineering was inspired by seeing the 1957 *Sputnik* launch. He began his career at NASA's Lunar Science Institute studying the interior of the moon and planets, before turning to his true passion – Earth.

Today, Srnka, 61, is one of the more than 14,000 scientists and engineers at ExxonMobil who are advancing breakthrough technologies such as *R3M*, which can unlock the resources we need to meet growing energy demand in an environmentally responsible way.

A lot of oil and natural gas remains, but

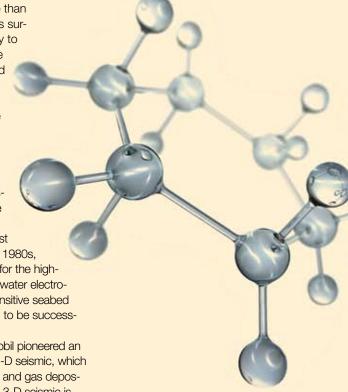
much of it is found in hard-to-reach locations – for example, more than 10,000 feet below the ocean's surface. *R3M* improves our ability to search for oil and gas in these deep waters. It has been used to explore off the coasts of West Africa, Brazil, Colombia and Canada, as well as in the Gulf of Mexico.

Breakthrough technologies
like R3M embody the continuous and dramatic evolution of today's high-tech energy industry. Such advances can require billions in investment and long timelines for success. Srnka first conceived the idea in the early 1980s, but it took two more decades for the high-performance computing, deepwater electromagnetic sources and ultra-sensitive seabed sensors that R3M depends on to be success-

fully developed.

Four decades ago, ExxonMobil pioneered an exploration technology called 3-D seismic, which uses sound waves to locate oil and gas deposits. A breakthrough at the time, 3-D seismic is now standard throughout the energy industry.

Which goes to prove: As our world's need for energy evolves, so do the technologies for finding, delivering and using that energy. Today, *R3M*. Tomorrow, who knows?



High-efficiency cogeneration plants create cost and environmental benefits

It takes a lot of power to run an energy company the size of ExxonMobil, and cogeneration helps provide that power while saving energy, cutting operational costs and reducing global greenhouse-gas emissions.

➤ The cost of providing energy to ExxonMobil's worldwide operations is more than \$10 billion a year.

That's a hefty tab, but a process called cogeneration (or simply "cogen") allows the company to efficiently generate its own electricity to run pumps, compressors, instruments and other equipment. At the same time, cogen produces the steam needed in processes that transform raw materials into consumer products.

Cogeneration works this way:
A fuel, usually natural gas, is
burned in a large gas turbine
that generates electricity. The hot
gases emitted from the turbine
are typically routed to a unit called
a heat-recovery steam generator
and used to produce steam for
use in the manufacturing process.

Later this year, ExxonMobil will expand the use of cogeneration in refining operations with the startup of new facilities at the Esso refinery in Antwerp, Belgium. With a capacity of 305,000 barrels per day, Antwerp is the company's second-largest refinery in Europe.

Antwerp's cogen plant will produce 130 megawatts (MW) of electricity, enough to meet the refinery's power requirements and also 85 percent of the electricity needed by other ExxonMobil sites in Belgium. Its

construction is expected to span 20 months.

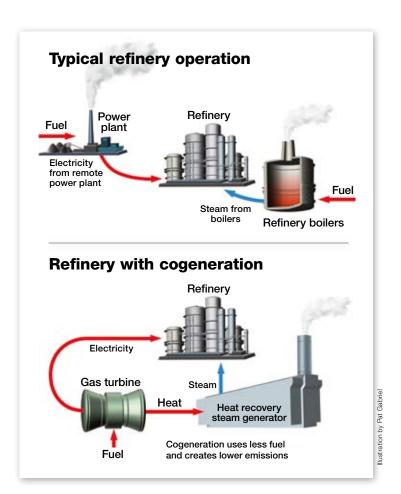
"This is a multinational project," says Project Executive Neil Thomas. "The engineering and procurement work was executed in Italy. Construction workers, project supervision and management came from Belgium, France, Germany, Italy, the Netherlands, Portugal, Australia, the United States and the United Kingdom. The plant construction activity has involved more than 400 workers at peak."

ExxonMobil and cogen

"Cogeneration offers significant benefits," says Tom Schiano, power projects manager for ExxonMobil Gas and Power Marketing Company.

"It's energy-efficient compared with the alternative of buying electricity from a utility and separately burning fuel for steam onsite. In some locations, we actually generate more electricity than we need and are able to profitably sell the balance into the local power grid. With cogeneration, less fuel is needed to provide for the company's power and steam needs. Although ExxonMobil is a major energy producer, it's also a large energy consumer. These savings are as important to us as they would be for any business."

Cogeneration also provides significant environmental ben-



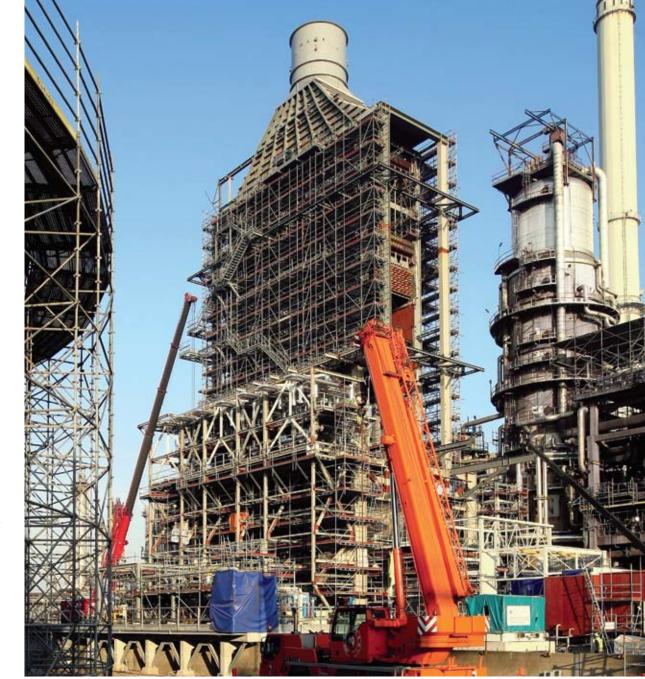
efits. "Since total fuel consumption with cogen is less than with separate facilities for power and steam, fewer greenhouse gases are produced," says Schiano.

ExxonMobil's investment in this highly efficient cogeneration technology has helped reduce global greenhouse-gas emissions equivalent to taking 2.5 million cars off the roads. The emissions savings from the company's global cogeneration plants are also equivalent to expanding

2007 U.S. wind-power generation by about 30 percent in lieu of traditional power plants.

ExxonMobil has interests in approximately 4,500 MW of cogeneration capacity in about 100 individual installations at more than 30 different sites around the world. That's enough electricity to power more than 2 million households.

The largest cogen plant in the ExxonMobil system, with 500 MW of power capacity, is at the Beaumont Refinery in Texas. With



The cogeneration unit (above) at the Antwerp Refinery will meet not only the refinery's power requirements, but also 85 percent of the electricity needed by other ExxonMobil sites in Belgium.

completion of new facilities under construction around the world, capacity will increase to more than 5,000 MW in the next three years.

Cogen development opportunities are routinely evaluated when the company is considering new investments where power and steam are both needed. They are frequently a key element in major new investments.

In Fujian, China, ExxonMobil has partnered with Sinopec, Saudi Aramco and Fujian province in a \$5 billion downstream and chemicals venture to help meet China's robust demand. The project is slated for startup in 2009. A 250 MW cogeneration plant is expected to provide half the facility's power.

In Singapore, ExxonMobil Chemical Company is building a second world-scale petrochemical project. Startup is expected in early 2011. When completed, it will be ExxonMobil's largest owned and operated petrochemical complex. Cogeneration is expected to provide 100 percent of its electricity needs.

Stepout at Antwerp

The Antwerp facility employs the fundamental principles of cogeneration, but it applies those principles to something new.

"In a typical refinery, cogeneration makes electricity that can

be used or sold, as well as heat, in the form of steam, for refinery processes," says Neil Thomas.

"Antwerp is different. To make our 130-megawatt plant highly efficient, we had to be innovative with the heat-recovery system. Since the cogeneration facility produces more steam than the refinery needs, we use the heat created in the gas-turbine exhaust to heat crude oil – the intial step in the process of converting crude into products. This alternative means of heat recov-

ery is what sets Antwerp apart from other cogeneration units.

"This isn't new technology," Thomas adds. "It's a group of existing technologies that have been carefully engineered into a new configuration."

Antwerp's unique cogeneration operation produces important benefits beyond the energy-efficiency advantages of producing steam and electricity simultaneously.

"We realize cost and environmental benefits through efficient use of fuel to generate power and gain process heat recovery," says Thomas.

"Cogeneration is a good example of how business needs

and the market encourage investments to reduce costs, generate

To learn more exxonmobil.com/ cogeneration

income and achieve significant environmental gains," Tom Schiano concludes. "We do this for sound business reasons: Our shareholders benefit, and so does the environment." the Lamp

Capturing new opportunities

Exploration Company President Tim Cejka believes ExxonMobil is uniquely positioned to capture maximum benefit through the value chain in both the upstream and the downstream segments of the company's business.

"The corporation has numerous opportunities across a broad spectrum of resource types and asset life cycles," Tim Cejka says, "and is well-positioned to continue a high level of exploration activities in the future. We look at long-term, not short-term business variations, and we consistently capture new opportunities in all business environments."

ExxonMobil has a "distinct competitive advantage" in global

exploration, which Cejka attributes to the corporation's size, financial strength, technical expertise and broad understanding of what he calls "the entire hydrocarbon opportunity spectrum."

This across-the-board advantage allows the company to move quickly, flexibly and profitably as promising high-quality exploration opportunities arise – despite technological hurdles and changing business conditions.

This provides investors with maximum value.

"We have seen our resource base grow from 55 billion oilequivalent barrels in 1990 to 72 billion barrels in 2007," Cejka says. "That's a 31 percent growth in quality resources. This is after we have removed resources associated with production and portfolio high-grading."

ExxonMobil's oil and gas exploration strategy starts with





Tim Cejka, president of ExxonMobil Exploration Company, says that the company's proprietary technologies are essential to unlocking more energy reservoirs.

identifying and prioritizing opportunities, continues with pursuit and capture, and ends with efficient evaluation and analysis of the resource.

Technology spurs success

Technology is a huge part of a successful program. "When the technology to effectively develop a high-quality resource does not exist, our industry-leading research and development teams

are eager to build the necessary expertise," Cejka says.

ExxonMobil's success in locating, extracting and bringing oil and gas supplies to world markets depends upon the corporation's investment in technological innovation, he says. For example, the company's proprietary technologies such as Remote Reservoir Resistivity Mapping

(R3M), extended-reach

To learn more
exxonmobil.com/
exploration

drilling, multi-zone stimulation technologies and increased liquid natural gas train and transportation capacities are all proving essential in unlocking additional energy reservoirs.

"A good example is the Piceance Basin gas reserve in northwest Colorado," says

> Cejka. "Discovered in 1929, the Piceance's potential as a source of hydrocarbons remained

largely unexploited until the development of multi-zone stimulation technology helped unlock its tightly held gas reserves."

In conclusion, Cejka says, "In 2007 this disciplined approach resulted in the capture of 14 conventional and unconventional opportunities in new, unproven locations as well as in established hydrocarbon provinces."

theLamp



Energy research program reaches milestone

Anniversaries celebrate fond memories and often elicit hopes for the future. The Global Climate and Energy Project, an ambitious research program initiated and co-sponsored by ExxonMobil, recently celebrated its fifth anniversary of scientific research that could have important consequences for the environment and future energy use.

➤ The Global Climate and Energy Project (GCEP) at Stanford University seeks new solutions to one of the most daunting problems of this century – supplying energy for a growing world population while protecting the environment.

Launched in December 2002, GCEP performs fundamental scientific research to establish a foundation for new technologies. In the decades ahead, scientists and companies will use the project's findings to develop global energy systems with significantly lower greenhouse-gas emissions.

Long-term support

Four international companies support GCEP's efforts: ExxonMobil, General Electric, Schlumberger and Toyota. Over the course of a decade, these sponsors will invest \$225 million at Stanford and other leading institutions around the world to build a wide-ranging portfolio of research.

The goal of GCEP isn't to create commercial technologies directly. Rather, GCEP strives to develop leads, frameworks and new science from which new technologies can be created. The focus is on a portfolio of research aimed at supplying energy for electric power and transport with dramatically lower greenhouse-gas emissions.

"The fundamental challenge – minimizing greenhouse-gas emissions on a global scale – is going to require breakthroughs in technology," says Dr. Brian Flannery, science, strategy and programs manager at ExxonMobil. "We



GCEP scientists and researchers are studying new technologies and energy systems to lower greenhouse-gas emissions.

believe these breakthroughs will come from leads generated by the type of fundamental science that GCEP is performing. Our hope is to mobilize a significant academic effort based on science and engineering."

It takes a potent research organization to generate such an effort. Five years into the project, GCEP involves 24 institutions, 17 departments at Stanford, 70 investigators and more than 300 graduate students and post-doctoral fellows to conduct 44 full-term research projects and 11 exploratory activities.

The program consistently shares research results with a wide audience, including the science and engineering community, media, business, governments and potential end-users.

Daunting challenges

Working toward these achievements isn't easy. GCEP seeks potentially "game-changing," breakthrough science and encourages innovative research involving high risks that could deliver high rewards. For GCEP portfolio managers at Stanford – senior scientists in the program – convincing academic scientists to take bold risks with their work can be challenging. More traditional research funding sources typically encourage proposals with higher confidence in success.

In addition to managing people, the complex, far-flung GCEP activities – 30 percent of the work is being done at a variety of institutions in several countries – require much face-to-face communication, which can be difficult to orchestrate with a research team scattered around the globe.

"Pulling together and managing all of these people while maintaining a clear sense of direction has been a challenge, requiring major effort by the leadership, and the program has handled that well," says Flannery. "After five years, GCEP has established programs involving great institutions, respected faculty members and talented students. This has created new research capacity and capabilities. GCEP is training a new generation of scientists and engineers who are thinking about these issues and can contribute."

Weathering the scientific and logistical challenges, GCEP has been a resounding success. "In the more developed areas, the researchers have done a great job of identifying where the challenges and opportunities are. For example, in the areas of solar

energy and carbon capture and storage, they've created a comprehensive set of programs that is establishing the fundamentals across a broad framework of research," says Flannery.

GCEP researchers are also working on these vital projects:

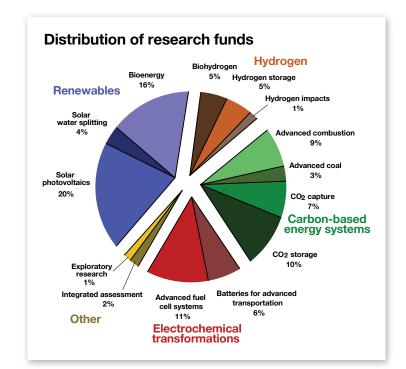
- ► Studies of fuel cells and bioelectric conversion of energy
- ► Increasing the energy capacity of lithium batteries for applications in vehicles
- ► Thermodynamic principles for designing engines that produce higher efficiency and lower emissions
- Pathways to produce biodiesel fuel from bacteria to achieve a 20-fold increase in energy yield
- Increasing knowledge of hydrogen bonding to create new strategies for using hydrogen to power vehicles

"Achieving these long-term goals is a titanic challenge that won't be met by academia alone," says Sherri Stuewer, corporate vice president of Safety, Health and Environment. "It will have to be met by industry and government institutions as well. We hoped that GCEP would be a catalyst to encourage scientists to think more broadly about these issues, and

we are seeing that happen. A number of other

To learn more gcep.stanford.edu

outstanding universities have cited GCEP as a model as they seek to develop energy research aimed at meeting global challenges. We've made achievements beyond what we had hoped for when we started the program five years ago." the Lamp



The next quarter-century in Malaysia

An agreement toward a new production sharing contract builds on 115 years of growth with one of ExxonMobil's most successful energy partners.



The highest quality crude oil in the world is a light, sweet grade known as Tapis. It's named after the Tapis field, off the east coast of Peninsular Malaysia, one of 17 fields operated by ExxonMobil in partnership with the national oil company PETRONAS.

A recent agreement in principle was reached to extend the partnership in the same oil field for the next 25 years.

"Few relationships in our industry have lasted as long as our 115-year involvement in Malaysia," says Mark Albers, Exxon Mobil Corporation senior vice president.

"We watched proudly as PETRONAS grew from an emerging national oil company into a highly respected supplier of energy on an international scale. Our relationship has grown too, and is now a global partnership."

Above right: Many of the 43 oil and gas platforms operated by ExxonMobil offshore Peninsular Malaysia are satellite structures, unmanned basic production facilities that are remotely monitored and controlled.

At left: Malaysia has developed a large resource of highly skilled contractors and workers who are in high demand in the global energy industry.

Under the agreement, ExxonMobil Exploration and Production Malaysia Inc. - the upstream affiliate in the country - will make significant capital investments to help sustain energy supplies for the nation. These include investments in conventional oil development, satellite fields adjacent to the existing infrastructure of offshore platforms as well as production facilities and pipelines. Advanced technology will allow increasing recovery of oil and gas deposits that otherwise would have been too expensive to develop.

"Through this agreement, we will continue applying ExxonMobil's world-class technologies and project-execution capabilities to efficiently develop Malaysia's petroleum resources," Albers says.

A reliable business partner

As a place to invest, Malaysia is particularly attractive by many measures. It is stable politically with good infrastructure, and the people are ethnically diverse and well-educated. The government strives to make the business climate favorable for international investors. Foreign direct investments have been instrumental in the transformation of the nation.



and will continue to remain important in the future.

"We have a long history here, and we have been treated well," says Rich Kruger, president, ExxonMobil Production Company. "To deliver on our commitments, we will have to continue bringing ExxonMobil's people, technology and best practices to bear. We are able to do that with a lot of confidence that it will be of value for us and for Malaysia as a country."

A model for utilization of natural resources

Malaysia's leaders have used their nation's resources to grow

a strong, diverse and modern industrial base. Petroleum resources have fueled the economy and helped the country diversify and become a significant exporter of semiconductors, electrical appliances and communication technology. According to the U.S. State Department, Malaysia's economic record is one of the most impressive in Asia.

"Malaysia has become a model for taking a wealth of natural resources and converting it to sustainable economic development," Kruger says.

Since offshore development began in earnest three decades

ago, Malaysia has developed local capacity to build much of the equipment it needs. The country has a large pool of experienced and capable workers and contractors that are much in demand in the global energy industry. ExxonMobil has used incountry contractors and fabrication yards employing thousands of Malaysians to build facilities for the company's developments in West Africa and elsewhere. More than 95 percent of ExxonMobil's 1,200 employees there consist of Malaysian nationals.

"From a people standpoint, our Malaysian employees are highly competitive global resources," Kruger says. "We have more than 100 Malaysian techni-

cians, geoscientists, engineers and managers working outside of their home country to support our international operations. That diversity adds to the value ExxonMobil brings wherever we are in the world and further strengthens the capabilities in

Malaysia as these employees

return home with a wealth of

experience." the Lamp

To learn more exxonmobil.com/ petronas

Our Malaysian affiliates at a glance

ExxonMobil's heritage companies began selling kerosene to the region in 1893, opened Kuala Lumpur's first gasoline station in 1921 and built a refinery in Port Dickson in 1963. As the young nation of Malaysia began developing its own oil and gas reserves in the 1970s, the Malaysian government established PETRONAS and vested it with the ownership and control of its petroleum resources. ExxonMobil partnered with PETRONAS in 1976 to develop these resources with a number of production sharing contracts, investing more than \$15 billion in Malaysia during the

last 30 years. Through technology transfer and building of local capabilities, the company helped advance the upstream oil and gas industry in Malaysia and contributed to the success of PETRONAS as a global player in the energy industry.

Today, ExxonMobil operates 43 oil and gas platforms off the east coast of Peninsular Malaysia. Together, they produce 160,000 barrels of crude oil and gas condensates, and about 1.2 billion cubic feet of gas a day. One of the largest upstream projects is the Guntong E gas compression platform

(ExxonMobil interest 50 percent), which began operations in 2006.

Three ExxonMobil affiliates also operate the 88,000-barrel-per-day Port Dickson Refinery and distribute the fuel it produces to a network of 530 *Mobil* and *Esso* service stations, most of which have convenience stores. Another affiliate, ExxonMobil Chemicals Malaysia, supplies plasticizers, synthetic rubber, resins, plastics and a range of specialty chemicals to support Malaysia's diverse manufacturing sector.

Corporation's newest director is a man for all seasons

"Life has its seasons," says Larry R. Faulkner.



Larry Faulkner's seasons have found him in many roles: student, teacher, research scientist, university department head, dean, provost and vice chancellor, president of one of the nation's largest universities and now head of a major philanthropic organization.

One of three children, Faulkner grew up in Shreveport, Louisiana, in a family with deep roots in engineering. His grandfather and father were civil engineers.

Faulkner's brother became an electrical engineer, his sister a nurse. His two children earned chemistry degrees. His daughter teaches high school chemistry and physics. His son worked for a major chemical company before attending law school and now practices environmental law.

"My family – my wife, my parents, my siblings and my children – has been the most important influence in my life," Faulkner says.

Passion for science

Faulkner developed a lifetime passion for science during his elementary and middle school years. "I decided when I was 13 or 14 that I wanted to be a scientist," he says.

He credits a high school chemistry teacher – "a terrifically influential person" – with providing inspiration and encouragement.

Faulkner earned a B.S. degree from Southern Methodist University in 1966 and a Ph.D. in chemistry from the University of Texas at Austin in 1969.

With doctorate in hand, he accepted a position that same year on the chemistry faculty at Harvard. "Until then, I had never lived north of Dallas," he says. "The transition from Austin, Texas, to Cambridge, Massachusetts, was something of a shock."

Four years later, Faulkner joined the faculty at the University of Illinois. After a decade, the university convinced him to take the post of chemistry department head. He went on to become dean of the College of Liberal Arts and Sciences, university provost and vice chancellor for academic affairs.

In 1998, he returned to Austin as the 27th president of the University of Texas. During his tenure, he directed a seven-year capital campaign that raised more than \$1.6 billion. He established the Commission of 125, a group of influential citizens who worked to create a vision of the university's next 25 years.

Under Faulkner's leadership, the university built the Blanton Museum of Art, acquired the extensive Suida-Manning Collection of European paintings and drawings, and became the permanent home of the Woodward-Bernstein Watergate Archive.

Scholarships promote diversity

Faulkner oversaw historic changes in the university's ability to attract minority students.

"When I arrived," he says, "court rulings had forced the university to drop its affirmative action program. African American and Hispanic families across the state thought we had no interest in them, and we experienced a serious drop in minority participation."

Faulkner challenged his staff to develop creative solutions to the problem. The result: innovative scholarship programs that encouraged and helped low-income students, many of them African Americans and Hispanics, to attend the University of Texas. In 2004, the entering freshman class was the most diverse in the university's history.

In Faulkner's current season of life, he is president of the Houston Endowment, a 70-year-old, \$1.6 billion private foundation that awards grants in seven areas in the Houston community: the arts, education, the environment, health, human services, neighborhood development and community enhancement. Grants totaled nearly \$70 million in 2007.

"It's a pretty common transition for a university president to do foundation work," Faulkner says. "The work of the Endowment connects to the outreach agenda we had at UT."

Faulkner enjoys golf – "if I only had time to play" – and reading. "I read a significant amount of nonfiction, mainly history and biographies," he says. "I still like

to learn things."

He faithfully follows Texas football. "Once you've been part of the University of Texas family," he says, "you can never disconnect from Longhorn sports."

Academic and author

Faulkner is a member of the American Academy of Arts and Sciences and recently chaired the National Mathematics Advisory Panel.

He has published more than 120 scientific papers, directed 40 doctoral theses and won numerous scientific awards.

With the eminent scientist and teacher Allen J. Bard, a longtime friend, colleague and mentor, Faulkner co-authored *Electrochemical Methods:* Fundamentals and Applications, an authoritative text in the field of electrochemistry.

Faulkner serves on the boards of Temple-Inland and Guaranty Financial Group. As a new ExxonMobil director, he's been impressed by how the corporation achieves its consistently strong results.

"The company maintains an exceptionally high quality of analysis and decision-making," he says, "and that's not easy. It starts with the human element. You need extremely strong people and processes, and ExxonMobil has both." the Lamp

New advertising program tells inside story

ExxonMobil employees are featured in a new series of technology-themed advertisements.

In early June, the corporation launched a new series of advertisements in the United States and Europe that tells the "ExxonMobil story" from its employees' points of view.

The advertising focuses on increasing awareness of today's energy challenges and showing how ExxonMobil uses technology to address the challenge of meeting growing energy needs while protecting the environment.

The employees featured in the ads capture this energy challenge in their own words and talk about technology solutions developed, or being developed, by the company.

Featured technologies include *R3M* and directional drilling as well as ExxonMobil Chemical's groundbreaking lithium-ion battery separator film that is helping create the next generation of hybrid vehicles.

The program also describes the advanced catalysts that help produce lighter-weight, stronger plastics for industrial and automotive use, and the company's collaboration with automakers to develop new fuel systems that propel vehicles with lower greenhousegas emissions.

"This broad-ranging program serves as an expansion of our ongoing communications effort," says Ken Cohen, vice president of Public Affairs for Exxon Mobil Corporation. "We hope that people who see the advertisements will learn about the dedication of our people, and that we recognize and understand critical energy issues and are working diligently to find solutions."

The advertisements are appearing via television, print and online ads as well as video content on exxonmobil. com. TV spots are running on network news, Sunday morning talk shows and relevant cable programs. Print ads are appearing in leading newspapers, journals and government publications in the United States and Europe. Online advertisements are being placed on sites that attract an opinion-leader audience. the Lamp

To learn more
the story continues
at exxonmobil.com

it's one of the world's great challenges.

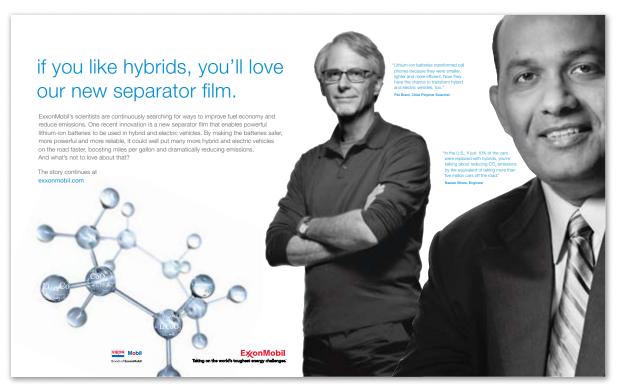
by 2030, global energy demand will increase by about 30%, mostly to support growth and progress in developing countries.

how do we meet this need while leaving a cleaner world for future generations?

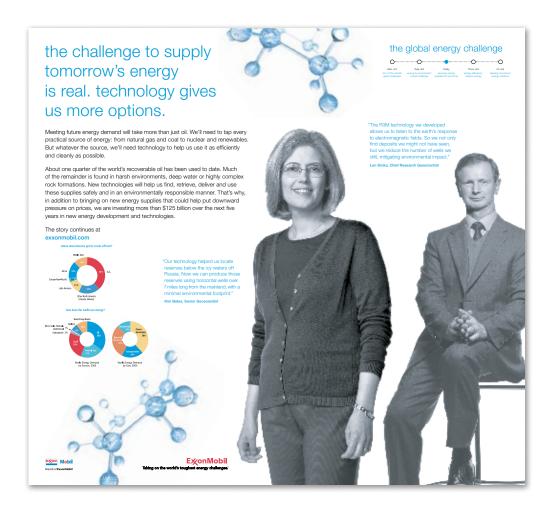
over the next four days, we'll be exploring these challenges and addressing possible solutions.



With the purpose of increasing awareness of today's energy challenges, ExxonMobil launched a new advertising campaign in June.



The new advertisements, featuring company employees, are appearing on television, and in print and online ads as well as video content on exxonmobil.com.



Panorama

► Around the world with ExxonMobil



ExxonMobil outpaces competitors

At ExxonMobil's annual meeting in May, Chairman and CEO Rex W. Tillerson said the corporation is outpacing its competitors in providing shareholder value, and is well-positioned to deliver vital energy to meet growing global demand while protecting the environment.

"The past year was an outstanding year and a record for our corporation by nearly every measure," Tillerson said in his presentation. "We achieved these results by delivering industry-leading safety performance, excellence in operations and environmental protection, strong governance and disciplined investment performance." These include:

- An annualized return on investment for ExxonMobil shareholders of more than 24 percent a year during the past five years, tripling the value of an investment for that period
- ➤ Since 2004, investment of more than \$1.5 billion in activities that reduce greenhouse-gas emissions and improve energy efficiency, and spending of at least \$0.5 billion on additional initiatives over the next few years

- ▶ Through efficiency actions taken in 2006 and 2007, reduction of greenhouse-gas emissions by approximately 5 million metric tons in 2007, equivalent to removing about 1 million cars from roads in the United States
- ➤ Achievement of an average return on capital employed of 32 percent, almost 40 percent greater than the company's closest competitor
- Startup of seven major projects, adding production capacity of nearly 220,000 oil-equivalent barrels a day
- Additional expected startup of 12 major developments to begin production in 2008
- Replacement of more than 100 percent of the company's production with new reserves for the future, adding an additional 375,000 oil-equivalent barrels a day to production
- ➤ An industry-leading portfolio of more than 100 projects expected to support development of more than 24 billion oil-equivalent barrels of energy

Rex Tillerson receives Hispanic Heritage Inspira Award

The Hispanic Heritage Foundation (HHF) presented its Inspira Award to ExxonMobil Chairman and CEO Rex W. Tillerson and U.S. Representative Rubén Hinojosa (D-TX) for their support in improving math and science education among Hispanic youth, and in inspiring a new generation of Hispanic leaders in the United States.

"The Inspira Award recognizes those who have taken a leadership role in breaking barriers and creating opportunities for Hispanic youth," said Jose Antonio Tijerino, HHF president and CEO. "We commend Rex Tillerson and Rep. Hinojosa for their efforts in working to ensure opportunities for Hispanic youth in education, particularly in science, technology, engineering and mathematics fields."

"It is a great honor to be recognized by the Hispanic Heritage Foundation," said Tillerson. "Our nation needs more brilliant minds than ever before. That's why we support programs like the Hispanic Heritage Foundation, which emphasizes the importance of role models, including those who have succeeded in the math and science fields, while celebrating the unique Latino culture and the strength and dimension it brings to our nation's workforce."

For eight years, ExxonMobil has partnered with the HHF to provide scholarships to talented and deserving Hispanic youth who have excelled in the disciplines of mathematics and engineering through the Hispanic Heritage Youth Awards. ExxonMobil's contributions to the awards total more than \$1.2 million.



ExxonMobil Chairman and CEO Rex W. Tillerson is congratulated by Jose Antonio Tijerino, president and CEO of the Hispanic Heritage Foundation, for the corporation's receipt of the Inspira Award for its support of math and science education programs among Hispanic youth.



At the Eddie V. Gray Wetlands Center in Baytown, Texas, children get a hands-on experience of the coastal environment and the need to protect this important resource.

Baytown wetlands center celebrates 10 years

Anthony and Allie Wankowicz (left) are among the thousands of schoolchildren who visit the Eddie V. Gray Wetlands Center in Baytown, Texas, each year. Through hands-on demonstrations, staff naturalists help kids learn about the environmental benefits of coastal wetlands and the need to protect them.

When ExxonMobil offered funds to establish a Baytown wetlands center in the early 1990s, Eddie Gray, a local entrepreneur, led the effort to purchase a six-acre site along historic Goose Creek. Backed by a large state grant, contractors and local volunteers began turning an abandoned 14,000-square-foot bowling alley on the property into classrooms, science labs, meeting rooms and exhibit halls. On April 25, the center celebrated 10 years of community service.

"It was a big day," Gray says, "not only for the wetlands center, but for the city of Baytown and especially all the young people who come here and learn to appreciate the natural world around them." Through annual donations, ExxonMobil continues to support the indoor learning center and a nearby 400-acre wetlands site.

"The wetlands center is growing," says Tracy Prothro, who runs the center and the wetlands site. "We recently added a butterfly house and a popular exhibit that includes baby alligators, fish, crabs and other critters living together in a natural environment. There's always something going on."

Entrance to the center is free. For more information, visit http://tourismprod.baytown.org/Wetlands+Center/.

Panorama

American Idol episode includes \$10 million ExxonMobil donation

Exxon Mobil Corporation donated \$10 million to anti-malaria efforts through the "Idol Gives Back" episode of the FOX-TV show *American Idol*.

The donation went to Malaria No More, a nonprofit organization with the mission to end deaths due to malaria. Malaria No More works to increase knowledge of the disease among the public, policymakers and businesses while engaging individuals, organizations and corporations to provide life-saving bed nets and other critical interventions in the fight against malaria.

This is the second year that ExxonMobil has participated in Idol Gives Back, which raised over \$76 million for charity in its first year in 2007. During that program, ExxonMobil provided a \$3 million "challenge grant" that matched donations by viewers to Malaria No More.

ExxonMobil has donated more than \$121 million to organizations working in and benefiting Africa that are engaged in important community and social development projects, including \$40 million through ExxonMobil Foundation's Africa Health Initiative.



ExxonMobil employees and former *American Idol* contestants Elliot Yamin and Fantasia Barrino (pictured above in white scarves) visited Angola to raise awareness of malaria projects in Africa.

ExxonMobil marks first World Malaria Day

As part of World Malaria Day, ExxonMobil employees and executives participated in a number of activities in Africa, Europe and North America to raise awareness and resources in the battle against this preventable disease. Events included:

- In Africa and Europe, employees of ExxonMobil retail operations initiated a fundraising campaign to purchase life-saving bed nets.
- ▶ In Africa, ExxonMobil's medical director of global issues and projects, Dr. Steven Phillips, participated in the Roll Back Malaria Zambezi Expedition, a voyage on the fabled Zambezi River to showcase successes and highlight challenges associated with the fight against one of the globe's leading infectious killers. ExxonMobil played a coordinating role and sponsored the Zambezi Expedition, which is a partnership of Roll Back Malaria, six countries from the Southern African Development Community, nonprofit institutions and private companies.
- Also in Africa, ExxonMobil affiliates continue to distribute bed nets and are holding a variety of malaria-related community and employee events, such as poster displays, malaria conferences and health education sessions.
- ▶ In Washington, J. Stephen Simon, recently retired director and senior vice president of Exxon Mobil Corporation, attended a World Malaria Day event in the Oval Office, hosted by President George W. Bush. ExxonMobil is the largest corporate donor to the President's Malaria Initiative.



ExxonMobil's J. Stephen Simon attended a private ceremony at the White House to commemorate the first-ever World Malaria Day.

ExxonMobil helps launch revenue transparency guide

The Extractive Industries Transparency Initiative (EITI) recently released its new Business Guide for EITI Implementation, which offers a road map for the role oil, natural gas and mining companies can play to ensure revenue transparency and good governance in the development of the world's energy resources.

To mark the release of the guide, ExxonMobil Production Company President Rich Kruger joined EITI Chairman Dr. Peter Eigen at an industry event hosted by the World Affairs Council of Houston. "The primary purpose of EITI is to provide more information on government revenues to help ensure they're used to benefit the citizens of the country," said Kruger. "But just as important is the culture of accountability that is created when governments, companies, nongovernmental organizations, international financial institutions and investor groups work together to improve disclosure and transparency."

The Business Guide is a model of cooperation, with many companies providing valuable input. Kruger also noted that 23 countries are now validated as being in the process of EITI implementation. "We hope this number continues to increase, and this guide can help make that hope a reality," he said.



ExxonMobil Fairfax building among most energy-efficient

ExxonMobil's Fairfax building was recently awarded the Energy Star by the U.S. Environmental Protection Agency (EPA) in recognition of the company's energy-efficiency efforts.

The award represents the national mark of excellence in energy performance and is a result of efficiently operating a building's systems and useing energy-efficient equipment. Commercial buildings earning the Energy Star use on average 35 percent less energy than similar buildings and generate one-third less carbon dioxide.

In November 2007, the Baton Rouge Refinery was also honored with the Energy Star by the EPA. Energy Star is a joint program of the EPA and the U.S. Department of Energy helping to save money and protect the environment through energy-efficient products and practices.



Teams recognized for outstanding safety

Esso Australia Supervisor Ben Robinson (right) and Contractor Stuart Sutherland monitor progress on the dismantling of a workover rig on the Cobia Platform in Bass Strait offshore Australia. Above the two men a rigger helps secure the rig mast. They are all part of the WellWork team that received one of two inaugural ExxonMobil Production Company WellWork Safety Awards. The other award went to ExxonMobil Exploration and Production Malaysia Inc. Both organizations achieved zero recordable incidents for well work operations in 2007.

Briefly

Exxon Mobil has received the 2008 Malaria Award from the Global Business Coalition on HIV/AIDS, Tuberculosis and Malaria in recognition of the corporation's Africa Health Initiative and its role in the battle against malaria.

"In the eight years since we launched our Africa Health Initiative, the way the world thinks about malaria has changed," says ExxonMobil Chairman and CEO Rex W. Tillerson. "We understand through our employees in Africa what an impact malaria has on peoples' lives and the community's economic development. We are committed to winning the battle against malaria."

ExxonMobil is the largest nonpharmaceutical corporate donor to malaria research and development efforts and has committed more than \$130 million to organizations engaged in important community and social development projects in Africa.

► Edward E. Whitacre Jr. has been elected to the corporation's board of directors. Whitacre is chairman emeritus of AT&T Inc., where he was chairman and chief executive officer until his retirement in 2007.

Whitacre is a member of the Boy Scouts advisory council and a trustee for the advisory board of the San Antonio United Way group. He is on the board of the Institute for International Economics, is a member of the Business Council and serves on the boards of Anheuser-Busch Companies and Burlington Northern Santa Fe Corporation.

The ExxonMobil board stands at 11 directors, 10 of whom are nonemployee directors.

ExxonMobil is committing more than \$100 million to complete development and testing of an improved natural gas-treating technology that could make carbon capture and storage more affordable and significantly reduce greenhouse-gas emissions.

The company plans to build a commercial demonstration plant near LaBarge, Wyoming, where it will use ExxonMobil's Controlled Freeze Zone technology, known as *CFZ. CFZ* is a single-step cryogenic separation process that freezes out and then melts the carbon

dioxide and removes other components including hydrogen sulfide, which is found in so-called sour gas. If successful, the process will reduce the cost of carbon dioxide removal from produced natural gas.

ExxonMobil Exploration and Production Hungary Limited (ExxonMobil), a subsidiary of Exxon Mobil Corporation, and MOL Hungarian Oil and Gas Plc. (MOL) announced an agreement to start a joint exploration program in blocks 106 and 107 in the Mako Trough in southeast Hungary.

ExxonMobil will fund the work program and receive a 50 percent interest in the acreage upon completion. MOL will retain the remaining 50 percent. The exploration program covers 387,000 acres with wells drilled to depths of approximately 14,000 feet. The comprehensive work program includes drilling and completion of wells using ExxonMobil proprietary technology and expertise.

▶ J. Stephen Simon, director and senior vice president responsible for ExxonMobil's petroleum refining and supply and chemicals manufacturing and marketing operations, has retired after more than 40 years of service.

Simon joined Exxon Company, U.S.A. in 1967 and shortly thereafter began a two-year assignment in the United States Army. He returned in 1969 as a business analyst in the Baton Rouge Refinery. During his career, Simon held a number of positions including manager, Baton Rouge Refinery; executive assistant to the president of Exxon Corporation, New York; supply and transportation manager, Esso Europe, London; general manager, supply department, Exxon U.S.A., Houston; chief executive, Esso Caribbean and Central America, Coral Gables, Florida; president, Esso Italiana, Rome; and executive vice president, Exxon Company, International, New Jersey. Following the ExxonMobil merger, he was appointed president of ExxonMobil Refining & Supply Company and vice president of Exxon Mobil Corporation in December 1999.

Lamp

The Lamp is published for ExxonMobil shareholders. Others may receive it on request. It is produced by the Public Affairs Department, Exxon Mobil Corporation.

Exxon Mobil Corporation has numerous affiliates, many with names that include ExxonMobil, Exxon, Esso and Mobil. For convenience and simplicity in this publication, those terms and the terms corporation, company, our, we and its are sometimes used as abbreviated references to specific affiliates or affiliate groups. Similarly, ExxonMobil has business relationships with thousands of customers, suppliers, governments and others. For convenience and simplicity, words like venture, joint venture, partnership, co-venturer and partner are used to indicate business relationships involving common activities and interests, and those words may or may not indicate precise legal relationships.

Trademark ownership: The terms Mobil, Esso, Mobil 1, Enable mPE and Exceed mPE, Taking on the world's toughest energy challenges are trademarks, service marks or certification marks of Exxon Mobil Corporation or its affiliates. R3M (Remote Reservoir Resistivity Mapping) and CFZ (Controlled Freeze Zone) are proprietary processes of ExxonMobil. The following terms are trademarks or service marks of the entities indicated: American Idol is a registered trademark of 19 TV Ltd. and FremantleMedia North America Inc.

Forward-Looking Statements: Outlooks, projections, estimates, targets and business plans in this publication are forward-looking statements. Actual future results, including demand growth and supply mix; ExxonMobil's own production growth and mix; resource recoveries; project plans, timing, costs and capacities; capital expenditures; revenue enhancements and cost efficiencies; margins; and the impact of technology could differ materially due to a number of factors. These include changes in long-term oil or gas prices or other market conditions affecting the oil, gas and petrochemical industries; reservoir performance; timely completion of development projects; war and other political or security disturbances; changes in law or government regulation; the outcome of commercial negotiations; the actions of competitors; unexpected technological developments; the occurrence and duration of economic recessions; unforeseen technical difficulties: and other factors discussed here and under the heading "Factors Affecting Future Results" in item 1 of our most recent Form 10-K and on our Web site at exxonmobil.com.

Frequently Used Terms: References to resources, the resource base, recoverable resources, barrels and similar terms include quantities of oil and gas that are not yet classified as proved reserves, but that we believe will likely be moved into the proved reserves category and produced in the future. Discussions of reserves in this publication generally exclude the effects of year-end price/cost revisions and include reserves attributable to equity companies and our Syncrude operations. For definitions of, and information regarding, reserves, return on average capital employed, normalized earnings and other terms that may be used in this publication, including information required by SEC Regulation G, see the "Frequently Used Terms" posted on our Web site. The most recent Financial and Operating Review on our Web site also shows ExxonMobil's net interest in specific projects.



First-quarter earnings

ExxonMobil's first-quarter net income was a record \$10,890 million, up 17 percent from the first quarter of 2007. Earnings per share were up 25 percent, reflecting the impact of the continuing share purchase program. Higher crude oil and natural gas realizations, driven by record worldwide crude oil prices, were partly offset by lower refining and chemical margins, lower production volumes and higher operating costs.

Upstream earnings were \$8,785 million, up \$2,744 million from the first quarter of 2007. Record high crude oil and natural gas realizations increased earnings approximately \$4.4 billion. On an oilequivalent basis, production decreased 5.6 percent from the first quarter of 2007. Excluding the Venezuela expropriation, divestments, OPEC quota effects and price and spend impacts on volumes, production was down 3 percent.

Downstream earnings of \$1,166 million were \$746 million lower than the first quarter of 2007. Significantly lower worldwide refining margins decreased earnings approximately \$1 billion, while improved refinery operations increased earnings about \$350 million. Petroleum product sales of 6,821 kbd (thousands of barrels a day) were 377 kbd lower than last year's first quarter, mainly reflecting asset sales.

Chemical earnings of \$1,028 million were \$208 million lower than the first quarter of 2007. Lower margins, which decreased earnings approximately \$350 million, were partly offset by favorable foreign exchange and tax effects. Prime product sales of 6,578 kt (thousands of metric tons) in the first quarter of 2008 were 227 kt lower than the prior year.

The corporation distributed a total of \$9.9 billion to shareholders in the first quarter, through dividends and share purchases to reduce shares outstanding, an increase of 13 percent or \$1.1 billion versus the same period in 2007.

ExxonMobil quarterly financial summary

Millions of dollars, except per-share amounts	First Quarter 2008 2007	
Functional earnings Upstream	\$ 8,785	\$ 6,041
Downstream	1,166	1,912
Chemical	1,028	1,236
Corporate and financing	(89)	91
Net income (U.S. GAAP)	<u>\$ 10,890</u>	\$ 9,280
Net income per common share		
- assuming dilution	\$ 2.03	\$ 1.62
Special items	\$ 0	\$ 0
Earnings excluding special items	\$ 10,890	\$ 9,280
Other financial data		
Total revenues and other income	\$116,854	\$ 87,223
Income taxes and other taxes	\$ 29,341	\$ 24,476
Capital and exploration expenditures	\$ 5,491	\$ 4,222
· · · · · ·		
Dividends on common stock	\$ 1,879	\$ 1,825
Dividends per common share	\$ 0.35	\$ 0.32
7		
Thousands of barrels daily, except natural gas and	cnemicai	
Operating data		
Net production of crude oil and natural gas liquids	2,474	2,746
riaturai gas iiquius	2,474	2,740
Natural gas production available		
for sale (millions of cubic feet daily)	10,246	10,114
Oil-equivalent production		
(6 million cubic feet = 1 thousand barrels)	4,182	4,432
(, -	, -
Refinery throughput	5,526	5,705
Petroleum product sales*	6,821	7,198
Chemical prime product sales		_
(thousands of metric tons)	6,578	6,805

^{*}Petroleum product sales data are reported net of purchases/sales contracts with the same counterparty.

the challenge to supply tomorrow's energy is real.

technology gives us more options.

Meeting future energy demand will take more than just oil. We'll need to tap every practical source of energy: from natural gas and coal to nuclear and renewables. But whatever the source, we'll need technology to help us use it as efficiently and cleanly as possible.

About one quarter of the world's recoverable oil has been used to date. Much of the remainder is found in harsh environments, deep water or highly complex rock formations. New technologies will help us find, retrieve, deliver and use these supplies safely and in an environmentally responsible manner. That's why we're investing about €80 billion over the next five years in new energy development and technologies.

The story continues at exxonmobil.com

> "Using technology, we have transformed the scale on which natural gas can be shipped around the world - making more cleanerburning energy available to more people."

Ferah Çakmak, Economist

ExonMobil

Taking on the world's toughest energy challenges."

"Our early offshore wells off the coast of West Africa were drilled in just under 100 metres of water. Today, we're drilling in water depths of up to 3,000 metres, using state-of-the-art technology to access oil and gas resources that only

Edson Dos Santos, Engineer





© 2008 by Exxon Mobil Corporation Printed on recycled paper

ne Hibbert Group

Address service requested

PRSRT STD