

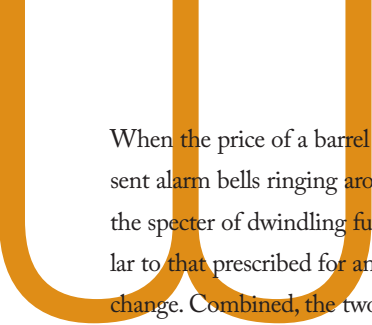


C

Gasoline prices are high. Natural resources are dwindling. The two topics have certainly generated their fair share of buzz, but combined they're giving projects aimed at increased energy efficiency an urgency not seen before. Make no mistake, though. Companies still have to see something in it for the bottom line, too.

When Two Worlds collide

BY TOM SULLIVAN & SARAH FISTER GALE



When the price of a barrel of oil passed the US\$150 mark, it sent alarm bells ringing around the globe. In an ironic twist, the specter of dwindling fuel supplies is sparking action similar to that prescribed for another global challenge, climate change. Combined, the two crises signal sustainability is no longer a discretionary strategy. And this epiphany is igniting a slew of new projects aimed at laying claim to a green future.

No one doubts it will take time for many of these much-vaunted sustainability projects and programs to show true ROI. But not having a credible portfolio of sustainability projects simply isn't an option anymore.

"Investors are concerned about environmental issues and global challenges and they expect companies to have policies in place to handle those issues, such as having a strategy for renewable energy and for product development that is less energy-consuming," says Ulrika Hasselgren, president of Ethix SRI Advisors, an ethical investment consultancy in Stockholm, Sweden.

A spot on an ethical investment index such as the FTSE4Good or the Dow Jones Sustainability Index can be a stamp of approval that can grant companies access to socially responsible investments worth an estimated US\$14 trillion worldwide, according to an initiative launched by global investors and the United Nations.

And investors won't hesitate to pull money from companies that lack a credible environmental record, says Ms. Hasselgren.

"Investors see this as a risk. The large energy companies have learned the lesson well and concluded that they have to bring sustainability issues into top management strategy because it can impact the business," she says. "Some of the biggest oil companies have difficulties recruiting people because of sustainability issues. That can obviously have a negative impact on their bottom line."

To avoid those risks and to stay viable in a changing economy, forward-thinking organizations are investing heavily in sustainability projects.

StatoilHydro ASA, Scandinavia's largest energy company, has a portfolio packed with a range of high-tech

renewable energy projects, including offshore wind farms, wave and tidal power stations, and biomass from wind farms.

The company is diversifying its portfolio with alternative energy projects for commercial as much as environmental reasons, says Trude Sundset, vice president for environment and climate at the Forus, Norway-based company. The goal is to deliver long-term growth while continuing to develop technologies and manage projects that meet the world's energy and climate challenges in a sustainable way.

"We're planning to produce oil and gas for many decades to come, but this is about surviving in the future," she says. "We believe that certain types of renewable energy will be part of the energy market in the long term. That's why we're working on them."

But the long lead times for commercialization and the uncertain rates of success for many sustainability projects mean there must be buy-in at all levels—starting at the top.

"Some renewable energy sources like solar power are growing fast but in general the speed is limited as you're dependent on the maturation of new technologies," Ms. Sundset says. "We have prototypes of offshore wind and wave power but it will take time to scale it up. And you will always face the uncertainty in regard to how fast you can develop it into a mature technology and capture a larger market."

Community Ties

Not all companies, or regions of the world, are equally progressive.

Awareness of sustainability is growing across Latin America, but there's still not enough being done to combat problems of pollution and toxic emissions, particularly in mining industries, says José Carlos Machicao, PMP, a project management consultant in Lima, Peru. He points the finger at vague government regulations and lax enforcement of environmental laws for slowing progress.



Project leaders need to put cost-benefit analysis and scope modeling tools into practice to understand the impact of their project decisions upon the business, the people and the environment.

—JOSÉ CARLOS MACHICAO, PMP, CONSULTANT, LIMA, PERU

“The environment is often seen as a trade-off in Peru. Either you’re making money or saving the environment. Environmental protection measures are considered to be an optional gift to the local community rather than being in the interest of a company,” says Mr. Machicao. “Businesses often do not see the relationship between the environment and their bottom line. A major part of the problem is our management culture, which is very focused on activities rather than outcomes. The same applies to environmental legislation, which tends to list things that need to be done rather than what needs to be achieved. A minor, but existing, part of the problem is the inadequate action of the state to push this culture to improve.”

In countries such as Canada or New Zealand that have clearly defined mining pollution regulations, companies know exactly what they must do to comply, he says. Although that makes some elements of project planning

straightforward, companies can’t always pick and choose locations for projects. So Mr. Machicao recommends companies capitalize on project management strategies to assess the financial gains of sustainable project decisions and the impact on community relations.

“Project leaders need to put cost-benefit analysis and scope modeling tools into practice to understand the impact of their project decisions upon the business, the people and the environment,” he says. “Then they need to communicate their intentions back to the community where the project is taking place, and translate to all main stakeholders the cost-benefit principles, using benefits as a common language to relate a project to the vision of each stakeholder.”

Because so many mining companies have failed to secure buy-in from the local communities and have been careless with the environment, a growing trend of resentment,

Waste Not

Besides being a sound environmental decision, reducing emissions and waste on projects has an ROI that goes straight to the bottom line, says Malachy Hargadon at the European Commission.

Many governments are already putting a price on carbon emissions, which gives companies a clear financial incentive to reduce their emissions and move to renewable sources of energy. “Increasingly you will find that you have to factor the price of carbon emission into the overall project cost,” he says.

Even in those countries that don’t yet have costs linked with carbon emissions, companies should calculate the potential cost of their carbon as a way to define the impact of the emissions on projects.

“Factoring a price for carbon into your project defines its value, even if you are not currently doing carbon trading,” he says. “You may also find that some of your suppliers are subject to carbon emission trading and you have to make allowances for that in your budget.”

hostility and even violence toward mining project teams has sprung up across the region, says Mr. Machicao.

“This situation has given the whole industry a bad image,” he says. “This is true even for companies that are clear about their goals and use sustainable development practices.”

It will take time to solve the rifts, but they can be overcome with careful project planning and decision-making. “On the positive side, the currently few companies that continue to have good communication with the community and develop a local vision for sustainable project management are and will be the most successful,” says Mr. Machicao.

Here to Stay

The global economic crisis makes it tempting to put sustainability on the back burner. But companies must be focused

on the long-term, warns Malachy Hargadon. As the Washington, D.C., USA-based environment counselor for the European Commission, he advises the group on climate-control issues and strategies for reducing emissions.

“You may have short-term financial crises or employment crises, and without dismissing those, you have to recognize that climate-control issues are not going away unless we deal with them,” he says. “Sooner or later everyone has to contribute.”

The push to sustainability should be driven by companies all around the world—and they cannot be contained to isolated “green” projects.

“Businesses have to change the way they address all project planning,” says Mr. Hargadon. “Energy efficiency is now part of the equation.”

Intelligent Design

U.S. IT giant Intel plainly spells out financial incentives for its sustainability initiatives. The company mandates that all of its manufacturing sites around the world comply with the U.S. Environmental Protection Agency (EPA) “minor source of emissions” rating, which requires facilities to limit the emissions of specific chemicals and toxins released during the manufacturing process.

“Facilities in the United States that are a major source for air emissions are subject to much higher levels of scrutiny, oversight and regulation than those that are classified as a minor source,” says Gary Niekerk, senior manager of corporate responsibility. “Those extra steps and bureaucracy would slow our time to market.”

In an industry that releases new technologies every 18 months, any added time on a project translates to additional risks.

“I could say we reduce emissions because it’s the right thing to do, but the bottom line is it’s a strategic business decision with a clear ROI,” he says. “It may cost more on the front end in environmental controls and abatement equipment, but it’s worth a lot more, because it gives us the flexibility to make quick changes and get products to market faster.”

In the planning stages of every new project, Intel's design engineers and environmental managers define the total allowable impact of the processing based on EPA regulations and build the product and processing steps around those goals.

"In addition to defining the necessary megahertz, the size of the die and whether it will fit the latest Apple product, we also look at whether we can meet our environmental goals," says Mr. Nickerk.

Even if the product will be produced outside of the United States, Intel requires all facilities to meet the same EPA environmental requirements.

"You can't design a process technology for Arizona and have a different process for Israel or Ireland," he says. "When we design a new technology, we duplicate it exactly around the world, so everyone has to be on the same page."

Double Rewards

Unlike Intel, Tesco plc, one of the United Kingdom's largest supermarket chains, didn't introduce its massive climate change program to save money. Launched two years ago, the effort to cut the carbon footprint of its stores by 50 percent was driven by a desire to be a responsible company. However, as fuel prices began to shoot up last summer it became obvious that Tesco's response to climate change wasn't just good for keeping the loyalty of its 30 million weekly customers. It was good for the bottom line, too.

"We set ambitious targets for reducing the carbon footprint of our business," explains Katherine Symonds, sustainability manager for Tesco plc, Cheshunt, Hertfordshire, England.

"We have implemented energy saving programs across our stores and are examining how we bring goods into our stores too, ensuring that we are getting the best out of our distribution system," she says. "In some routes in the United Kingdom, we have begun using alternatives to roads such as railways and canals."

And the rewards turned out to be two-fold.

"Our investors recognized our sustainability policies as beneficial because they are what our customers are asking for," she says. "They are also aware of the financial rewards for an efficient business tightening up how it uses energy—especially in a time of price rises."

Ms. Symonds sees the climate change debate and rising energy costs as two sides of the same coin.

"Last year all the talk was about climate change and this year it has been about fuel prices and managing the current economic situation, but the two issues are absolutely entwined and the response needed for both is the same," she says.

And with the issues high on everyone's agenda, securing buy-in from management and the support of staff in thousands of stores posed little challenge, says Ms. Symonds.

But it did require a solid communications plan.

"With each new initiative, we ensure we have senior buy-in, we write to all our store managers and then put regular articles in our fortnightly staff paper," she explains.

That effort paid off. "Our staff members are all very enthusiastic about green initiatives and have really embraced the challenges," Ms. Symonds says. "With their help, our customers have used 2 billion fewer plastic carrier bags since August 2006. It would not have been possible to bring about that kind of behavioral change if they were not having the right conversations with customers."

Whatever a company's rationale, the need to factor sustainability and environmental impacts into project decision-making is clear, says Mr. Hargadon.

And, perhaps not so surprisingly, he thinks the European Commission is an excellent model to follow.

"When we bring forward a proposal we look at all the possible costs, impacts and benefits of what we are doing on businesses, individuals and the environment. It never comes down to one figure but it helps us come to a global assessment," he says. "The same principles can be applied to project planning for companies. It's about making objective decisions that are based on the overall costs and benefits of your actions."*