

BP Amoco Steps Up to Climate Change

The keynote speaker at our winter reception in December was Steven W. Percy, chairman and CEO of BP America. Introduced as the first “captain of industry” ever invited to address INFORM and its supporters, his talk shed an interesting light on the how’s and why’s of corporate leadership and environmental protection.



Photo: Sara Foster

BP America chairman and CEO Steven W. Percy at the podium.

Last September, British Petroleum (now BP Amoco) became the first energy supplier to acknowledge that, in light of the mounting scientific evidence supporting global climate change, precautionary action is warranted. BP pledged to reduce emissions of greenhouse gases from its own operations by 10 percent below 1990 levels by the year 2010. These reductions are larger than those agreed to in Kyoto last year, and BP intends to make them whether or not the Protocol actually takes effect.

Why would one of the world’s largest oil companies break ranks with the rest of the industry and make such a pledge?

“BP has noted the concerns of INFORM and other environmental

Opting for Natural Gas: A Pioneer’s Tale

INFORM Board Member Dorcas McDonald helps the environment every time she takes a drive. The proud new owner of a car that runs on either compressed natural gas (CNG) or gasoline, Dorcas believes that everyone has a role to play in preventing pollution. So when the time came to replace her old car, she reviewed her needs carefully before settling on a bi-fuel version of Ford’s Contour.

Dorcas knew that the optimal choice was no car at all, but for her driving was a necessity. She began to look at alternative vehicles and quickly ruled out the electric option.

“Most electricity is generated in coal- and oil-fired plants that themselves produce pollution,” she explains. “Besides, electric cars have to be recharged every 60 miles, and that takes time.”



Photo: Dory Johnson

Dorcas McDonald (with her dog Finnegan) at the wheel of her bi-fuel automobile. The natural gas intake is visible above the rear wheel.

Having determined that natural gas was available in her

area, she next turned to cars powered by natural gas only. “I knew a dedicated CNG vehicle would be cleaner,” she confesses, “but I just couldn’t do it. I had to be able to go beyond the 80-mile range of a tank of natural gas—and bi-fuel gives me that option.” Dedicated CNG vehicles also tend to be large cars, designed for livery fleets, and Dorcas wanted to replace her Mazda Protegé with another compact, fuel-efficient automobile.

The next possibility was converting a conventional car to run on both CNG and gasoline. Dorcas was given a quote for \$5000, but then learned that the bi-fuel Contour listed at about the same additional cost (after various rebates and other incentives, her out-of-pocket costs came to only about \$800 more than a conventional model). She chose the new car over conversion in order to send a message. “I wanted to use my power as a consumer to nudge a big manufacturer to make cleaner cars more available.”

The road to ownership began in October 1997, and it was not a smooth one. Dorcas called Ford and learned that only one dealer in Colorado carried the bi-fuel Contour (now, over a year later, at least six more dealers can at least provide prospective buyers with information). She got in touch, but no one at

Letter from the President

Good Intentions Meet the Road



At INFORM, we evaluate corporate and government environmental performance by what individual institutions do and by the results that their programs achieve.

Good intentions and policies are fine, but it is only real change and innovation that can move this country ahead on the path to sustainability.

In this issue of *INFORM Reports*, we turn the spotlight with special pride on one of our board members, Dr. Dorcas McDonald, who took to heart the ominous facts about vehicle emissions and the damage they cause—about the pollution that blankets our cities, threatens the health of our children, and increases the risk of global climate change, and about the technologies that can arrest these environmental problems. Determined to do her part for a healthy world, she endured almost a year of bureaucratic resistance and delay before finally gaining her prize—a brand-new natural gas-fueled automobile. Dorcas runs her Ford Contour mainly

on compressed natural gas, which when burned in the car's conventional engine dramatically reduces pollution—producing far less carbon monoxide and carbon dioxide than gasoline and far fewer hydrocarbons and nitrogen oxides. Should the fuel run low at a distance from a natural gas refueling station (of which there are over 30 throughout Colorado, where Dorcas lives), she just flicks a switch on the dashboard and a gasoline tank is there for backup. That means her driving range is not restricted. She keeps a map in her car of refueling locations (and plans to tape a sign in the back window saying “This vehicle burns cleaner natural gas. You can get one too!”).

Trying out new technologies, taking the time to choose products that are more environmentally sound, developing and supporting company programs that reduce waste at the source—such as using double-sided copiers, avoiding disposable items in the cafeteria, making maximum use of electronic communications—that is, *taking action*, is in the end the only way that our goal of living sustainably can be realized.

So if you're ever in Boulder, Colorado, give Dorcas a call—she may be willing to take you for a ride

in her bi-fuel car. In the meantime, look over the checklist we've prepared (see p. 5) on what to find out if you're thinking of buying a clean-fueled vehicle of your own.

On the Web...

In addition to our print publications, the following reports and information are now available exclusively on INFORM's web site. Just click on the title on our home page, <http://www.informinc.org>.

🔗 **“Getting an ‘A’ at Lunch: Smart Strategies to Reduce Waste in Campus Dining”** (1998) Simple steps to reduce food and food-related waste while also bringing down purchasing and operational costs.

🔗 **“Joining Forces: Case Studies in Business and Environmental Integration”** (1998) Describes the efforts of three leading manufacturers to simultaneously improve business and environmental performance through communication and coordination of activities and goals.

🔗 **Our latest research on extended producer responsibility (EPR), including:**

“What Are Rechargeable Batteries?” (1998) A fact sheet on their uses, environmental impacts, and disposal.

“EPR: What Does It Mean? Where Is It Headed?” (1998) An article by INFORM Fellow Bette Fishbein from *Pollution Prevention Review*.

Interview with Bette Fishbein from *Environmental Manager* (1998).

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a member of Earth Share

BP steps up

(continued from page 1)

groups,” Percy explained, “and it has listened to its customers, who want energy at a reasonable price, delivered in a way that is environmentally sound.” Most important, Percy pointed out that oil is by nature a long-term business—BP’s performance 20 years from now depends on investments in resources and production that it makes now—so “sustainability” is just as important as profits to the company’s bottom line. “This,” Percy said, “is what brought about BP’s willingness to acknowledge the possible fact of global warming.”

Still, BP’s own operations release far fewer greenhouse gases than the vehicles that burn the fuels it sells. With oil prices at their lowest level in 25 years, Percy acknowledged that energy suppliers have little incentive to look for alternatives. But he is adamant that transportation holds the key to their growth. Already the world’s largest producer of solar photovoltaics, BP is beginning to shift its product base toward renewable technologies and less carbon-intensive fuels—a trend that the merger with Amoco, North America’s largest producer of natural gas, is bound to advance.

“While BP believes that oil and gas will continue to play an important role,” Percy concluded, “we are also convinced that changes must come in the production and use of energy. And the earlier we start to think about change, the less traumatic change will be.” Wise words—and ones that explain, as INFORM President Joanna Underwood observes, how BP can “see a business opportunity in a challenging environmental problem, while setting an important example of corporate responsibility.” ♦

Snapshots from our reception

INFORM held its year-end gathering at the Racquet and Tennis Club on Park Avenue. Over 150 people mingled in the club’s oak-paneled library.



Above: Paul A. Brooke, INFORM Board of Directors, prepares to introduce a speaker.



Above: Steven W. Percy (center), Chairman and CEO, BP America Inc., with INFORM President Joanna Underwood and Stephen B. Land, Chair of INFORM’s Board of Directors.



Above: INFORM President Joanna Underwood poses with New York City Council Member Andrew Eristoff (far left) and Albert Butzel, partner, Berle, Butzel, Kass & Case.



Above: Janet Corcoran, Vice President, Financial Guaranty Insurance Co., makes a point to Dr. Robert Banks, INFORM Board of Directors.



Above: A friend of INFORM reviews our goals and achievements.



Right: Nicholas and Barbara Millhouse (center), sponsors, and INFORM member Cynthia Gibbons.

Natural Gas: a Pioneer's Tale

continued from page 1

the dealership knew its price or availability. She persisted, and finally, after repeated shipment delays, received her 1998 model Ford Contour the following August.

How does the car run? "Fine!" says Dorcas. "It's a little slower getting going, but once it's up to speed I find it's even spunkier on CNG than on gasoline." She does most of her driving on local roads, as well as some in the mountains, and once a week drives 20 miles to Denver. "One of Ford's concerns was high altitudes," she says, and the car does get sluggish at around 10,000 feet. But Dorcas points out that it wouldn't be much different on gasoline. "At those altitudes, any car is liable to slow down."

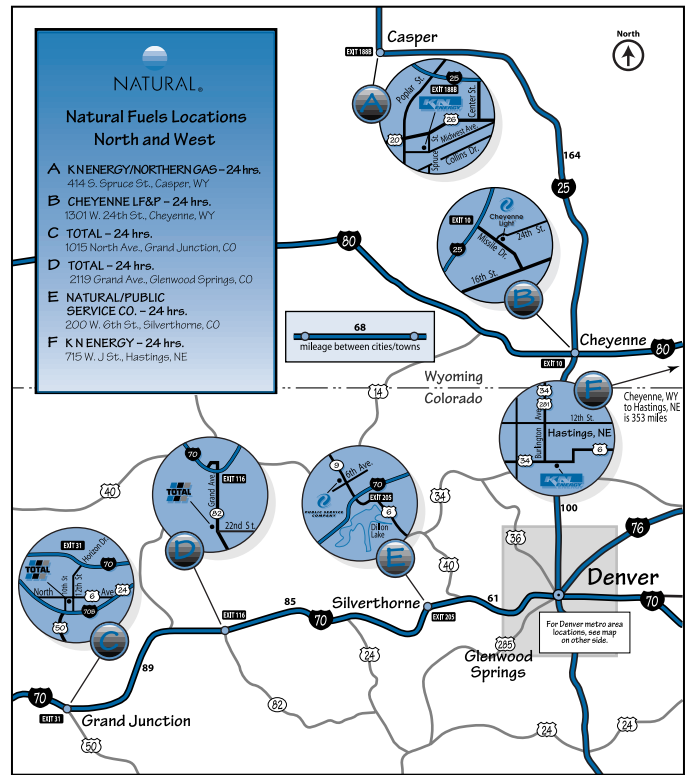
The Contour's CNG tank is located in the trunk and runs its entire width—about a foot and a half high and a foot deep. "It takes up about a third of the trunk space, but I still have enough room for luggage," Dorcas says. A switch on the dashboard allows her to change fuels, and there's a filling unit on each side of the car, one for CNG and one for unleaded gas. To keep the engine in working order, the car must be run on a full tank of gasoline every two months.

Boulder has one CNG fueling station and Denver has eight. The Boulder pump, located at a regular service station, is run by Natural Fuels Corp., a subdivision of Public Service Co. of Colorado that operates 34 CNG refueling stations throughout the state. The pump is self-serve and credit-card activated. Dorcas says that fueling with CNG is as easy and fast as with gasoline. A full tank costs \$3.00 and lasts between 70 and 80 miles. Her monthly CNG

bill is about \$16, compared to \$45 a month to run her former car on gasoline. Colorado owners of CNG vehicles benefit from a fuel tax exemption on natural gas, as well as other federal, state, and utility industry incentives.

When people inquire about her car, Dorcas notes that they often ask about its safety. She reassures them with the story of a fellow bi-fuel car owner who won't let her kids near a gasoline pump but lets them refuel with CNG. The pump is designed not to release gas until the fuel nozzle is hooked in place, and a rubber and metal sleeve fits over the connected fuel nozzle and intake. Besides, the overall safety record of CNG is superior to that of any other automotive fuel, including gasoline. Even in the event of a leak, natural gas simply dissipates; it catches fire only at relatively high concentrations of 5 to 15 percent.

What about accidentally using the wrong fueling unit? Dorcas says that the intakes for CNG and regular gasoline are so different that "you couldn't possibly have any trouble." Nor does she worry about getting stuck without fuel. "It's almost impossible, since I have two fuels. If one runs out, I just stop by the side



Natural Fuels Corp., a subdivision of Colorado's energy utility, provides consumers with detailed maps of natural gas fueling stations throughout the state.

of the road, flip the fuel switch, and I'm ready to go." Her Ford dealer is prepared to do regular checks on the CNG system as well any repairs she might need.

"Many people tell me they thought you had to have a different engine for natural gas," Dorcas says. "I tell them it's the same engine with both gasoline and CNG, and the car is really easy to run." A small sticker near the CNG intake unit indicates that the car runs on natural gas, but people don't seem to notice. "I'm going to make my own sign and hang it in the back window," Dorcas promises. "I want people to know this kind of car is out there!"

For more on natural gas and other alternative fuel vehicles, see "Gearing Up for Hydrogen" on INFORM's web site.

Alternative Fuel Vehicle Buyer's Guide

In the United States, about half of all air pollution regulated under federal law and 31 percent of the carbon dioxide emissions implicated in global warming come from the 195 million cars, buses, and trucks that ply our roads. If you want to reduce emissions from your car and may be interested in buying an alternative fuel vehicle:

1. Find out about the latest vehicles available.

The DOE's Alternative Fuels Data Center web site (www.afdc.doe.gov) provides comprehensive information on vehicle offerings and alternative fuels, as well as many links to related sites. You can also call the National Alternative Fuels Hotline at (800) 423-1363.

For prospective buyers interested in CNG vehicles in particular, the Natural Gas Vehicle Coalition's web site (www.ngvc.org) includes a 1998-99 Purchasing Guide that provides descriptions, by manufacturer, of light-, medium-, and heavy-duty dedicated CNG and bi-fuel vehicles, including specifications, availability, and cost. In the light-duty category:

- * Ford offers, in addition to the Contour, a dedicated CNG version of the full-size Crown Victoria, as well as bi-fuel and dedicated vans and wagons. A dedicated CNG pickup truck is available now, and a bi-fuel version will be on the market early this year.
- * The Cavalier from Chevrolet/GMC is another small bi-fuel passenger car. GMC also makes bi-fuel pickup trucks.
- * Chrysler manufactures dedicated CNG vans and wagons.
- * A dedicated CNG version of the Civic GX is available from Honda.

2. Locate dealers in your area that have alternative fuel vehicles for sale.

The AFV Fleet Buyer's Guide (also appropriate for individual buyers) on the DOE's Clean Cities web site (www.fleets.doe.gov) provides links to dealers by city/state, zip code, and area code/phone prefix. You can also call each manufacturer's alternative fuel number for information on local dealerships:

Ford: 800-ALT-FUEL	Honda: 888-CC-HONDA.
Chevrolet/GMC: 888-ALT-FUEL	Nissan: 800-222-5500
Chrysler: 800-999-3533	Toyota: 310-618-4484

3. Make sure the alternative fuel of interest is available in your area and that public fueling stations are conveniently located.

The Alternative Fuels Data Center web site contains a refueling station address locator that allows you to locate alternative fueling sites by fuel, city, and state and then obtain specific data, such as public accessibility and hours of operation, on individual stations.

4. Find out about federal, state, local, and private incentives available to purchasers of alternative fuel vehicles.

The federal government provides an income tax deduction of \$2000 to \$5000, depending on vehicle weight and type, for the purchase or conversion of qualified clean fuel vehicles. The AFV Fleet Buyer's Guide provides information on federal tax credits and deductions, federal alternative fuel vehicle incentive programs, and any state, local, or private incentives. (For example, New York State offers tax incentives for the purchase or conversion of an alternative fuel vehicle and Colorado offers a fuel tax exemption on natural gas and liquefied petroleum gas.) The Buyer's Guide provides a contact name and phone number for each incentive for followup and details.

5. Figure out the costs and benefits.

Once you've obtained the information above, assess the feasibility of investing in an alternative fuel vehicle by answering these basic questions:

- * Are your driving needs compatible with the driving range and the recharging/refueling demands of an electric vehicle or a dedicated CNG vehicle?
- * Are your driving needs compatible with the driving range of a CNG vehicle supplemented by gasoline (i.e., a bi-fuel vehicle)?
- * How much will tax credits, rebates, and any other available financial incentives offset the additional cost of buying or converting to an alternative fuel vehicle?
- * If tax exemptions on alternative fuels are available in your state, how will they affect the cost of fuel?

Working for Safer Communities

Tracking Toxics

Asthma. Cancer. Neurological disorders. These are some of the fears and suspicions harbored by workers at industrial plants and by residents of surrounding communities. Sometimes their concerns are warranted and sometimes they are not. But there's no need to remain in the dark.

A year and a half ago, INFORM published *Tracking Toxic Chemicals*, which examined the value of information

reported by manufacturers in New Jersey on hazardous chemicals used in their facilities. This "materials accounting data," which identifies the quantities of specific substances entering, consumed in, and leaving plants, provides the basis of the information needed to thoroughly track toxic chemicals and identify ways to avoid harmful exposures. Given ready

access to this and other community right-to-know information, environmental, community, and public interest groups can assess the performance of local facilities and promote constructive change.

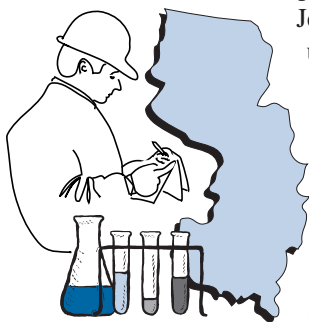
Senior Research Associate Mark Dorfman, co-author of the report, is spreading the word on chemical use data in New Jersey and beyond. "Citizens have a right to know about the chemicals flowing through their community so they can make informed decisions about the course of local development," he explained at a forum on environmental concerns in Newark's largely Puerto Rican North Ward. Community and environmental leaders were eager to learn how they could promote industry's stewardship of hazardous chemicals by raising such questions with local companies as "Why is this substance being shipped out in products when the data suggest it was meant to be used up in the factory?" Dorfman also met with representatives of the Oil, Chemical, and Atomic Workers Union, who subsequently requested analyses of a number of chemicals used at a Morton International chemical facility in Paterson, New Jersey.

New Jersey is one of only two states (the other is Massachusetts) that require industrial facilities to collect

and report on chemical use. At a meeting in Chicago on efforts to reduce persistent, bioaccumulative toxic substances in the Great Lakes Basin, Dorfman suggested that better progress might be made if a similar requirement applied to that region's manufacturers. "Businesses can share in the benefits," he added, "by using the data to identify opportunities for preventing waste and to measure their own performance over a given period."

To make materials accounting data more accessible to residents of New Jersey and elsewhere, INFORM is in the process of putting this information on the Web in such a way that it can be mapped alongside demographic, land use, and other community data.

For more information, see *Tracking Toxic Chemicals: The Value of Materials Accounting Data*, by Mark Dorfman and Marion Wise (1998).



Working for Waste-free Products

Acting Locally on Product Waste

Ever since 1991, when Germany passed its Packaging Ordinance and became the first country to make producers responsible for the end of life of certain products, the waste management approach known as extended producer responsibility (EPR) has swept Europe and Asia. In shifting the costs of collection and recycling from government to private industry, this simple yet elegant policy has proven to be a driving force behind the design of less wasteful products.

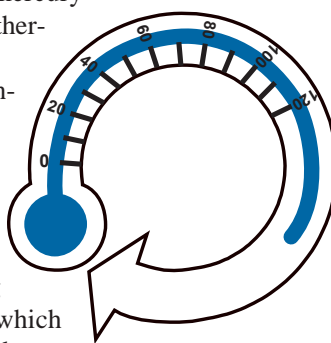
In the United States, EPR at the federal level has not made much headway. However, a number of state and municipal governments, including Minnesota, Maine, and New York, are beginning to consider aspects of the overseas model. Draft legislation in Minnesota, on which INFORM Senior Fellow Bette Fishbein provided comments, aims to reduce the need for disposal by making manufacturers responsible for the end of life of certain products. The policy's intent is to encourage less wasteful designs, as well as reduce the waste management burden on municipalities, but it does not dictate the means businesses would use to meet the state's reduction and recycling goals.

Minnesota is no stranger to EPR, having passed legislation that led to the battery industry's national collection and recycling program for nickel-cadmium (Ni-Cd) batteries

(see "Industry Program to Collect and Recycle Ni-Cd Batteries" on INFORM's web site). At a number of US companies, such voluntary product "take-back" programs have successfully produced changes in product design:

- Xerox is profitably recovering the residual value of office equipment taken back from customers through extensive redesign of its products.
- DuPont and other companies have set up take-back programs for carpeting and are working toward the labeling of component materials to facilitate recycling.

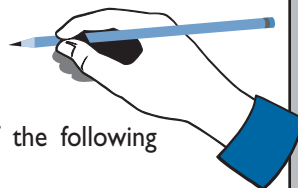
Fishbein also contributed to a report submitted to the Maine legislature, which is considering a take-back program for mercury-containing products such as fluorescent lamps, thermometers, and thermostats. Mercury is a heavy metal that builds up in the environment, threatening wildlife and human health, and levels in Maine are among the worst in the country. In addition to take-back, the report addresses strategies such as disposal fees, which would give manufacturers an incentive to reduce the mercury content of their products, and labeling (already required in Minnesota and Vermont), which would allow consumers to seek alternative products.



In New York City, where the Fresh Kills landfill will close at the end of 2001, the need for disposal alternatives is especially pressing. At an EPA roundtable on packaging waste, Fishbein discussed the municipal role in promoting less wasteful designs, suggesting that cities exert their purchasing power by introducing joint packaging guidelines. These would give manufacturers an incentive to decrease the materials used in packaging and eliminate pigments and adhesives incompatible with recycling.

For more on this subject, see the EPR gateway on the home page of INFORM's web site.

Our Wish List



INFORM's staff would welcome donations of the following items:

- | | |
|----------------------------------|----------------------------|
| Computer speakers for PCs | Sony digital camera |
| New computers | New printer |
| General office supplies | |

Prospective donors are encouraged to contact Sam Arnoff, director of finance and administration, at (212) 361-2400 or by e-mail at arnoff@informinc.org.

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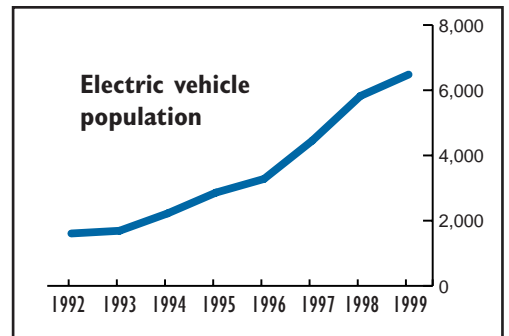
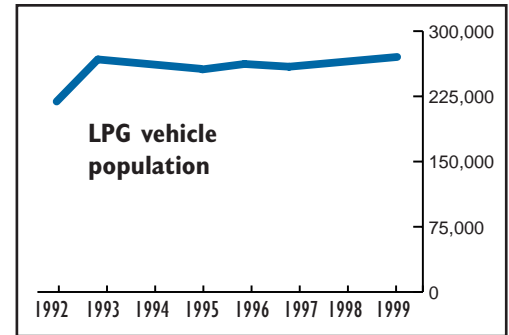
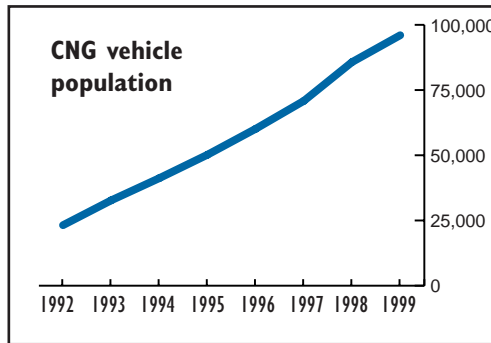
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INFORMaTion: Toward the Post-Petroleum Age

The fastest-growing alternative transportation fuel in the United States is compressed natural gas (CNG). Compared to a growth rate of less than 1 percent per year for gasoline- and diesel-powered vehicles, the population of CNG vehicles has increased by almost 23 percent annually throughout the 1990s. Meanwhile, the growth rate of vehicles powered by liquefied petroleum gas (LPG), currently the most widely used alternative fuel, has remained stagnant. Electric vehicle use is increasing nearly as quickly as CNG, although the population of these vehicles is much smaller.



Despite this growth, the total US alternative vehicle population of about 400,000 is minuscule compared to the 158 million gasoline-powered and 37 million diesel-powered vehicles that continue to travel our nation's roads.

Source: US Department of Energy, Energy Information Administration. Figures for 1999 are projections.

INFORM reports

Strategies for a better environment

Winter 1999, Vol. 19, No. 1

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