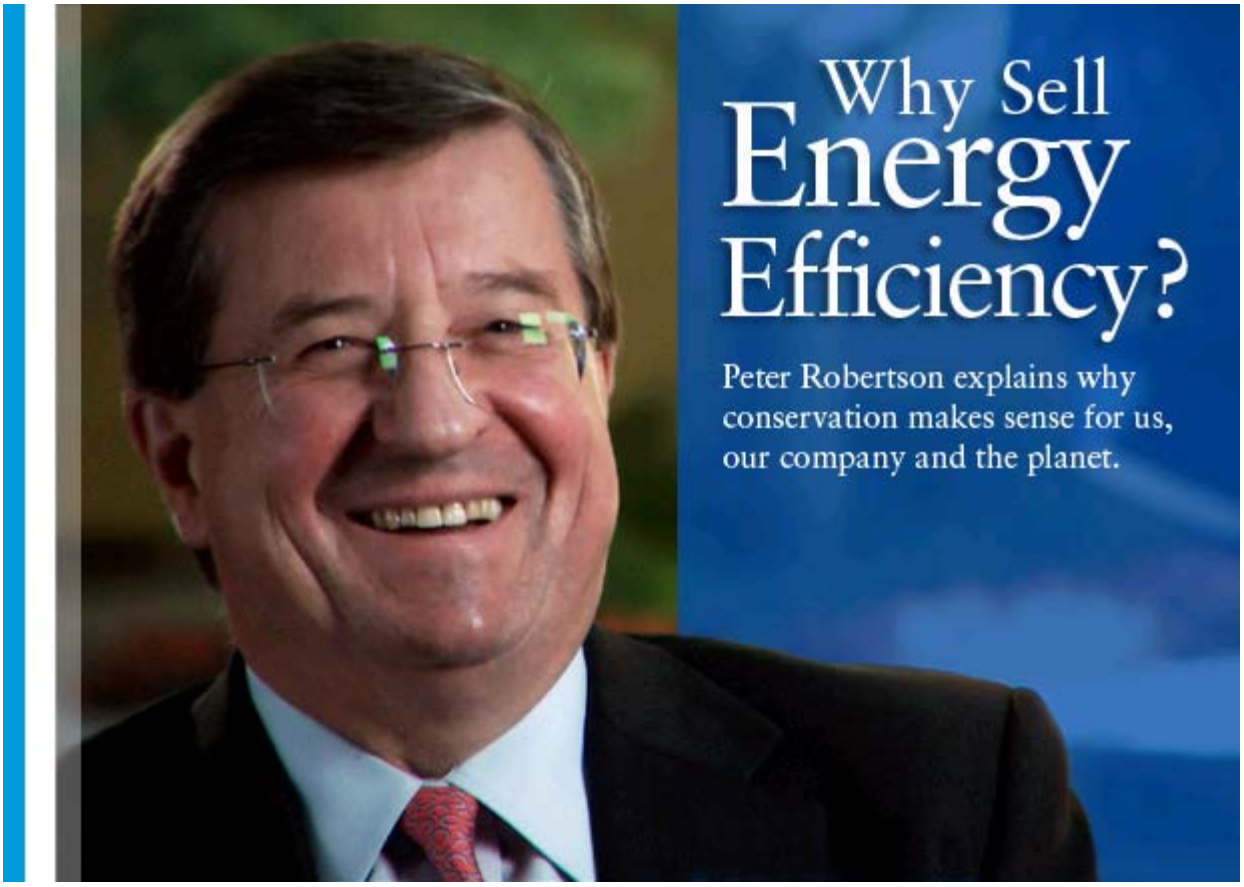
Line Rider

Global Employee eMagazine



September 2008 Issue

Also in This Issue

22 September 2008

Content Contact: Corporate Communications
Technical Contact: PGPA - Information Technology
Company Confidential
Opco: PGPA

Why Sell Energy Efficiency?

Peter Robertson explains why conservation makes sense for us, our company and the planet.

Encouraging customers to use less energy may seem an odd strategy for an energy company. But for Chevron, it makes sound business sense.

The need to focus on energy efficiency is driven by the fact that “a lot of us are concerned about the ability of the world’s supply system to provide energy that people need,” Vice Chairman Peter Robertson explains.

For a company committed to providing affordable, reliable energy to its customers, energy efficiency becomes, in Robertson’s words, “the best source of new energy.”

Robertson adds that by curbing carbon emissions, energy efficiency and conservation “will go a long way toward protecting our planet and addressing the environmental concerns we have.”

The company is pressing forward with its energy efficiency message through a new public outreach and advertising campaign that kicked off this month. Titled “I Will,” the campaign is designed to serve as a call to action by raising awareness of the importance of energy efficiency and conservation.

Advertisements appearing on television and in major print publications and online media will focus on individuals making decisions to save on energy consumption.

The advertisements complement Chevron’s updated willyoujoinus Web site (see link to the right) that provides useful ways to conserve energy and use it more efficiently. The site serves as a public debate forum on global energy issues, inspiring commitment and initiating action by the general public. New features include the Energy Generator and the MPG Optimizer, tools developed for Chevron by the Alliance to Save Energy, a non-profit coalition of business, government, environmental and conservation leaders that supports energy efficiency around the world.

The updated Web site and ad campaign reinforce Chevron’s efforts to be part of the energy solution. In his video from the willyoujoinus site, which can be viewed from this page, Robertson says, “Internally, we want to use less energy because it’s a good economic decision to use less.”

Reduce Use, Increase Profit

His remarks underscore that Chevron is a major consumer of energy throughout our operations, and anything we can do to reduce the energy we use makes us a more competitive and profitable enterprise.

In addition, he says, “Our business is to provide affordable, reliable energy to our customers.” Consequently, the company has a responsibility to encourage sound energy policies – and that begins with energy savings and conservation.

Robertson notes that many well-informed observers – including Chevron – have serious concerns about the ability of future energy supplies to keep pace with rising global demand – especially from the fast-growing economies in Asia and the developing world. “So it’s really important that we encourage people to use less.” …

Chevron has been setting an example throughout our operations. Since we’ve begun tracking our energy consumption in 1992, we’ve improved energy efficiency by 27 percent. In addition, our subsidiary Chevron Energy Solutions (CES) creates innovative solutions such as solar power installations for schools, colleges, government agencies and businesses. Since 2000, CES has developed hundreds of projects that will help to reduce over $1 billion in energy costs for customers.

While the current advertising targets Americans, the message of the campaign affects us all, says Robertson. “Chevron is not just a company. We’re people, we’ve got children and grandchildren, and we’re convinced that energy efficiency is the best source of new energy in the world and the best thing we can do in terms of carbon emissions.”

What do you do in your daily life to conserve energy? That’s the subject of the current Voices Message Board question in this issue of Line Rider. now!

Thinking Safety, Underground

Chevron's mining operations are among the industry's safest, and mining best practices are influencing the core business.

Mining is one of the smaller businesses in our organization yet carries some of the biggest risks. As a result, Chevron Mining Inc. (CMI) puts enormous energy into safety, and that effort is now paying major dividends. Policies recently implemented by CMI are setting a standard of excellence for the U.S. mining industry while providing best practices to share within Chevron.

Perhaps the best indicator of CMI's success in creating a strong safety culture is its Days Away From Work Rate (DAFWR). In 2007, that rate stood at 1.0 per 200,000 work hours, which is almost four times better than the U.S. mining industry average of 3.58. Through the first half of 2008, CMI has continued to improve, recording a DAFWR of 0.47, a more than twofold improvement over 2007 figures.

"While we're pleased by the improvement, the results still aren't good enough," says Mark Smith, CMI president and CEO. "We wholeheartedly believe that becoming incident- and injury-free is a very achievable goal – both within our organization and throughout the entire mining industry."

Smith added that reaching this goal will require a systematic approach to controlling and mitigating risks in conjunction with a companywide culture focused on operational excellence (OE).

Chevron Mining Inc. was created in 2007, when the company's Pittsburg & Midway Coal Mining Co. merged with Molycorp, Inc., another Chevron subsidiary. The resulting company has 1,500 employees and operates five mines, producing products that are essential to the world's energy future and important to Chevron.

Chevron's Questa Mine in northern New Mexico is one of only three primary U.S. suppliers of molybdenum. This silvery white metal is an essential alloy in steel used for deepwater drilling, as it significantly improves corrosion resistance, toughness and flexibility in some of the world's harshest environments. Downstream, molybdenum plays a key role in refineries as a catalyst in the hydrocracking process, which is used to convert heavy hydrocarbons into light products such as high-quality fuel.

Managing Risk

A major initiative to manage risk is taking place at Questa Mine. The mine, which has a strong reputation for safety, has won several industry honors, including Safe Operator of the Year awards in 2005 and 2007 from the New Mexico State Mine Inspector.

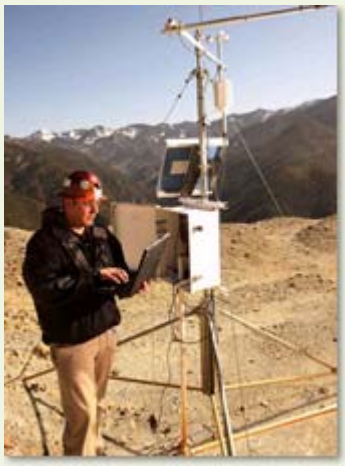
“While our safety performance has been consistently better than the national average for our industry, we are never happy as long as we have any injuries at all,” says Roy Torres, Questa Mine manager. “Our goal is to create an environment where no one gets hurt and all of our employees go home safe at the end of their shifts.”

To help achieve this goal, a team at the Questa Mine recently reviewed data from incidents recorded during operations. After careful review and analysis, team members determined that the root cause for most of these incidents was improper or insufficient self-performed safety assessments.

“People were not spending enough time thinking before they acted,” says Ray Cherniske, Questa’s OE and Health and Safety manager who was a member of the review team.

According to Cherniske, the Questa Mine began to address this deficiency in the spring of 2007 by rolling out its innovative Think Incident Free (TIF) safety tool. Now, before starting a new task, personnel are asked to perform a written safety assessment using a TIF card specially created to address planning, tools and equipment usage, training, and the respondent’s state of mind. Cards are then discussed with a supervisor and modified as tasks change.

“By taking a few moments to size up the job and identify potential hazards, miners get a better understanding of potential risks and how to avoid them,” Cherniske adds. “This new procedure not only helps workers perform more safely, but also more efficiently, which improves productivity.”



Mine staff monitor groundwater, surface water and air quality as part of the commitment to operate in an environmentally sound manner.

TIF is playing a key role in improving safety performance at the Questa Mine. Since its implementation in 2008, the severity of incidents has declined. The program is currently being shared throughout CMI. As a potential best practice, TIF has also been shared at a Corporate Strategic Planning committee meeting and has garnered active interest from other parts of the Chevron organization.

Coal Mining Operations

In addition to its Questa Mine operations, CMI also operates three coal mines in the Unites States. Chevron’s Kemmerer Mine in Wyoming set a record by producing 5.2 million tons of coal in 2007 while achieving two consecutive years – 2.1 million work hours – without a lost-time injury. The McKinley Mine in New Mexico and the North River Mine in Alabama also have safety records well above the industry average. Together, these three mines sell more than 12 million tons of coal annually and control more than 200 million tons of valuable reserves, including environmentally desirable low-sulfur coal.

“Chevron Mining is proud of its successes and is committed to pioneering practices that can help our industry achieve ever-increasing levels of safety,” says Mark Smith. “We also welcome opportunities to collaborate with our Chevron colleagues and share the specialized technical expertise we’ve acquired through years of successful operation.”

HOW IT WORKS

Fuels That Drive Us

With gas prices soaring, should we plug into hybrids, make a detour for biofuels or stay on the road toward increasingly efficient and Earth-friendly petroleum fuels?

Day after day, the headlines beg the same question: Why can't we replace our gasoline guzzlers with vehicles that use Earth-friendly "future fuels" like electricity, hydrogen and compressed air?

Which Fuel is Which?

It's flat and black but there's more science going on inside a solar panel than meets the eye.

Yes, compressed air, replenished by little onboard gasoline engines. Tata Motors, India's largest carmaker, says it plans to build thousands of MDI MiniCAT air cars – and conservation-conscious citizens worldwide also may want them.

The transition won't be that simple of course. Decades of evolution – not overnight revolution – will be required to reduce dependence on oil, increase driving efficiency and lower greenhouse-gas emissions.

Toyota has sold 1 million Prius hybrid cars worldwide in 11 years. Impressive, but globally more than 70 million new cars are sold each year. And the internal combustion engine is getting cleaner, more efficient and more competitive.

"Higher oil prices are making alternatives more viable," says Rajesh Paulose, Global Marketing's manager for alternate fuels. "But limiting petroleum too soon would mean scaling back life as we know it. And anything hoping to replace this fuel would have to scale up at an incredible pace."

The National Petroleum Council, Chevron and others argue that the world must develop every kind of energy that makes sense to customers – petroleum, natural gas, biofuels, hydrogen, electricity and more – and boost energy efficiency to meet forecasted demand. So, what will we all be driving?

Our interactive chart on this page lists every type of fuel we have heard of. Click through the descriptions and read what our experts say about each one's environmental and commercial viability – and judge for yourself whether it's going to fuel your journeys today, soon or far into the future. If you think we've missed one – !

Letters to the Editor

We had a very full inbox following the story in the last issue on pigs – the sort that check pipelines, not the “oinking” variety.

Tickled

I enjoyed reading the article “Pigs: Sentinels of Energy’s Underworld” (June 2008 issue). The title is so catchy, and the way it was written tickled my funny bones. I actually imagined a real pig doing the work and found myself giggling. I appreciate the simple way the whole technology was explained to a non-techie person like me. Thanks, and I hope to read more very interesting stories from the “descendant” of the real Line Rider.

Fatima Erasmo, Makati City, Philippines

I was looking for a picture of an oinker on a farm (in “Pigs: Sentinels of Energy’s Underworld”) and was pleasantly surprised to discover that no animals were involved in the oil industry, just little “squealers” cleaning out Chevron’s pipelines. The tidbit about horses and *Line Rider* at the end was icing on the cake. Thanks for an enjoyable, informative article.

Nancy Wright, San Ramon, United States

I was researching into pipeline integrity-related issues and came across the pigging animation. It was masterfully done. Of course, it was the animation that thrilled me the most, just like the Energyville animation [see www.willyoujoinus.com].

Adeola Stephen Oladayiye, Lagos, Nigeria

‘Resources’ Explained

Great article on “The Resource Factory” (June 2008 issue). Excellent explanation of how an oil company measures its resources and true worth and the processes involved.

Maureen Greaves, Brea, California, United States

Chevron Engineers Praised

Your article (“Chevron Engineers Donate Skills To Improve Lives,” June 2008 issue) was especially timely for me. The Construction Industry Institute just held its 25th anniversary annual conference. One of the speakers was Dr. Bernard Amadei, Founding President of Engineers Without Borders. Chevron’s support for Engineers Without Borders was highlighted during Dr. Amadei’s presentation.

Paul Woldy, Houston, Texas, United States

An Education

I just want to use this medium to thank you for all your efforts on *Line Rider*. Anytime I'm reading your articles I feel as if I'm back at school learning new ideas and technologies while at work, seeing how people are overcoming challenges. In fact your topics always make my day; hence I always look forward to another edition with passion. Keep-up the good work!

Olajide Ilelaboye, Escravos, Nigeria