



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549-0402

*DC*



05002727

January 24, 2005

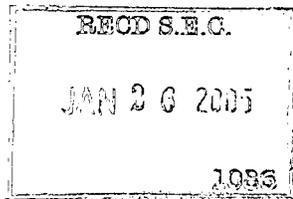
Tina S. Van Dam  
Corporate Secretary  
The Dow Chemical Company  
2030 Dow Center  
Midland, MI 48674

Re: The Dow Chemical Company

Act: 1934  
Section: \_\_\_\_\_  
Rule: 14A-8  
Public  
Availability: 1/24/2005

Dear Ms. Van Dam:

This is in regard to your letter dated January 21, 2005 concerning the shareholder proposal submitted by the General Board of Pension and Health Benefits of the United Methodist Church and the Board of Pensions of the Evangelical Lutheran Church in America for inclusion in Dow Chemical's proxy materials for its upcoming annual meeting of security holders. Your letter indicates that the proponents have withdrawn the proposal, and that Dow Chemical therefore withdraws its January 4, 2005 request for a no-action letter from the Division. Because the matter is now moot, we will have no further comment.



Sincerely,

*Heather L. Maples*

Heather L. Maples  
Special Counsel

cc: Vidette Bullock Mixon  
Director, Corporate Relations  
General Board of Pension and Health Benefits  
of the United Methodist Church  
1201 Davis Street  
Evanston, IL 60201

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FEB 07 2005  
THOMSON  
FINANCIAL

# GIBSON, DUNN & CRUTCHER LLP

LAWYERS

A REGISTERED LIMITED LIABILITY PARTNERSHIP  
INCLUDING PROFESSIONAL CORPORATIONS

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(202) 955-8500

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rmueller@gibsondunn.com

January 4, 2005

Direct Dial  
(202) 955-8671

Fax No.  
(202) 530-9569

Client No.  
22013-00029

**VIA HAND DELIVERY**

Office of the Chief Counsel  
Division of Corporation Finance  
Securities and Exchange Commission  
450 Fifth Street, N.W.  
Washington, D.C. 20549

Re: *The Dow Chemical Company; Stockholder Proposal of the General Board of Pension and Health Benefits of the United Methodist Church et al.; Securities Exchange Act of 1934 – Section 14(a), Rule 14a-8*

Dear Ladies and Gentlemen:

This letter is to inform you that it is the intention of our client, The Dow Chemical Company (the “Company”), to omit from its proxy statement and form of proxy for the Company’s 2005 Annual Meeting of Stockholders (collectively, the “2005 Proxy Materials”) a stockholder proposal (the “Proposal”) received from the General Board of Pension and Health Benefits of the United Methodist Church and co-filed by the Board of Pensions of the Evangelical Lutheran Church in America (the “Proponents”). The Proposal addresses the Company’s response to pressure to significantly reduce carbon dioxide and other greenhouse gas emissions and to issue a report to stockholders. The Proposal and related correspondence are attached hereto as Exhibit A.

On behalf of our client, we hereby notify the Division of Corporation Finance of the Company’s intention to exclude the Proposal from its 2005 Proxy Materials on the bases set forth below, and we respectfully request that the staff of the Division (the “Staff”) concur in our view that the Proposal is excludable pursuant to Rule 14a-8(i)(10) because the Company has already substantially implemented it.

Pursuant to Rule 14a-8(j), enclosed herewith are six copies of this letter and its attachments. Also in accordance with Rule 14a-8(j), a copy of this letter and its attachment is

Office of the Chief Counsel  
Division of Corporation Finance  
January 4, 2005  
Page 2

being mailed on this date to the Proponents, informing them of the Company's intention to omit the Proposal from its 2005 Proxy Materials. Pursuant to Rule 14a-8(j), this letter is being submitted to the Securities and Exchange Commission (the "Commission") no later than 80 calendar days before the Company files its definitive 2005 Proxy Materials with the Commission. On behalf of the Company, we hereby agree to promptly forward to the Proponents any Staff response to this no-action request that the Staff transmits by facsimile to us only.

### THE PROPOSAL

The Proposal requests "that a committee of independent directors of the Board assess how the company is responding to rising regulatory, competitive and public pressure to significantly reduce carbon dioxide and other greenhouse gas emissions and report to shareholders, at reasonable cost and omitting proprietary information, by September 1, 2005."

### ANALYSIS

Rule 14a-8(i)(10) permits exclusion of a stockholder proposal "if the company has already substantially implemented the proposal." According to the Commission, the exclusion provided in Rule 14a-8(i)(10) "is designed to avoid the possibility of shareholders having to consider matters which have already been favorably acted upon by the management." See Exchange Act Release No. 12598 (July 7, 1976). When a company can demonstrate that it already has taken actions to address each element of a stockholder proposal, the Staff has concurred that the proposal has been "substantially implemented" and may be excluded as moot. Based upon the publication of reports substantially similar to the Company's disclosures described below, the Staff has concurred that both Exxon Mobil Corporation and Xcel Energy Inc. substantially implemented a proposal that was virtually identical to the Proposal. *Exxon Mobil Corporation* (avail. Mar. 18, 2004) and *Xcel Energy Inc.* (avail. Feb. 17, 2004). See also, *Exxon Mobil Corporation* (avail. Jan. 21, 2001) (proposal that board conduct a review of a project and report on its results substantially implemented by prior corporate disclosures); *Nordstrom, Inc.* (avail. Feb. 8, 1995) (proposal that the company commit to a code of conduct for its overseas suppliers that was substantially covered by existing company guidelines was excludable as moot). As detailed below, the Company already has instituted on-going emission improvements and provides extensive disclosure on the topic addressed in the Proposal, and thus has substantially implemented the Proposal.

Uniquely, the Company has two committees of its Board that oversee the Company's response and initiatives in this area. The Environment, Health and Safety Committee of the Board of Directors (the "EH&S Committee") assists the Board of Directors in fulfilling its oversight responsibilities by assessing the effectiveness of environment, health and safety programs and initiatives that support the Environment, Health and Safety policy of the Company.

Office of the Chief Counsel  
Division of Corporation Finance  
January 4, 2005  
Page 3

The Public Interest Committee of the Board has responsibility for advising the Board on matters impacting corporate social responsibility and the Company's public reputation, including overseeing the Company's progress on sustainable development. Under the oversight of these standing Board committees, each of which consists of a majority of independent directors and each of which is chaired by an independent director,<sup>1</sup> the Company has undertaken a number of key initiatives that respond to regulatory, competitive and public pressure to significantly reduce carbon dioxide and other greenhouse gas emissions. These include:

- The Company has realized a 20% improvement (reduction) in energy intensity from 1990-1994 and an additional 22% improvement from 1994 to mid-year 2004.
- Since 1994, the Company has reduced its greenhouse gas emission intensity – measured as CO<sub>2</sub> equivalents per pound of production – by 45%.
- The Company has developed and markets products that enable lighter vehicles, improved insulation for buildings, more efficient wind power turbines and many other solutions critical to efforts to minimize greenhouse gas emissions.
- The Company has established a Climate Change and Energy Policy Strategy Board. The role of this board is to integrate climate change and energy efforts among the Company's various businesses, teams and functions and to have a fully comprehensive energy business strategy that meets societal and stakeholder expectations.
- The Company and General Motors Corporation have inaugurated the world's largest fuel cell project to-date for power generation. The project is based at the Company's site in Freeport, Texas. Hydrogen fuel cells offer a cleaner, more efficient option for power generation than coal, natural gas, or other fossil fuels, reducing both greenhouse gas emissions and air pollution.

The EH&S Committee of the Board receives periodic reports to allow it to assess the Company's response to "regulatory, competitive and public pressure to significantly reduce

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<sup>1</sup> A majority of the members of each of these Board committees is independent, including the chair of each of the committees. Moreover, because of the importance of these two committees, every Company director serves on one or the other of the two committees. Although the Proposal requests that the assessment of and report on the Company's response to pressure to reduce greenhouse gas emissions be conducted under the oversight of a committee of independent directors, it does not direct that the Board committee consist solely of independent directors. Moreover, we believe that the focus of the proposal is on Board involvement in the assessment and reporting of the Company's actions, and for the reasons addressed in this letter we believe that the Company's actions have substantially implemented the essential element of the Proposal.

Office of the Chief Counsel  
Division of Corporation Finance  
January 4, 2005  
Page 4

carbon dioxide and other greenhouse gas emissions.” In addition, the Company has issued annually in each of the past several years a Global Public Report that includes a report on the Company’s on-going initiatives to reduce carbon dioxide and other greenhouse gas emissions. A copy of the most recent Global Public Report, which was published in 2004 and reports on 2003 results, is attached hereto as Exhibit B, and a copy of relevant pages from the 2002 Global Public Report is attached hereto as Exhibit C. The 2003 Global Public Report reports on the Company’s various initiatives to address carbon dioxide and greenhouse gas emissions and other aspects of its initiatives to address global climate change in the section entitled “Environmental Stewardship,” which begins at page 24. At page 45, the 2003 Global Public Report shows detail of the Company’s reduction in absolute greenhouse gas emissions and reductions in greenhouse gas intensity for each year since 1995. In addition, the Company’s position on addressing greenhouse gas emissions is set forth on the Environmental, Health and Safety section of the Company’s website, at <http://www.dow.com/commitments/debates/climate/index.htm>. A copy of these pages is attached hereto as Exhibit D. This information is all available to the public and to Company stockholders through the Company’s website.

Given the already existing transparency around the Company’s actions to address climate change and greenhouse gas reductions and the Company’s commitment expressed in these reports to continue to provide information on the Company’s response to these issues, the Company believes the desired results called for in the resolution have already been achieved. The Proposal, if implemented, would not improve the value of public information above that already supplied and would not be beneficial to our stockholders.

### CONCLUSION

Based upon the foregoing analysis, we respectfully request that the Staff concur that it will take no action if the Company excludes the Proposal from its 2005 Proxy Materials. We would be happy to provide you with any additional information and answer any questions that you may have regarding this subject. Please do not hesitate to call me at (202) 955-8671, or the Company’s Corporate Secretary, Tina S. Van Dam, at (989) 636-2663, if we can be of any further assistance in this matter.

Sincerely,



Ronald O. Mueller

Attachment

GIBSON, DUNN & CRUTCHER LLP

Office of the Chief Counsel  
Division of Corporation Finance  
January 4, 2005  
Page 5

cc: Tina S. Van Dam, Corporate Secretary, The Dow Chemical Company  
Vidette Bullock Mixon, General Board of Pension and Health Benefits of the United  
Methodist Church  
Heather Williamson, Board of Pensions of the Evangelical Lutheran Church in America

70305551\_3.DOC

**EXHIBIT A**

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### Dow Resolution

**RESOLVED:** The shareholders request that a committee of independent directors of the Board assess how the company is responding to rising regulatory, competitive and public pressure to significantly reduce carbon dioxide and other greenhouse gas emissions and report to shareholders, at reasonable cost and emitting proprietary information, by September 1, 2005.

#### SUPPORTING STATEMENT:

We believe management has a fiduciary duty to assess and disclose to shareholders all pertinent information about its response to climate change. It is our opinion that early action to reduce emissions and prepare for standards could provide competitive advantages, while inaction and opposition to emissions control efforts could expose companies to regulatory, litigation, and reputation risk.

Global warming is one of the most important issues facing industry today. According to the Conference Board: "The significance of global warming for different businesses and sectors will vary, but given the increasing costs of, and uncertainties surrounding, the reliability of traditional energy sources; and growing pressures for higher standards of citizenship and contributions to global sustainability, businesses that ignore the debate over climate change do so at their peril." (<http://www.conference-board.org/edecutive> action 107)

Concern regarding the severe impact of increased warming is prompting governments, investors and consumers to act. The Russian government recently approved the Kyoto Protocol, which will soon make this mechanism for controlling greenhouse gas emissions binding international law in the countries that have ratified it.

The Carbon Disclosure Project reported in May 2004 that:

- The mainstream investing community has woken up to the financial implications of climate change;
- The social and economic costs have begun to emerge and companies are expected to feel increased pressure and
- Legislation designed to put a price on carbon has increased.  
<http://www.cdproject.net/report.asp>

The European Union (EU) has adopted an Emissions Trading Scheme (ETS) that, as of January 2005, imposes carbon emissions caps on five sectors in the 28 participating countries. It is anticipated that ETS will be expanded to the chemical sector in 2008. U.S. owned manufacturing facilities in the 28 participating countries will have to operate within their emissions allowances or pay for emissions offsets, Environmental Finance, May 2003, at 19.



Mellon Trust

October 29, 2004

Videtta Bullock Mixon  
General Board of Pension and Health Benefits  
Of the United Methodist Church  
1201 Davis Street  
Evanston, IL 60201

Dear Ms. Bullock Mixon:

This letter is in response to a request for confirmation that the General Board of Pension and Health Benefits of the United Methodist Church has owned shares of Dow Chemical Company stock for at least one year since September 30, 2003 and such investment had a market value of at least \$2,000.00.

The security is currently held by Mellon Trust, Master Custodian, for the General Board of Pension and Health Benefits of the United Methodist Church in our nominee name at Depository Trust Company.

Please contact me directly at 412-234-5197 with any questions.

Sincerely,

Steven A. Cuning  
Service Delivery Officer  
Mellon Trust

GENERAL BOARD OF PENSION  
AND HEALTH BENEFITS OF  
THE UNITED METHODIST CHURCH

November 22, 2004



Ms. Tina Van Dam  
Corporate Secretary  
Dow Company  
2030 Dow Center  
Midland, MI 48674

1201 Duoin Street  
Evanston, Illinois 60201-4110  
1.800.651.2201

**RE: Shareholder Proposal**

Dear Ms. Van Dam:

I am writing on behalf of the General Board of Pension and Health Benefits of the United Methodist Church. We are beneficial owners of 361,369 shares of Dow common stock and the primary filer of the enclosed shareholder proposal submitted for consideration and action at the 2005 Annual Meeting. The proposal requests Dow to have a committee of independent directors assess and report the specific actions taken by the company to reduce carbon dioxide and other greenhouse emissions. Please include our proposal in the 2005 proxy statement in accordance with Regulation 14a12 of the Securities and Exchange (SEC) Guidelines.

In accordance with SEC Regulation 14a8, the General Board has continuously held Dow shares totaling at least \$2,000 in market value for at least one year prior to the date of this filing. Proof of that ownership is enclosed, and it is our intent to maintain ownership of Dow stock through the date of the 2005 Annual Meeting.

According to the Code of Conduct posted at your website, Dow is committed to preventing adverse environmental impacts, to reducing wastes and emissions, and to reporting company progress. However, in light of rising regulatory, competitive and public pressure to preserve the environment, we believe that greater disclosure is warranted.

While there are other co-filers supporting this proposal, I am the primary contact. Therefore, if you have questions or concerns specific to either the General Board or this shareholder proposal, please contact me by email at [videttebullock\\_mixon@gbophb.org](mailto:videttebullock_mixon@gbophb.org) or by phone at 847-866-5293.

Thank you for your time and attention. I look forward to working with you and/or members of your team regarding this issue.

Sincerely,

*Vidette Bullock Mixon*  
Vidette Bullock Mixon, Director  
Corporate Relations

Enclosures



GENERAL BOARD OF PENSION  
AND HEALTH BENEFITS OF  
THE UNITED METHODIST CHURCH

**FAX**

To: Ms. Tina Van Dam  
Dow Company  
989-635-1792  
989-638-1740 fax

RECEIVED

NOV 22 2004

T.S. Van Dam

From: Barbara Fears  
847-866-4699  
847-866-4611  
barbara\_fears@gbophb.org

Date: November 22, 2004

Re: Shareholder Proposal

1201 Davis Street  
Evanston, Illinois 60201-4118  
847.869.4550

Pages: 4 including cover

Ms. Van Dam:

Attached is a letter declaring our intent to file a shareholder proposal, a copy of the proposal, verification of stock ownership. Hardcopies of the same are being sent via FedEx and should arrive by Wednesday 11/24/04.

If you have questions or comments, please feel free to contact me at the number indicated above.

Thank you for your time.

Barbara

**DISCLAIMER:**

This message is for the use of the intended recipient only. It may be privileged, confidential, or otherwise protected from disclosure. If you are not the intended recipient, please immediately delete all copies of this message and its attachments and notify the sender of its inadvertent transmission. Thank you.



Rachel N Miller  
Sr Administrative Specialist  
Office of the Corporate Secretary  
The Dow Chemical Company

2030 Dow Center (210H)  
Midland, MI 48674-0001

(989) 636-6753 - Phone  
(989) 638-1740 - Fax  
[rachel.miller@dow.com](mailto:rachel.miller@dow.com) - Email

**Date** : *November 23, 2004*

**To** : *Ron Mueller, Gibson, Dunn & Crutcher LLP  
(202) 530-9569*

**From** : *Rachel Miller on behalf of Tina Van Dam*

**Subject** : *Shareholder Proposal*

**Total Pages** : *5 (including cover page)*

**Notes** :

*The information contained in this facsimile message may be confidential information and is intended only for the use of the individual or entity named above. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please immediately notify us by telephone and return the original message to us at the above address via the United States Postal Service. Thank you.*

## Dow Resolution

**RESOLVED:** The shareholders request that a committee of independent directors of the Board assess how the company is responding to rising regulatory, competitive, and public pressure to significantly reduce carbon dioxide and other greenhouse gas emissions and report to shareholders, at reasonable cost and omitting proprietary information, by September 1, 2005.

### SUPPORTING STATEMENT:

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Global warming is one of the most important issues facing industry today. According to the Conference Board: "The significance of global warming for different businesses and sectors will vary, but given the increasing costs of, and uncertainties surrounding, the reliability of traditional energy sources; and growing pressures for higher standards of citizenship and contributions to global sustainability, businesses that ignore the debate over climate change do so at their peril." (<http://www.conference-board.org/edecutive> action 107)

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- Legislation designed to put a price on carbon has increased.  
<http://www.cdproject.net/report.asp>;
- 

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Mellon Global Securities Services

November 23, 2004

Ms. Tina Van Dam  
Corporate Secretary  
Dow Company  
2030 Dow Center  
Midland, MI 48674

RECEIVED  
NOV 24 2004  
T.S. Van Dam

Dear Ms. Van Dam:

This letter is to confirm that Mellon Trust, custodian for the Board of Pensions of the Evangelical Lutheran Church in America (ELCA), has held 11,978 shares of Dow Company shares for over one year.

As of this date, the ELCA - Board of Pensions intends to hold its shares of Dow Company common stock through the date of your next annual meeting.

If you have any questions, please call me at (617) 382-6624.

Sincerely,

A handwritten signature in cursive script that reads "Kelli Dever".

Kelli Dever  
Vice President  
Client Services

CC: Pat Zerega  
ELCA SW PA Synod  
9625 Perry Highway  
Pittsburgh, PA 15237-5590

Heather Williamson  
ELCA - Board of Pensions  
800 Marquette Ave., Suite 1050  
Minneapolis, MN 55402-2892

**EXHIBIT B**



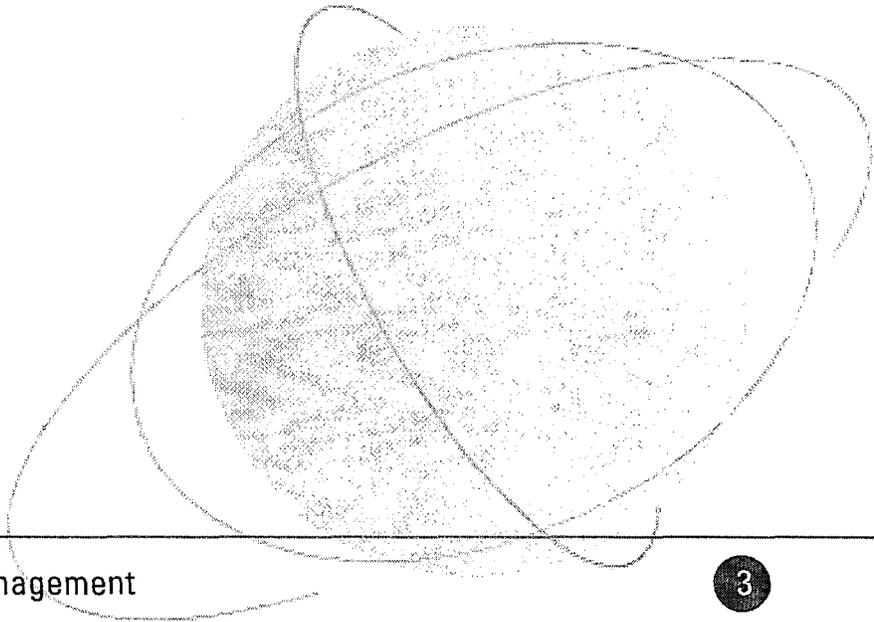
The Dow Global Public Report 2003



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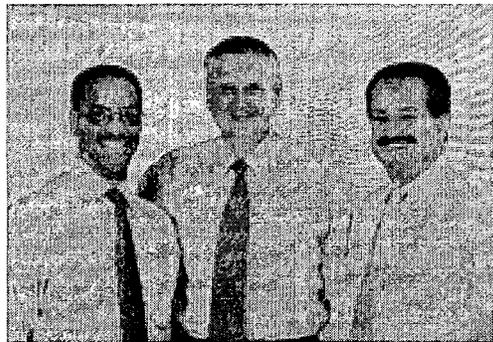
# Sustainability

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# Letter from Dow Management



From left to right—Lawrence J. Washington, William S. Stavropoulos, and Andrew N. Liveris

## **2003 Demonstrates the Strength of Dow's Commitment to the Triple Bottom Line of Sustainability**

*2003 was a year of substantial progress for Dow. In the face of very difficult conditions, including an unprecedented \$2.7 billion increase in feedstock and energy costs, industry overcapacity, and a fragile economy, we increased earnings, improved cash flow, and reduced net debt. Just as important, we continued our focus on the other areas of Sustainable Development, delivering all-time best performance records in environment, health, and safety.*

*Early in 2003, we pledged that the entire Dow organization would focus on improving both our financial and safety results, regardless of how difficult industry conditions might be.*

*Dow people answered the call. 2003 earnings were \$1.87 per share, including a tax benefit of \$0.49 per share, compared with a loss of \$0.37 per share in 2002, which included a net charge of \$0.71 per share for restructuring and other items. Excluding all of the special items, earnings increased from \$0.34 per share in 2002 to \$1.38 per share in 2003.*

*We also made substantial progress toward improving our cash flow. In 2002, free cash flow (cash from operations minus capital expenditures and dividends paid to stockholders) was a negative \$732 million. In 2003, it was a positive \$1.45 billion, a turnaround of \$2.2 billion—well beyond our turnaround target of \$1 billion. We also improved our financial ratios, including a reduction in our net debt to total capital ratio from 56 percent to 50 percent.*

*Meanwhile, Dow's stock rose 40 percent during the year. As measured by total shareholder return, Dow has outperformed the Standard & Poors (S&P) 500 and the S&P Chemicals Index both in 2003 and over the past five years.*

### **Governance**

*The Company continues its focus on sound corporate governance.*

*In 2003, the Board of Directors elected its first Presiding Director, Harold T. Shapiro, instituted and disclosed new Corporate Governance Guidelines, and launched a corporate governance web site with a link to contact the Directors by email. Committee charters were adopted for each standing Board Committee and are posted on the governance web site. At the 2004 Annual Meeting, stockholders will be asked to approve a return to annual election of all Directors to allow for greater accountability. The Board has also adopted an updated Code of Business Conduct to reinforce the importance of ethical business practices worldwide.*

*In November, as part of its succession planning responsibilities, the Board named Andrew N. Liveris as President and Chief Operating Officer. Andrew, an Australian with a 27-year Dow career, brings a wealth of experience to his new role, including many years working in Dow's Asian operations and as head of Performance Chemicals. He is leading our effort to further improve the Company's productivity and to accelerate implementation of the Company's strategy. We have also now formed the Office of the Chief Executive, a group of senior managers that oversees the Company's strategic priorities.*

*Two new Directors were added in 2003: Jeff M. Fetting, President and Chief Executive Officer of Whirlpool Corporation, and Keith R. McKennon, retired Chairman and Chief Executive Officer of PacifiCorp and former Dow Director. They bring valuable experience and insight to our Board.*

### **Environment, Health, and Safety**

*Of all our accomplishments, our environmental, health, and safety results were probably what gave Dow people the most satisfaction. These represent our concern for one another and for the communities where we work and live.*

*We improved our injury and illness rate by 19 percent in 2003, and there were no injuries at all in more than 70 percent of our plants. Overall, we have reduced our injury and illness rate by 77 percent from 1994 when we set our ambitious 2005 Environmental, Health, and Safety Goals. We also posted a 23 percent yearly reduction in leaks, breaks, and spills; a 63 percent improvement from 1994.*

*Our recognition of the strong interrelationship between economic prosperity, environmental stewardship, and corporate social responsibility, and our ongoing commitment to improving our performance in all three areas have enabled us to proactively strengthen our Company instead of operating in a weak or reactive mode.*

### **Energy Management**

*One example of Dow leadership was in the area of energy use. The chemical industry has been hit hard by increases in energy costs and, in some cases, by shortfalls in the supply of oil and gas. Take away the huge impact of energy costs on Dow in 2002 and 2003, and our financial results would have been much better.*

*In the long run, we need to take a more strategic look at energy use and exert greater control over our energy supply. In 2003, we took initial steps to do just that. We announced our collaboration with General Motors Corporation in the world's largest application to date of hydrogen fuel cells in a new power generation project in Freeport, Texas. It is the first time a carmaker has used its fuel cell technology to provide electricity and heat for buildings and manufacturing inside a chemical plant. Dow will ultimately use about 400 GM fuel cells to generate 35 megawatts of electricity. This represents two percent of the total electricity used by Dow in Freeport and is roughly the equivalent power used by 25,000 average homes for a year. This is a big step for evaluating fuel cell technology and a significant step on the road to the hydrogen economy.*

*Dow sees fuel cells as one potential solution to the environmental challenges associated with being an energy-intensive company. Through our commitment to the principles of Sustainable Development, Dow continues to explore and invest in alternative energy solutions.*

### **Other Examples**

*While energy use is one area where our Company is benefiting from the sustainability mindset we have embraced, we would like to draw your attention to some of our other innovative solutions to global sustainability issues, such as:*

- *Dow's innovative and life-saving pharmaceutical products for cancer, allergy treatment, glaucoma, kidney failure, and heart disease are only a few drugs the Company currently manufactures.*
- *Dow's ion exchange resins, used to purify water around the world for drinking water, power plants, wastewater treatment, and to manufacture pharmaceuticals.*

- A new soybean-based technology is meeting market demands for a sustainable resource for the production of high-performance carpet backings. BIOBALANCE polymers replace a portion of the system required to make polyurethane carpet backings.
- In 1986, Dow introduced the Waste Reduction Always Pays (WRAP) Award program. Since the inception of WRAP, Dow has recognized 395 projects and presented their sponsors with "WRAP Awards." Globally, the projects have accounted for the reduction of 230,000 tons of waste, 13 million tons of wastewater, and eight trillion BTU's of energy. The estimated value of all of these projects is about \$1 billion.

You'll find many other examples in this 2003 Public Report.

### **Debates and Dilemmas**

Despite making what we believe is good progress on the multiple dimensions of Sustainable Development, we still have a number of challenges and dilemmas—almost all of which are issues from our past. We cover those that are of most interest to the widest set of stakeholders in this report. We also realize that our position on a few of these issues is in conflict with some stakeholders—we continue to look for ways to resolve these issues.

### **Next Generation Goal Setting Process—Stakeholder Engagement**

As we approach the end of our 10-year commitment to Environmental, Health, and Safety Goals, we have initiated a process to develop a second set of progressive, long-term, stretch goals using the Triple Bottom Line framework. We started this process in 2003, with a significant amount of both internal and external stakeholder dialogues focused on an understanding of what are the critical expectations of our Company—and we will continue this process in 2004.

### **Global Reporting Initiative**

Globalization and increased access to information via the Internet have helped expand the scope and direction of these reports. The Global Reporting Initiative (GRI) is a multi-stakeholder process and independent institution. Its mission is to develop and disseminate globally applicable Sustainability Reporting Guidelines. Dow is supportive of the mission of the GRI, and for the 2003 report, we have included a downloadable GRI report addressing specific elements of the GRI Guidelines. This report has been prepared in accordance with the 2002 GRI Guidelines. It represents a balanced and reasonable presentation of our organization's economic, environmental, and social performance—yet we still consider it a "work in progress."

The progress reflected in this Report provides a clear indication of the importance we continue to place on the Triple Bottom Line. Sustainable Development—and our integrated efforts to improve our economic, environmental, and social performance—is making Dow a stronger company as well as a better neighbor. Now more than ever, we consider Sustainable Development a business priority in the 21st century.



**William S. Stavropoulos**  
Chairman and  
Chief Executive Officer



**Andrew N. Liveris**  
President and  
Chief Operating Officer



**Lawrence J. Washington**  
Corporate Vice President,  
Environment, Health, and Safety,  
Human Resources, and Public Affairs

February 11, 2004

# Dow's Commitment to the Triple Bottom Line

## The Convergence of Mission and Sustainability

Dow's Mission is to "constantly improve what is essential to human progress by mastering science and technology." It's an ambitious promise, one that is boldly expressed under our corporate theme line as "Living. Improved daily."—a clear declaration of both our past achievements and our aspirations for the future.

However, it is sometimes difficult to see how a chemical company contributes to the quality of life around the world. Our products are not generally used by consumers, although they are great enablers for our customers and their customers as well. The Top Industries for Dow Products table shows where our products end up in everyday life. We participate in many markets that are critical to long-term sustainability.

Further detail on some of these applications is provided below:

- STYROFOAM brand insulation is producing more energy efficient homes around the world. In North America alone, over two million homes are insulated with STYROFOAM insulation, resulting in \$200 million per year in energy savings and a significant reduction in fossil fuel consumption and carbon dioxide emissions.

- Dow's innovative and life-saving pharmaceutical products for cancer, allergy treatment, glaucoma, kidney failure, and heart disease are only a few drugs the Company manufactures.
- Dow AgroSciences provides farmers globally with crop protection products. New innovations using biotechnology are reducing environmental risks associated with crop protection products and improving the agricultural industry's ability to feed the world.
- Dow's ion exchange resins are used to purify water around the world for drinking water, power plants, wastewater treatment, and pharmaceuticals.
- Dow epoxy technology makes it possible to create lighter, larger, and more durable windmill blades offering higher energy yields, increasing the use of renewable energy. This same technology is used in making composite structures for bus panels—significantly decreasing fuel consumption for this type of public transportation, and saving valuable nonrenewable resources in the process.

### Top Industries for Dow Products

Automotive & Transportation  
Building Maintenance & Construction  
Electronics & Entertainment  
Food & Food Packaging  
Furniture & Furnishings  
Health & Medicine  
Home Care & Improvement  
Paper & Publishing  
Personal & Household Care  
Water Purification

- Innovative Dow thermoplastic resins eliminate the need for paint in consumer products such as televisions, reducing volatile organic compound emissions and improving the recyclability of television cabinets.
- Saran resins provide food protection, extending the food available to the world. In developing countries where refrigeration is scarce and expensive, meat products are formed into sausages covered with Saran film that can be shipped and stored without refrigeration for up to six months.

Our Corporate Mission explains why Dow has wholeheartedly embraced the principles of sustainability, both to set direction for our global enterprise and to assess the real and potential impacts of our work.

We understand that improving life is not possible without a clear understanding of, and sensitivity to, the effects of our business operations on the world around us. The days when for-profit corporations seemed to exist exclusively to maximize shareholder value are behind us. Today, our Mission compels us to consider and address the interests of customers, neighbors, employees, governments, nongovernmental organizations (NGOs), as well as shareholders in everything we do.

### **The Ultimate Balance Sheet**

The manifold interests of all Dow stakeholders converge under the Triple Bottom Line of Sustainable Development. The Triple Bottom Line is the ultimate balance sheet, calling attention to the three fundamental areas—economics, environment, and society—where companies impact the quality of life. The Triple Bottom Line provides a clear means to assess Dow progress against our goals for improvement. And, it provides a framework that directs all Dow activities to ensure that we continue on the course prescribed by our Mission statement.

### **Transparency and Accountability**

This Public Report is an accounting of the progress Dow has made in 2003 against the Triple Bottom Line. We continue to be guided by the Global Reporting Initiative (GRI), achieving "in accordance with" status with the latest guidelines for the first time, and, in compiling this report, we have also been guided by two overarching imperatives—transparency and accountability—to ensure that we honor both the spirit and the substance of those guidelines.

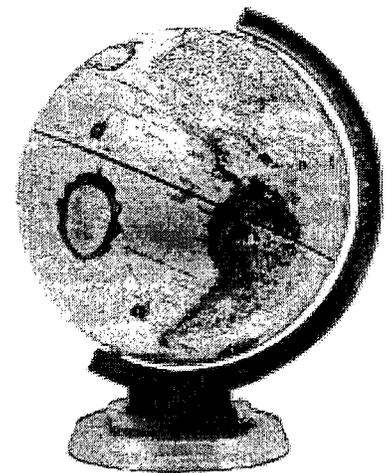
In the pages of the 2003 Public Report, you will find updates on our progress toward our 2005 goals. Each year, Dow strives for the most exhaustive and accurate accounting

of our progress so that you and other stakeholders can assess how we are doing, and also so that we can assess how true we have been to our Mission statement.

### **Seeing Is Believing**

As you would expect from a science and technology company, the 2003 Dow Public Report quantifies our progress in detail through the use of data and supporting descriptions. But statistics alone can't fully convey how Dow is making life better. We recognize that for many, "seeing is believing."

To better communicate the extent to which we are striving to deliver against the promise of our Mission and the Triple Bottom Line, the 2003 Dow Public Report contains a wide range of case study examples—allowing readers to see for themselves how Dow science, technology, products, people, sponsorships, and alliances are making a positive difference in real life around the world.



Since beginning our sustainability reporting in 1999, we have made significant progress against the Triple Bottom Line. In 2003, the Dow Public Report continues this trend. Here are some of the year's highlights:

### **Economic Prosperity**

- Despite continued difficult economic conditions, Dow increased earnings, improved cash flow, and reduced net debt.
- Dow declared a cash dividend to its shareholders in each quarter of 2003. Through the end of the year, Dow had paid dividends in 369 consecutive quarters.

### **Environmental Stewardship**

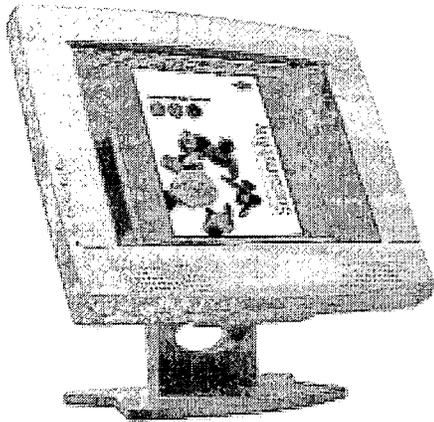
- Dow achieved its lowest illness and injury rate in its history in 2003—continuing the steady progress since the inception of the EH&S 2005 Goals. The current rate is 0.58 per 200,000 work hours, a 19 percent improvement over last year and a 77 percent improvement since 1994.
- Dow's internal WRAP (Waste Reduction Always Pays) Award program was expanded in 2003 to include reprocessing of waste into raw materials, enabling Dow to capture value while reducing waste. The estimated value of all WRAP projects since 1986 totals roughly \$1 billion.
- The American Chemistry Council awarded Dow the Responsible Care® Sustained Excellence Award for the second year in a row. The award recognizes companies that have demonstrated excellent safety records over the past three years.

### **Corporate Social Responsibility**

- Dow adopted a revised Code of Business Conduct in July. The Code is available to employees in 14 different languages. A mandatory global, online training program was initiated in the fourth quarter of 2003.

### **External Assurance**

- Dow received a 2003 BEST Award from the American Society for Training & Development (ASTD). The ASTD BEST Awards recognize organizations demonstrating enterprise-wide success as a result of employee learning and development.
- Dow received the 2003 Outstanding Corporate Innovator Award from the Product Development & Management Association, the first time a chemical company has received the honor in the award's 27-year history.



### **Multiple Formats Enhance Reporting Transparency**

The 2003 Dow Public Report is published—online and in downloadable pdf format—as a companion to the 2003 Dow Annual Report, which provides in-depth financial results for our Company. This enables Dow to report its progress against the Triple Bottom Line in a highly accessible and transparent fashion to meet the needs of the majority of our stakeholders. However, for stakeholders who wish to review our information in a single, combined document conforming to the text-based Global Reporting Initiative (GRI) format, we are issuing a

second report in the GRI format. This downloadable document combines information provided by the 2003 Dow Public Report with detailed supplemental data drawn from Dow financial reports and other documents as prescribed by the GRI. We expect this GRI format report will be most useful to independent sustainability assessment bodies. You may download a copy of this alternative report, titled “The 2003 Dow Chemical Company Global Reporting Initiative Report,” by visiting

[www.dowpublicreport.com](http://www.dowpublicreport.com)

### **Debates and Dilemmas**

Despite making what we believe is good progress on the multiple dimensions of Sustainable Development, we still have a number of challenges and dilemmas—almost all of these are “legacy” issues. We cover those that are of most interest to the widest set of stakeholders in this report. We also understand that our position on some of these issues is in conflict with a number of stakeholders. We continue to look for ways to resolve these dilemmas, understanding that in some cases we may have to “agree to disagree” on

some aspects. We are constantly looking for constructive ways to put these aspects behind us and recognize that, in some circles, our legacy issues continue to define who we are and what we do.

[www.dow.com/environment/debate.html](http://www.dow.com/environment/debate.html)

### **We Take Sustainability Personally**

The progress reported in the 2003 Dow Public Report represents the combined efforts of Dow’s approximately 46,000 employees globally. As members of the communities where we operate, Dow people have a very personal stake in our efforts to improve life. They understand that aggressive pursuit of Dow’s Corporate Mission will provide benefits that are both far-reaching as well as important to us all close to home.

[www.dowsustainabledevelopment.com](http://www.dowsustainabledevelopment.com)

# Dow's To Do List

In 2003, we continued to report on our progress against a set of "To Do" List activities. We started this reporting mechanism in 1999, with eight specific tasks that guided our efforts for two years. Since then, we have completed many tasks and added new ones.

## New Tasks

### Sustainable Development Training

Integrate the World Business Council for Sustainable Development's (WBCSD) Chronos Training tool into the Dow online training resource, [learn@dow.now](mailto:learn@dow.now).

Start: 2003/Deadline: Year-end 2004

### Sustainable Development Goals

Build on the success of our EH&S 2005 Goals, develop a new set of Sustainable Development-based corporate goals, using extensive internal and external stakeholder dialogues.

Start: 2003/Deadline: Year-end 2005

### Supply Chain

Develop an effective and efficient method for questioning our supplier base on their overall environmental and social performance and integrate the results into the purchasing decision-making process.

Start: 2004/Deadline: Year-end 2005

### Communications

Upgrade both the Sustainable Development Intranet (for Dow employees) and the Internet (for all other stakeholders) to include more useful and timely information about our processes, results, and plans for the future.

Start: 2004/Deadline: Year-end 2004

Last year, we made significant progress on a number of tasks, and completed four additional tasks in the areas of Community, Dialogue, Solutions Development, and Sustainable Development Workshops. We also added four new tasks to our list, reflecting a maturing Sustainable Development ethic

within the Company and an assessment of areas for improvement. See pages 12–15 for 2003 activity detail. On our web site, you can read more specifics about many of the tasks and their background.

[www.dowpublicreport.com](http://www.dowpublicreport.com) 

## Ongoing Tasks

The "up" trend arrows  next to our ongoing tasks indicate where we have made good progress toward our goals. The "down" arrows  indicate tasks with less progress achieved.

### Brand

Sustainable Development will be an integral component of how our corporate reputation will be measured and grown.

Start: January 2002/Deadline: Year-end 2005

### Transparency

We will publish Dow's opinions on topics relevant to us and our stakeholders, and we will have developed a set of Internet-based tools that can be used for meaningful discussions about these topics.

Start: January 2002/Deadline: Year-end 2004

### Integration

All businesses, functions, and major sites will integrate the Sustainable Development principles into their respective strategies and plans and have specific implementation plans in place.

Start: January 2002/Deadline: Year-end 2005

### Citizenship†

We will publish a position paper on Citizenship based on internal and external stakeholder dialogue, for use as a guide in developing growth opportunities.

Start: January 2002/Deadline: Year-end 2005

### Environment, Health & Safety (EH&S)

Dow will strive to meet its 2005 EH&S goal commitments.

Start: 1995/Deadline: Year-end 2005

### Industry Alignment

We will provide leadership to the American Chemistry Council and other global industry associations to establish additional performance requirements and external verification to the Responsible Care initiative and implement these at Dow.

Start: January 2002/Deadline: Year-end 2004

### Community Surveys

Conduct regular perception surveys to track progress toward our goal of being seen as a "good neighbor and valued member of the community" by at least 80 percent of the residents in communities where Dow has a major impact.

Start: September 1999/Deadline: Year-end 2005

† Redefined from "Responsible Globalization" in late 2002.

## Completed Tasks

✓ **Sustainable Development Principles**  
Articulate and endorse a set of Sustainable Development Principles building on the current Responsible Care Guiding Principles.

Completed: 2000

✓ **Refine Dow's Sustainable Development Measurements**  
Develop a global set of measurements to evaluate business performance and monitor progress of each global business against economic, environmental, and social goals.

Completed: 2000

✓ **Sustainable Development and New Businesses**  
Integrate Sustainable Development Principles into the strategic planning process through New Businesses—the global business unit where new commercial and technology opportunities are identified.

Completed: 2000

✓ **Heighten Product Stewardship Efforts Globally**  
To reach 100 percent implementation of Responsible Care globally, we will accelerate our Product Stewardship efforts in developing countries.

Completed: 2000

✓ **People**  
We will communicate Dow's People Strategy to all employees globally and have it integrated into all Business Strategies and all Functional and Geographic Plans.

Completed: 2002

✓ **Advocacy**  
We will incorporate a review screen into our advocacy process for ensuring that Dow's approach is consistent with our Sustainable Development Principles.

Completed: 2002

✓ **Six Sigma**  
Six Sigma will deliver \$1.5 billion in EBIT (Earnings Before Interest and Taxes) cumulatively from the combined impact of revenue growth, cost reductions, and asset utilization.

Completed: 2002

✓ **Balanced Scorecard**  
To bring more balance into how we measure our success and progress on the integration of the Triple Bottom Line, Dow will launch a Balanced Scorecard.

Completed: 2002

✓ **Community**  
A best practice process will be in place for dialogue with community leaders at our largest sites to begin a sustainable community visioning process that includes a plan for accomplishing specific Dow and Community goals.

Completed: 2003

✓ **Dialogue**  
We will formalize our principles and process for external stakeholder engagement, which will allow businesses, functions, and sites to incorporate external inputs in their decision-making process.

Completed: 2003

✓ **Solutions Development**  
Sustainable Development principles and key probing questions will be an integral part of Dow's decision-making process for developing and commercializing technology.

Completed: 2003

✓ **Sustainable Development (SD) Workshops**  
We will expand SD workshops to more businesses. During these meetings, business leaders analyze the gaps between current performance and a defined set of metrics, and develop plans to improve performance.

Completed: 2003



## 2003 Activity

### ↑ Brand

In 2002, we established a model to clarify and align our understanding of corporate reputation:

Brand + Performance = Reputation

In 2003, we strove to identify metrics to track reputation across our key stakeholder groups of employees, customers, shareholders, and communities.

As a result, we identified the following reputation metrics as best practice and plan to draw the data from existing Dow research efforts to further quantify the impact of our brand and performance efforts on our overall reputation:

- Quality of Products—Offers quality products and services.
- Strength of Management—Experienced senior executives lead the Company through strategic and visionary thinking.

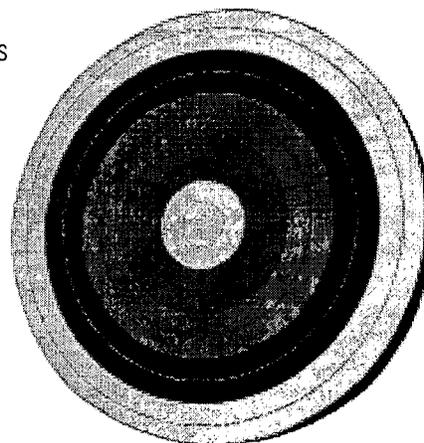
- Effective Communications—Communicates with customers, analysts, employees, and members of the community in an open and transparent manner.
- Innovation—Develops new ideas for products, services, or ways of doing business.
- Financial Soundness—Financially strong in terms of sales, profits, or stock price.
- Attracting and Retaining Talent—Recruits and retains high-performing employees.
- Social Responsibility—Operates in a way that contributes to the communities in which it does business.
- Environmental Responsibility—Operates in a way that is safe for the environment.
- Ethical Business Practices—Manages our business in a way that follows related principles and laws.
- Overall Reputation Rating—Perception rating of the Company's overall reputation.

### ↑ Transparency

Corporate transparency has emerged as a focal point of societal expectations.

Corporations like Dow are experiencing pressures from stakeholders to be more transparent about their values, commitments, and performance. In this "show me" world, stakeholders want to know who the Company is, what it stands for, and whether it is living up to its values and commitments to society.

Our Global Public Report, Benelux regional report, and our 20 individual site reports are the best evidence we can offer of our commitment to transparent operations. We strive to provide the most comprehensive report of our progress and challenges in a format that is approachable and understandable to Dow stakeholders everywhere.



In 2003, Dow was a member of the Global Environmental Management Initiative (GEMI) Transparency Work Group. The Chair of the Communication and Marketing committee is also a working member of the Transparency Work Group and a senior Dow employee. Working with other global companies of similar size, Dow is helping define a standard for transparent operations.

#### ↓ Integration

In 2002, we made significant progress in integrating Sustainable Development Principles with the various businesses, functional, and site strategies within the Company. Over a dozen businesses have added Sustainable Development Principles, looking for gaps and areas of strength. This has led to action items for the individual businesses.

In 2003, as Dow focused principally on improving its financial performance, very little additional activity took place in terms of further integration of Sustainable Development within the Company. A couple of businesses and sites did proceed with integration of Sustainable Development into their business strategies, as they were undergoing an overall review at the time.

We were successful in adding key Sustainable Development criteria into our "Class of Facility" value improvement practice. This is a facilitated review that triggers business team input to establish the kind of facility that is needed to meet the business plan.

Sustainable Development criteria that are now included in this evaluation include energy intensity and type, material intensity, overall emissions, priority emissions, illnesses and injuries, and fresh water use.

Given the continued focus on cost reduction, we are extending this activity out to year-end 2005—allowing us to incorporate Sustainable Development thinking into emerging long-term corporate and business strategies.

#### ↓ Citizenship

Of all the tasks on the To Do List, this one caused the greatest dialogue and debate within the Company. Even the name was heavily debated. (Task was redefined from "Responsible Globalization" in late 2002.) One view was that if we called this activity Responsible Globalization we might (erroneously) indicate that we as a company were irresponsible in the past. Another view was that we simply don't have the ability to define the term—it has been defined in the outside world by our stakeholders, and we will need to respond to the concerns inherent in the term.

In the end, we decided that we wanted our internal element name to reflect a positive, forward-looking approach to the group of issues associated with this element. We chose Citizenship as the term, and defined it as:

**"The manner in which Dow will achieve value growth to meet societal needs, while being held accountable for our actions."**

The struggle we continue to have is to fully understand what is viewed as good corporate citizenship, what is not, and what are the boundary conditions that define our actions and behaviors. As a result, we did not complete or publish the position paper in 2003, as described in our To Do List. Dow is committed to further understanding this complex set of issues through active stakeholder dialogue. In 2004, we will use our standing stakeholder dialogue mechanisms, such as our Corporate Environmental Advisory Council and our Community Advisory Panels throughout the world, together with other stakeholder forums, to more extensively explore Globalization and Citizenship, and Dow's role. As such, we have moved the completion date for this task out to the end of 2005.

#### **Environment, Health & Safety**

Throughout the Company, we remain focused on Environment, Health & Safety (EH&S) excellence. Progress toward meeting the 2005 EH&S goals will continue while we maintain compliance with Dow and regulatory requirements.

Dow senior leadership regularly reviews our Company's results and sets future direction through quarterly meetings of the EH&S Management Board.

As we near the end of our 2005 goal commitments, we continue to aim for our Vision of Zero—zero injuries, zero incidents, and zero environmental harm.

#### **Industry Alignment**

In 2003, Dow established an internal, global network of EH&S leaders to provide input into strategic reviews and various discussions (e.g., Business Value) on Responsible Care in Europe, Brazil, Canada, the U.S., and Asia/Pacific. Dow had active representation on two of the five Responsible Care sub-teams chartered by the International Council of Chemical Associations (ICCA) and selected industry CEOs from around the world. They are carrying out a strategic review of Responsible Care at the global level and will develop a more consistent global approach to meeting evolving and emerging stakeholder needs and expectations. Good progress was

made toward the finalization of a global Responsible Care Strategy by mid-2004. Internally, Dow continued to strengthen the global utilization of its Responsible Care Management System and to drive improvement of EH&S metrics via our focus on Dow's EH&S 2005 goals.

#### **Dialogue**

During 2003, we developed Dow's strategy, principles, and process for external stakeholder engagement. Our strategy highlights the value of dialogue with stakeholders and our commitments to principles and values. It calls for enhancement of our existing dialogue processes to achieve more and better dialogue. It also calls for a strategic focus on dialogue with NGOs seeking solutions to issues of mutual interest.

We carried out internal and external validation exercises to refine and endorse this strategy. Internally, a series of focus groups that involved NGO relationship leaders, geographic public policy, the Sustainable Development Advisory Council, and business leaders helped to achieve clarity and consensus. The Sustainable Development Steering Group and the Public Policy Leadership Team provided the final endorsements. We achieved external validation with the cooperation of the Corporate Environmental Advisory Council (CEAC) and other key individuals.

Our focus groups concluded that new principles for dialogue were not needed. Many of the principles that Dow already has in place are directly applicable to our conduct of dialogue and relationships with external stakeholders. We have, therefore, documented the ways in which these existing principles guide our external engagement efforts.



### **Solutions Development**

Develop and Commercialize Technology (D&CT) is the multifunctional discipline used by Dow to evaluate, develop, and implement new products, processes, services, applications, line extensions, and strategic alliances. This work process uses a stage-gate approach and includes the participation of research and development, marketing, financial, environmental/health, and manufacturing functions.

The D&CT process was revised in 2003 to more formally incorporate Sustainable Development principles and key probing questions into the guidelines and decision screens.

As a result of a question on the Dow Jones Sustainability Index, we recently conducted a review of all of our businesses to determine the sales over the last five years that have resulted from eco-efficiency improvements. We used the U.S. Environmental Protection Agency (EPA) definition of Green Chemistry as our guide for reporting by the businesses:

“Green chemistry is the use of chemistry for pollution prevention. More specifically, green chemistry is the design of chemical products and processes that are more environmentally benign.”

Some more-specific criteria applicable to Dow included the following:

- Processes derived or partially derived from renewable resources
- Product or process development aimed at increasing material intensity, decreasing waste, decreasing water consumption, or decreasing energy consumption without otherwise adversely affecting environmental performance
- Research designed to recover or recycle products within a production system, again, without otherwise adversely affecting environmental performance

The final summary indicated just over 15 percent of sales in the last five years can be attributed to “greener chemistry.”



## Economic Prosperity

For many years, reporting on the economic impact of Dow and other corporations focused largely on the Company's financial health, with only secondary discussion of how our economic contributions impact the quality of life in our society.

The Triple Bottom Line of Sustainability and Dow's Mission

"to constantly improve what is essential to human progress by mastering science and technology"

call for a broader assessment of our economic performance. This does not mean that we are reducing the emphasis on financial performance.

A strong financial balance sheet provides us with the resources we need to help improve life and achieve our specific sustainability goals.

But a true assessment of Dow's economic performance must include not only our Company's financial performance, but also our total contributions to local, national, and global economic prosperity.

How is Dow improving life from an economic perspective? Our contributions fall into two basic categories: the impact of our products, practices, and services on society, and the Company's economic impact on the regions in which we operate.

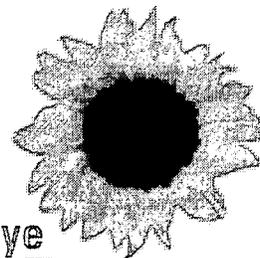
In the first category, Dow has fully integrated sustainability principles into our product development process, equipping our people with the mindset and skills to develop products in a more sustainable way, while also creating more sustainable products and practices that contribute to higher quality of life around the world. We know that Sustainable Business is also Good Business. Sustainability-driven product, service, and process innovations create revenue opportunities and reduce operating expenses, enhancing rather than encumbering our financial performance, and securing our future financial health.

Dow's economic impact on the local communities where we operate is often great, considering the scale of our operations and the modest size of many of our site communities. Dow jobs, taxes, and purchases all contribute significantly to local economies, infrastructure, civic institutions, and culture. Despite our need to actively manage costs, Dow continues to work closely with local government, civic groups, labor unions, local supplier firms, and others to provide opportunities for employment, business relationships, community alliances, and other collaborations that enhance the quality of life for our neighbors as well as ourselves.

## Products and Services

How do the products and services of a chemical company contribute to Sustainable Development? We're answering that challenge by integrating sustainability principles into all of our businesses, as promised in the original Dow Public Report (1999). Special workshops in the business units provide training that results in both mindset and skills to develop and market more sustainable products.

"Living. Improved daily." is our articulation of this approach to products and services. As a \$33 billion enterprise serving customers in more than 180 countries, Dow provides innovative "building block" chemicals, plastics, and agricultural products that add value across a wide spectrum of consumer industries. However, it's difficult to measure the exact economic impact of Dow ingredients in consumer products or separate the economic impact from the impact on the other areas of the Triple Bottom Line.



## Goodbye Trans Fats

Vegetable oils are widely used for frying, cooking, and salad dressings, and to prepare many processed foods, like chips, fast food, frozen dinners, and popcorn. Many of these oils contain trans fats. Most recent research shows that trans fats raise the level of the "bad" cholesterol that increases the risk of heart disease. It is estimated that over 40 percent of food products on grocery store shelves contain trans fats. In fact, a new U.S. Food and Drug Administration (FDA) rule effective January 2006 will require that the Nutrition Facts panel for all products list the trans fats content. As more people learn of the harmful effects of trans fats, manufacturers are seeking oils that are functional and healthy.

NATREON canola and sunflower oils from Dow AgroSciences help manufacturers eliminate trans fats in their products. NATREON also provides the lowest saturated fat and increased levels of healthy monounsaturated fats compared to other oils. NATREON oils do not affect the quality or taste of food products. Already, NATREON oil has seven percent of Japan's canola oil market, and is now being launched in North America and the European Union.

[www.dowagrosciences.com](http://www.dowagrosciences.com)



Take pharmaceuticals, for example. Dow products make tablets easier to swallow and help control the rate of drug release. Not to mention that packaging made of our products keeps the medicines whole and hygienic while prolonging the shelf life of these valuable products. So, Dow products add value both for the consumer and for our customers, the drug manufacturers.

We are improving the essentials of life and doing so within a Sustainable Development framework. Our “disruptive technologies”—advances that improve the quality of life while replacing earlier technologies—illustrate the long-term potential for sustainable chemistry research and development. For example, the development of soy-based polyols could significantly reduce dependence on finite resources by switching to a renewable raw material. In addition, traditional Dow products like STYROFOAM insulation and lightweight plastic materials for automotive applications provide a cost-effective solution for consumers and enable downstream cost and energy savings.

## Local, Regional Economic Impact

The economic prosperity of a city, state, or country is largely dependent on the amount, and type, of business being conducted there.

Jobs, taxes, and corporate purchases all contribute significantly to economic health—and, indirectly, to infrastructure, civic institutions, and culture. Economists estimate that, over time, a company’s spending often generates a multiple value six to 10 times that of the original spending. Dow is especially sensitive to how its operations affect the lives of people in the many locations in which it operates around the world. Here again, we sometimes face a very difficult trade-off. We are fully aware of the impact many of our purchases can have on a given local economy; but, as a competitive global enterprise, we have to find a responsible balance between supporting the local economy and actively managing our costs to a minimum.

For certain products this means consolidating purchases and buying in great volume independent of the location of the supplier. However, there are other products and services that by their very nature will be bought locally, such as contract labor and certain maintenance activities.

Dow’s local purchasing department works closely with local suppliers to educate them about our strategic purchasing requirements and to help them understand the needs and the potential actions for their businesses, which will help them to be globally competitive.

In order to better understand our local economic “footprint,” we regularly review data on these topics:

- Salaries paid (payroll) and number of employees by global region;
- Taxes paid to all taxing authorities;
- Purchasing (global and by region);
- Sales and production in OECD (Organisation for Economic Co-operation and Development) countries and non-OECD countries.

Please refer to page 22 at the end of this section to see how we have performed in these areas.

## Financial Results of the Triple Bottom Line

In 2003, we increased our earnings, improved our cash flow, and reduced net debt. We are very pleased with this result, which was achieved despite an unprecedented \$2.7 billion increase in feedstock and energy costs, industry overcapacity, and a fragile economy.

Last year the entire Dow organization was asked to focus on improving our financial, as well as safety, results, regardless of how difficult industry conditions might be. Dow people answered both calls. Regarding Dow's financial performance:

- Earnings increased from \$0.34 per share in 2002 to \$1.38 per share in 2003, excluding all special items.
- Our free cash flow (cash from operations minus capital expenditures and dividends paid to stockholders) for 2003 was a positive \$1.45 billion, a turnaround of \$2.2 billion from 2002—all beyond our turnaround target of \$1 billion.

- Dow's stock rose 40 percent during the year. As measured by total shareholder return, Dow has outperformed the Standard & Poor's (S&P) 500 and the S&P Chemicals Index both in 2003 and over the past five years.

### **Dow's Four Key Financial Objectives**

- Achieve 20 percent return on equity (ROE) across the cycle.
- Return at least three percent over the cost of capital across the cycle.
- Earn at least the cost of capital at the trough in the business cycle.
- Achieve annual growth of 10 percent in earnings per share across the cycle.

Please refer to page 23 at the end of this section to see how we have performed against these objectives.

### **Building Our Financial Strength**

The economic expansion now underway is gaining momentum, and in 2004 we have reason to expect an increase in volume and an improvement in the overall supply/demand balance. But feedstock costs remain stubbornly high and volatile. If the past three years have proven anything, it is that difficult conditions can have remarkable staying power, and we must prepare ourselves to do well despite them.

So, just as last year, we will continue to be frugal in our capital spending; and we will sustain the gains we have made on structural cost reduction. We will focus on our customers and on managing price and volume. We will continue to sell assets that are not a strategic fit and shut down plants that are not competitive. And, we will work safely.

### **Shareholders and Stakeholders**

Since 1912, The Dow Chemical Company has paid its shareholders cash dividends each quarter and has either maintained or increased the quarterly dividend amount throughout that period. We believe that this kind of data, normally a highlight of financial reports, nevertheless has an important place in this Public Report.

We believe that the dividends are a key component of the Triple Bottom Line. Capital is, after all, the “fuel” for all that we do. So we must be zealous in pursuing the innovations and efficiencies that support the dividends that will attract capital when needed. However, it is the careful attention that is paid to all stakeholder interests that enhances the prospects for profitability. Today, more than even a few years ago, stock price is increasingly being influenced by a host of intangible factors: employee relations, environmental sensitivity, and product reliability among them. We have moved from the 20th century “linear” corporate model in which the shareholder was predominant to a 21st century “circular” model where the shareholder and other stakeholders are mutually dependent.

Despite these admittedly difficult times, we are learning to make sustainability a way of business at Dow. Our economic imperative is clear. But equally clear is our continued focus on environmental stewardship, workplace safety, and corporate responsibility. We simply do not view economic growth in isolation from social and environmental issues.

### **Six Sigma—The Way We Work to Improve Productivity, Cost Control, and Efficiency**

Dow began its implementation of Six Sigma in 1999. In each subsequent year, Dow has continued its Six Sigma commitment with renewed vigor. Through our implementation of Six Sigma, Dow has gained increasing value while equipping employees with critical problem-solving skills and a mindset for reducing variation and defect.

Six Sigma is both a set of tools and a way of thinking. It leads to breakthrough improvement using the Measure-Analyze-Improve-Control (MAIC) process to improve existing products, work processes, and behaviors. Six Sigma also encompasses innovation, utilizing Design for Six Sigma (DFSS) methodology to develop new designs or redesigns that result in competitively advantaged products, services, processes, and systems.

Incorporating the breakthrough tools and thinking of Six Sigma in all that we do benefits each and every aspect of the Triple Bottom Line.

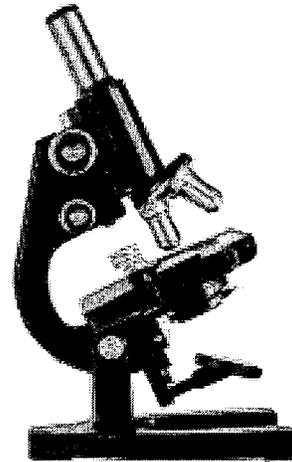
Since our implementation of Six Sigma as a Company-wide discipline, Six Sigma projects have contributed to our Company's economic results in the form of productivity gains, opportunity growth, and cost savings. At Dow, Six Sigma goes beyond dollars and manufacturing efficiency improvements. In 2003, the tools and methodology of Six Sigma were put to work on more than 300 projects related to Environment, Health, and Safety (EH&S) activities. These projects were primarily focused on 2005 EH&S goals and productivity targets. One Six Sigma project focused on improving water treatment at a major manufacturing complex. In the end, this project delivered effective, efficient wastewater treatment and managed to save Dow approximately \$3 million.

We're also applying our Six Sigma mindset to improve our social performance—because we view employee dissatisfaction and shortcomings in community relations as defects in our operations, the same as waste generation or shortfalls in plant productivity.

#### **On Track for Long-Term Profitability**

As mentioned earlier, 2003 was a year of substantial progress for our Company. But we are well aware that it can be considered a good year *only* when set against the backdrop of difficult industry conditions. The task now before us is to build on our progress and continue to improve our financial performance. Our ultimate objective remains what it has always been: to maximize long-term shareholder value.

So we are approaching 2004 in the same way we approached 2003—taking it one quarter at a time and continuing to improve earnings and increase our financial strength. We are confident that Dow people will once again rise to the occasion and meet our objectives.



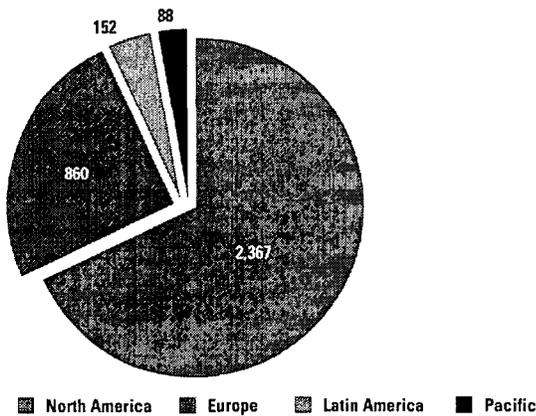
## **A Closer Look Creates Better Drugs**

A major hurdle in new drug development is solubility—the drug's ability to dissolve in the body. If not soluble, a drug cannot be absorbed into the body. More than 30 percent of new drug breakthroughs have poor solubility. The DOWPHARMA team providing BioAqueous solubilization services is working with pharmaceutical companies to create more soluble versions of their new drugs. The team alters the shape, size, or surface area of the drug particles to improve solubility.

[www.bioaqueous.com](http://www.bioaqueous.com)  
[www.dowpharma.com](http://www.dowpharma.com)



**Payroll 2003 (\$ millions)**



Includes direct salaries, wages, allowances, and incentive compensation

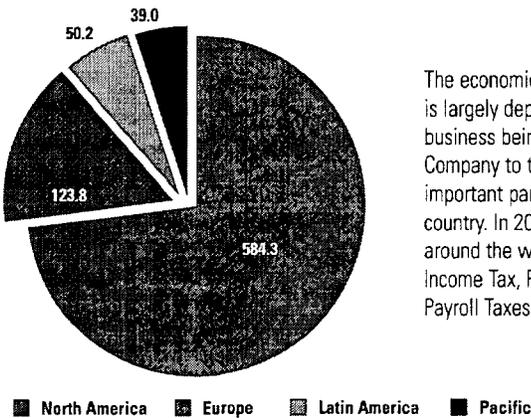
**Sales & Production**

Most of Dow's production and a significant amount of our sales are in 30 OECD† countries that make up most of the developed world. As Dow continues to pursue value growth guided by the increasing expectations of a global world, changes in the balance of OECD to non-OECD production and sales become one way to measure our success. After all, the major potential growth opportunities in the future are likely to be in non-OECD countries. We realize that pursuing growth in these countries is not a trivial task. It will require very different business models than those we are utilizing today.

	Production	Sales
OECD countries	89.9%	80.3%
Non-OECD countries	10.1%	19.7%

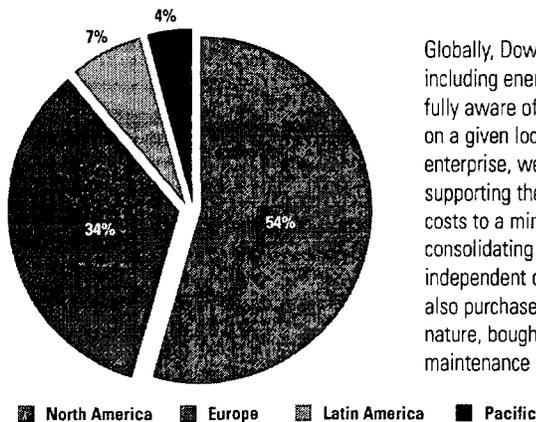
†Organisation of Economic Co-operation and Development

**Taxes Paid 2003 (\$ millions)**



The economic prosperity of a city, state, or nation is largely dependent on the amount, and type, of business being conducted there. Taxes paid by the Company to the various authorities are an important part of our economic "footprint" in a country. In 2003, the various Dow subsidiaries around the world paid \$797.3 million in Corporate Income Tax, Property Taxes, Employer's portion of Payroll Taxes, and various other non-income taxes.

**Total Purchases 2003 (Percentage by Region)**

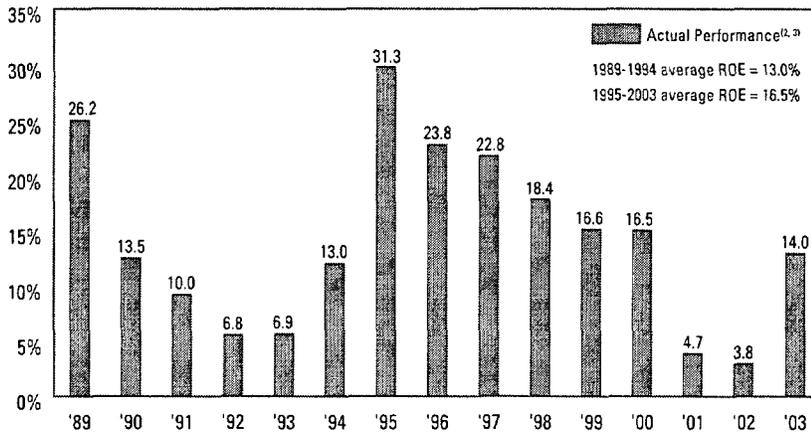


Globally, Dow spent \$30.5 billion in 2003 on purchases, including energy, feedstocks, and capital spending. We are fully aware of the impact many of our purchases can have on a given local economy; but, as a competitive, global enterprise, we have to find a responsible balance between supporting the local economy and actively managing our costs to a minimum. For certain products this means consolidating purchases and buying in great volume independent of the location of the supplier. However, we also purchase products and services that are, by their very nature, bought locally, such as contract labor and certain maintenance activities.

2002 purchases were "calculated" based on backing out Salaries & Wages and Depreciation from Dow's Income Statement, then allocating the "buy" based on Replacement Asset Base (RAB) percentages by area. 2003 purchases were extracted from the Vendor Invoicing and Purchasing database, providing a summary of all payments made by Dow via SAP, summarized by area.

Progress

**Financial Objectives: Return on Equity<sup>1</sup>**



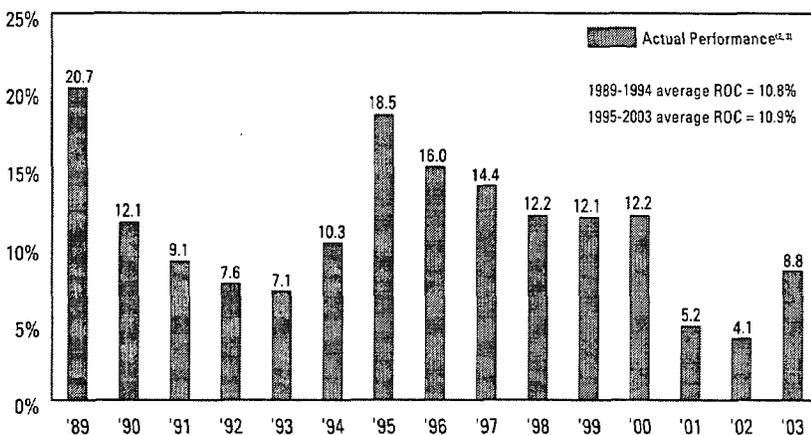
<sup>1)</sup> Excluding Union Carbide prior to 2001

<sup>2)</sup> Adjusted Return on Equity and Return on Capital excluding certain items, adjusted to reflect pre-merger results for Dow for 1989–2000

<sup>3)</sup> Adjusted Return on Equity and Return on Capital are not defined under accounting principles generally accepted in the United States ("GAAP"). For a reconciliation of the bases used to calculate these non-GAAP financial measures to bases that represent the most directly comparable GAAP financial measures, please see Dow's financial reports online at:

[www.dow.com/financial/reports/index.htm](http://www.dow.com/financial/reports/index.htm)

**Financial Objectives: Return on Capital<sup>1</sup>**



**Facts and Figures**

*Dollars in millions, except as noted*

	2003	2002
Net Sales (dollars in billions)	32.6	27.6
Net Income (Loss) Available for Holders of Common Stock	1,730	(338)
Earnings (Loss) per Share—Diluted (in dollars)	1.87	(0.37)
Research and Development Expenses	981	1,066
Capital Expenditures	1,100	1,623
Return on Stockholders' Equity	18.9%	(4.4)%
Dividends Declared per Share (in dollars)	1.34	1.34

Progress



# Environmental Stewardship

In 1996, Dow announced a series of ambitious goals to improve Environment, Health, and Safety performance. We did this because we value the safety of our people and neighbors. This section of the report will demonstrate our progress toward these goals. The graphs displayed are compelling, but we must all look beyond the numbers and recognize that behind each statistic there are people. In essence, since adopting these goals, 10,000 Dow employees and contractors

would otherwise have been injured if we had been content with "business as usual." These goals and their attendant improvements prevented these injuries.

Our "Vision of Zero" means we want no injuries, illnesses, accidents, or environmental harm to result from our enterprise. It is a lofty goal, but it is also the only acceptable Vision for us to work toward.

**Dow's EH&S Policy:**

At Dow, protecting people and the environment is part of everything we do and every decision we make. Each employee has a responsibility to ensure that our products and operations meet applicable government or Dow standards, whichever is more stringent.

Our goal is to eliminate all injuries, prevent adverse environmental and health impacts, reduce wastes and emissions, and promote resource conservation at every stage of the lifecycle of our products. We will report our progress and be responsive to the public.

For a complete online listing of Dow policies, see Dow's Code of Business Conduct.

[www.dow.com/about/aboutdow/code\\_conduct/ethics\\_conduct.htm](http://www.dow.com/about/aboutdow/code_conduct/ethics_conduct.htm)

## Accountability for Progress

Our progress is based on two things:

- Implementation of a global management system and global standards providing standardized approaches shared among facilities
- Clear accountability

The entire Dow workforce is responsible for the achievement of our Environment, Health, and Safety (EH&S) 2005 goals. Each business, site, and function is directly accountable for its EH&S performance. A portion of many individuals' variable compensation is tied to progress on our EH&S goals. Clear accountability also includes accountability toward society. When the goals were launched in 1996, we committed to annual public progress reports.

Our Environmental Stewardship data takes into account divestitures, mergers, and acquisitions and reflects these activities.

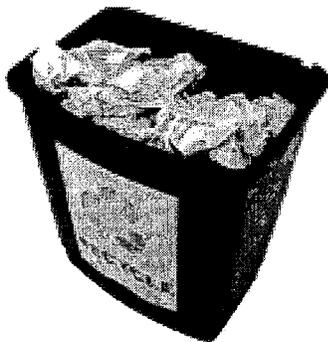
## Business Case

Doing good for the environment is not just driven by moral considerations. It simply makes good business sense as well. The ability to integrate the principles of Sustainable Development might very well become a determining factor in the long-term survival of companies.

In 2002, we revisited the business case for meeting the EH&S 2005 goals that we had established, based on recent performance and expectations for future performance, costs, and benefits.

For our Resource Productivity Improvement goals (Energy, Waste, Wastewater, Overall Chemical Emissions, Priority Compounds, and Dioxins), we estimate that we will ultimately spend close to \$1 billion and achieve overall value of \$3–5 billion, largely dependent on the volatile price of energy and feedstocks.

Achieving significant improvements in overall energy use is especially important in the current environment of rapidly increasing feedstock and energy costs.



## Waste Reduction Always Pays (WRAP)

In 1986, Dow launched the WRAP Award program to promote the three R's—reduction, reuse, and recycling. Today's WRAP Award program goes beyond the three R's to include reprocessing of waste into raw materials. This enables Dow to capture value while reducing waste. Since the program began, Dow has given the WRAP Award to 395 projects and their sponsors. Worldwide, the projects account for the reduction of 230,000 tons of waste, 13 million tons of wastewater, and eight trillion BTU's of energy. The value of all these projects totals roughly \$1 billion.

We also assessed the cost/benefit of achieving our EH&S 2005 Incidents goals (Process Safety, Personal Safety, Loss of Primary Containment, and Transportation). We estimate a total cost of \$95 million, and an overall value of \$130 million. The value was determined using a methodology adapted from the Total Cost Assessment methodology developed by the Center for Waste Reduction Technologies, a working group of the American Institute of Chemical Engineers.

The world is rapidly changing. Scarcity of resources, continuing population growth, and the influence of human activity on the future of the world are causes for concern. Society, which ultimately holds our license to operate and grow, expects industry to play its part in the resolution of these issues. In return, companies that take on this challenge can look forward to a better relationship with community neighbors, a boost in employee motivation, increased customer loyalty, reduced costs and liabilities, and a better corporate reputation—all of which have a direct or indirect influence on a company's financial results.

## 2005 Goals Update

In 1996, we publicly announced aggressive, voluntary, global EH&S Goals for the Year 2005. While we continue to make progress as compared against our baseline year, several of our goals will require additional attention and action. The data indicates that our performance is improving overall. We update our performance records annually or quarterly, depending on the goal.

### Responsibility and Accountability

Our objectives...

- To be a responsible corporate citizen
- To be open and responsive to ideas and concerns
- To integrate environmental considerations into our business decisions
- To design or modify our products and processes to minimize their environmental, health, and safety impact
- To find solutions to challenges by working with key stakeholders to find practical solutions to challenges
- To manage our lands to protect and enhance wildlife and ecosystems

**Global Progress on Responsible Care Codes of Management Practice**

Dow is at "100 percent practice in place" for the original 106 management practices embodied in the six Responsible Care codes. This includes our 1999 To Do List commitment to heightened Product Stewardship communication in all Dow businesses. In addition, we are well on our way to implementing a new Security Code, introduced in 2002. Our globally integrated Operating Discipline Management System (ODMS) is particularly helpful with newly acquired sites and businesses where it helps us to improve the existing management practices, implement the security measures, and to integrate Responsible Care standards.

In 2003, Dow implemented programs that will enable us to conform to the American Chemistry Council's new Responsible Care expectations. These new expectations require having a Responsible Care Management System in place, having that system externally certified and reporting industry EH&S metrics.

**Prevent Environment, Health & Safety Incidents**

Our objectives...

- To value—above all things—the safety of our people and our communities
- To continuously improve our performance in protecting the environment, health, and safety of our workforce, neighbors, and the public
- To work with our distributors, customers, and suppliers to improve the way we handle, transport, and use our products

Dow's Vision for EH&S performance is zero:

- no injuries and illnesses
- no accidents
- no environmental harm

While this may not be very realistic from a mathematical perspective, it's the only option in terms of employee health and safety. Without our "Vision of Zero," it means we will tolerate injuries and illness among our workforce and environmental impact. We won't, and we'll continue our aggressive goals.

Because of that aggressiveness, last year we had the best safety performance ever in the history of our Company. Our annual combined Dow employee and contractor injury and illness recordable rate was an all time low of 0.58. That's a 19 percent improvement over the prior year and a 77 percent improvement from our 1994 baseline performance. We're improving results through behavior-based programs, including peer observation, intervention programs, pre-task hazard analysis, and root-cause investigations. We've also been successful at reducing the severity of the few injuries that did occur last year. All categories of incident classification set record lows and last year there were no fatalities.

**Useful information on EH&S-related issues can be obtained from:**

- International Council of Chemical Associations [www.icca-chem.org](http://www.icca-chem.org)
- World Business Council for Sustainable Development [www.wbcsd.ch](http://www.wbcsd.ch)
- European Chemical Industry Council (CEFIC) [www.cefic.be](http://www.cefic.be)
- American Chemistry Council [www.americanchemistry.com](http://www.americanchemistry.com)
- Canadian Chemical Producers' Association [www.ccpa.ca](http://www.ccpa.ca)

Last year, Dow signed an alliance with the U.S. Occupational Safety & Health Administration (OSHA). Dow was the first company in the chemical industry and first Fortune 100 company to forge an alliance with OSHA. The alliance focuses on Dow's technical knowledge and guidance on Process Safety Management and Ergonomics. OSHA uses alliances to collaborate with organizations committed to safety to communicate best practice knowledge to workplaces throughout the U.S. to prevent injuries and illnesses.

Other measures of a company's EH&S performance include the amount of capital expenditures for EH&S projects as well as the amount of government penalties incurred:

- Even with Dow's commitment to reduce capital spending in 2003 by \$500 million, the percentage of spending on EH&S projects actually increased last year. Please refer to page 41 at the end of this section for EH&S capital spending in 2003.
- Measurements for government reportables, notices of violation and compliance orders, and fines and penalties are truly lagging indicators of performance. Simply put, they are not an accurate measurement of current performance but are typically

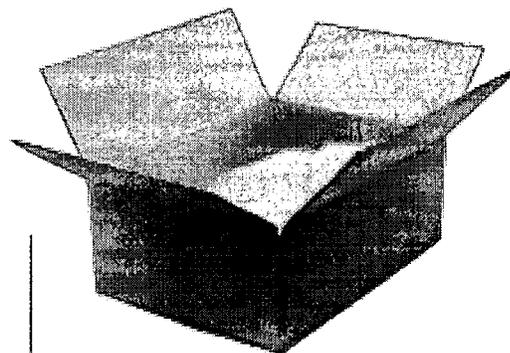
one to two years behind because of the various stages in the regulatory process. Despite the timeframe involved, our current performance in these areas is not up to the standards that we have set for ourselves. These numbers should be declining, and they are not. We are not content to accrue government penalties as a way to run our business. Information about how we plan to improve our performance is detailed on page 44.

#### **Goals to Reduce EH&S Incidents**

Our objective is to significantly improve Dow's performance (from a 1994 base) by reducing:

- Injuries and illnesses per 200,000 workhours by 90 percent
- Loss of primary containment incidents (leaks, breaks and spills) by 90 percent
- Transportation incidents per 10,000 shipments by 90 percent
- Process safety incidents (fires, explosions, and significant chemical releases) by 90 percent
- Motor vehicle incidents per one million miles by 50 percent
- Repeat incidents with Dow product at customer facilities by 50 percent (in this case, from 2001 levels)

Please refer to the pages 39–40 at the end of this section to see how we have performed against these objectives.



## **A Softer Touch**

New SYNERGY RCA soft touch foam is strong, resilient, and soft—making it ideal for shipping delicate auto parts. But SYNERGY RCA foam does not just protect parts during shipment, it also helps protect the environment. The foam is recyclable, which reduces landfill waste and saves disposal expense. The process used to produce SYNERGY RCA foam is CFC and HCFC-free. In addition, the accelerated curing system reduces the amount of blowing agents released from the foam.

SYNERGY RCA soft touch foam is one example of how Dow products support the Environmental Stewardship aspect of the Triple Bottom Line.

[www.dowsynergy.com](http://www.dowsynergy.com)





These measurements, however, are all strongly impacted by loss of primary containment (LOPC) performance. As we've made great strides recently in our LOPC performance, we expect that these lagging indicators will generate an improvement on these measurements on the near horizon. Therefore the acceleration of improvement in LOPC performance will improve these lagging indicators but not necessarily concurrent with the same timeframe.

### Increase Resource Productivity

Our objectives...

- To enhance resource productivity to reduce risk, minimize Dow's impact on the environment and health, and increase global competitiveness through greater efficiency
- To prevent pollution in our processes
- To transfer and use the best available technology throughout the Dow world to build the most environmentally sound and safe facilities

## Energy Efficiency and Conservation Efforts

High energy prices and energy price volatility—coupled with the environmental impact of energy production and consumption—make energy use a critical issue for Dow. Implementing an aggressive energy efficiency and conservation effort is an important part of Dow's plan to address this critical issue.

Business and Site energy efficiency teams have been established throughout the Company to focus both up and down as well as across the product chain. As a result of focused business and site efforts, over 700 Six Sigma projects have been chartered in the past four years to address all aspects of energy production, use, efficiency, and cost reduction.

Below are a few of the many projects that made significant contributions in 2003:

- Two older and less energy efficient ethylene crackers were shut down at Seadrift and Texas City, Texas (U.S.). A portion of the production from these units was shifted to newer, more efficient facilities resulting in 15–20 percent less energy consumed for this incremental volume.
- Dow Central Germany's Boehlen site reduced the import of natural gas by 25 percent through efficiency improvement and energy optimization projects. This saved the site five million Euros.
- The Plaquemine, Louisiana (U.S.), EO/EG plant was able to save \$7.5 million in energy costs through a comprehensive variable cost reduction program.
- Implementation of new seawater pump operation procedures at the Terneuzen, Netherlands, site resulted in savings of over 4,000 megawatt hours of electricity.
- The MDI plant in Stade, Germany, successfully completed a project to burn hydrogen instead of natural gas for a furnace. This resulted in a reduction of natural gas purchases worth over 1.6 million Euros.
- The Chlor-Alkali, EDC/VCM, and Ethylene plants at the Fort Saskatchewan, Alberta, Canada, site focused on reducing electrical energy consumed by motors. The combined effort resulted in yearly savings of almost 12,000 megawatt hours.
- A simple, yet elegant change in the process control strategy and operating procedures eliminated wasted steam in the Polycarbonate plant in Stade, Germany. The project resulted in a 20 percent reduction in total steam consumption.
- Implementation of a new boiler steam dispatch protocol at the Freeport, Texas (U.S.), site resulted in natural gas savings of over 800 million BTU's per day.
- A benchmarking study conducted by Polyolefins and Elastomers at Tarragona, Spain, resulted in a site utility optimization program that saved \$625,000 in the cost of steam, compressed air, and nitrogen.
- Polypropylene operations at Freeport, Texas (U.S.), saved \$865,000 on energy cost through process design upgrades, improvement of operating practices, and product mix rationalization.

**Goals for Emissions,  
Waste, and Energy**

Our objective is to reduce air and water emissions for our global operations by reducing:

- Priority compounds by 75 percent
- Dioxin emissions by 90 percent
- Chemical emissions by 50 percent
- Waste and wastewater generated per pound of production by 50 percent
- Energy use per pound of production by 20 percent

Priority compounds include persistent, bioaccumulative, and toxic (PBT) compounds, known human carcinogens, selected ozone depleting substances, and high volume toxic compounds:

- PBTs: Hexachlorobenzene, mercury compounds
- Known Carcinogens: Benzene, Vinyl Chloride, Nickel Compounds, Chromium Compounds, Arsenic Compounds, Asbestos
- Selected Ozone Depletors: Carbon tetrachloride, 1,1,1-trichloroethane, CFC-11, CFC-12, CFC-113, CFC-114, CFC-115, CFC-123, CFC-500, CFC-502, CFC-1301, H2402
- High Volume Toxics: Propylene Oxide, 1,2 Dichloropropane, 1,2 Dichloroethane (EDC), 1,3 Butadiene, Chloroform, Epichlorohydrin, Ethylene Oxide, Formaldehyde, Acrylonitrile

Please refer to pages 41–43 at the end of this section to see how we have performed against these objectives.

## Global Challenges

Among the many challenges facing the world today are those related to environment, health, and safety. For example: the availability of fresh water, the management of chemicals (including testing), climate change, dioxin emissions, and the development of promising, new technologies such as biotechnology. Resolving these issues is a shared responsibility that we take very seriously. Their resolution can often be done most effectively through the formation of broad-based alliances between industry and societal institutions such as government, professional societies, and non-governmental groups.

Unfortunately, the chemical industry is often singled out as the source of the problem, whereas in reality our products are a valuable part of the solution. Examples that illustrate this point are the plastics that allow car manufacturers to build lighter cars that use less energy and emit fewer pollutants, the reverse osmosis filters that enable water companies to secure safe drinking water for millions of people, and the disinfectants that kill human pathogens. The following is a summary of our positions and approaches to resolve nine key issues that we face.

## Longer Lasting Roofs

A Protected Membrane Roof (PMR) system using STYROFOAM insulation shields and protects a roof's waterproof membrane unlike a traditional roof system that does not cover the membrane. On a PMR roof, the membrane is placed beneath STYROFOAM insulation. The PMR roof protects the membrane against the most common causes of failure—sunlight, extreme heat, extreme cold, weather, and foot traffic. Traditional roofs are typically replaced every seven to 10 years. PMR roofs have lasted over 30 years. The cost savings to building owners are obvious. However, the benefits do not end there.

### PMR Roofs are "Greener" Roofs

Currently, three to four percent of all waste in U.S. landfills comes from old roofs. By more than tripling the time a roof lasts, landfill space is conserved. In addition, STYROFOAM insulation resists water so well it can be reused if the roof is ever replaced, which saves even more landfill space.

PMR roofs help the environment in another way. Ever notice how large cities tend to be hotter than surrounding areas? This is because the many buildings and paved surfaces create an effect called a "heat island." PMR roofs stay cooler than black membrane surfaced roofs, helping to reduce this heat island effect.

[www.styrofoam.com](http://www.styrofoam.com)





## Managing Water Resources

Pick up a paper or turn on the television and you're sure to see something about water. Usually, this precious material becomes newsworthy because there is too little, in the wrong place, or it is of poor quality. Globally, people are challenged to manage water more effectively. Our efforts are delivering significant results to Dow and its Stakeholders.

In 2003, Dow sites and businesses reduced water needs by nearly 20 million metric tons (5.28 billion gallons) and delivered value of \$15 million to Dow through better resource management. A few examples of contributing projects are:

- Through the combined efforts of many businesses at our Midland, Michigan (U.S.), site, demand has been reduced by almost 7.56 million metric tons (two billion gallons) of water annually—enough to supply 30,000 U.S. households.
- In Guaruja, Brazil, optimization of tank operations reduced water usage by 10%. This is equivalent to 2,000 metric tons of water saved.
- More efficient tank scrubbers in Plaquemine, Louisiana (U.S.), reduced water needs by 1,000 gallons per minute.

### Fresh Water Use

Increasing global demand for fresh water obliges corporations to create sustainable solutions and ensure long-term access for all. If nothing is done, the strain on this limited resource will continue to increase as more people have access to basic essential services and as the global population grows. To contribute to water conservation, Dow is taking an integrated approach. By engaging outside organizations such as academia and regulatory agencies, we will all better understand the challenge, work toward solutions, and develop new business opportunities that are environmentally beneficial and economically sustainable.

Dow's work on the water issue is to ensure adequate supplies of fresh water for manufacturing while reducing demand through new technologies, conservation, and recycling. In 2003, Dow processed approximately 410 million metric tons (286 billion gallons) of fresh water. Dow reduced its cumulative use of water by almost 40 million metric tons (10.56 billion gallons) over the past two years. Dow remains committed to managing water as a valued resource and will continue to aggressively implement strategies and technologies to further reduce demand.

### Chemicals Management

The products of chemistry provide undeniable and significant benefits to society. However, some also possess inherent hazards that must be identified and responsibly managed. Over time, knowledge about the basic characteristics of the chemicals has grown, primarily as a result of continuous studies and the development of refined testing methodologies. Control measures have been introduced to reduce the most serious risks of chemical exposure. Dow has traditionally been keenly engaged in this area, which is now broadly defined as chemicals management.

In the period 2000 to 2004, we are actively participating in three voluntary international initiatives aimed at improving the quality and availability of health and environmental information on High-Production-Volume (HPV) chemicals. The initiatives were developed as a joint effort among governments, the chemical industry, and environmental groups. They focus on filling information gaps by completing appropriate testing, and making a summary of the test findings available to the public. Governments in Europe and North America are driving development of new policies for the introduction of new chemicals and the continued scrutiny of chemicals already established in commerce. The chemical industry has, as part of the Responsible Care initiative, committed to improving the public availability of information about these chemicals.

Dow's involvement in these efforts is primarily delivered through the chemical industry trade associations in Europe, Canada, and the United States. We have volunteered to provide information consistent with the HPV criteria for over 180 chemicals; Dow is the sole volunteer for 33 chemicals (refer to page 45). We are on track to meet our testing commitments.

At the same time, we are trying to assess the impact of the evolving European Commission's Chemicals Management Policy, including the "REACH" protocol, which was introduced in 2001 and is expected to be in place in 2006. REACH would require the registration, evaluation, and authorization for some 30,000 chemicals currently on the market, as well as for those to be introduced in the future. The burden would fall principally on manufacturers, but downstream users also have obligations under the proposed system. Increased regulatory scrutiny of chemicals is also underway in Canada, the United States, and in some Asia Pacific nations.

We favor a scientifically justified, risk-based, and globally consistent system of regulating chemicals. We are, therefore, working through trade associations in each geographic region to deliver a unified, scientifically based, advocacy position to support our point of view.

Dow has contributed to the development of the International Coalition of Chemical Associations' Global Chemicals Management Policy, which includes an objective to:

"Provide the information and data (a knowledge base) for assessing health, safety, and environmental effects of chemicals and their intended uses. This would be sufficient to: consistently prioritize chemicals to determine which should be focused on first; promote and contribute to the understanding of health, safety, and environmentally related scientific issues on chemicals; and promote further minimization in the use of animals in testing."

This policy has been used to establish metrics that the American Chemistry Council (ACC) will use to measure company performance as part of its Responsible Care commitment. The ACC product-related metrics include demonstration that a company has a risk characterization process and provides a summary of that process to the public. Also, ACC requires that the company is applying its risk characterization process and sharing information in an easily accessible way with the public. Dow intends to provide access to our risk characterization process through [www.dow.com](http://www.dow.com), where we will be continuing to make product risk characterization documents available.

[www.dow.com](http://www.dow.com) 

Dow is also participating in the U.S. Environmental Protection Agency's (EPA) Voluntary Children's Chemical Evaluation Program (VCCEP). VCCEP was initiated in 2001 as a pilot program to evaluate a tiered approach to assessing the risk that chemicals might pose to children's health. Dow has committed either alone or as part of an industry consortia to assist the EPA in the evaluation of seven chemicals. During 2003, detailed risk assessments for two of those chemicals, vinylidene chloride and acetone, were submitted to the VCCEP peer-consultation process. For further information go to:

[www.tera.org/peer/MeetingReports.html](http://www.tera.org/peer/MeetingReports.html)

Risk assessments on the remaining five chemicals will be prepared and submitted to fulfill Dow's commitments.

#### **Animal Testing**

One of the more divisive aspects of chemicals management is the issue of animal testing. This government required testing, primarily with mice, rats, and rabbits, has long played an important role in major scientific breakthroughs, ranging from nutrition improvements to new medicines.

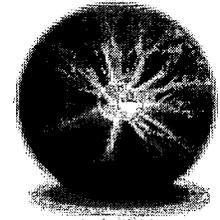
Nevertheless, we seek to develop alternative tests that don't involve animals but are acceptable to regulatory agencies, and we follow a self-imposed regimen of using a minimal, and decreasing, number of animals. We also provide humane handling, care, and treatment for all the animals used in our testing laboratories. This practice is audited and validated by the Association for Assessment and Accreditation of Laboratory Animal Care. When selecting a contract research organization, an evaluation of its animal welfare practices is also part of our decision-making process.

#### **Climate Change**

2003 saw additional progress in the implementation of the Climate Change Strategy adopted in 2001. Internal mechanisms and expertise continued to develop, as did evidence that climate change is becoming an integral part of business decision-making. Specific progress in 2003 included:

#### **Technology**

Another milestone was achieved with the announcement in May of a collaboration with General Motors (GM) on what is the largest hydrogen fuel cell deal to-date.



## **World's Largest Fuel Cell Project**

Dow and General Motors (GM) Corporation are inaugurating the world's largest fuel cell project to-date for power generation. The project is based at Dow's Freeport, Texas, site, where hydrogen is created as a co-product. GM's fuel cells will convert hydrogen to electricity. When complete, the fuel cells will provide a portion of the power used at the plant.

Hydrogen fuel cells offer a cleaner, more efficient option for power generation than coal, natural gas, or other fossil fuels. Both greenhouse gas and air pollution are reduced. Fuel cells could also reduce need for foreign oil and provide an option to costly natural gas.

If the project proceeds as planned, up to 400 fuel cell units could be producing up to 35 megawatts of power at Freeport. That is enough energy to power 25,000 homes for a year. And, it is more than 15 times greater in scale than any other fuel cell system to date. Although the fuel cells will provide only two percent of the total power the Texas plant uses, the project is a first step in developing fuel cells into a major power source. Dow and GM are discussing future use of fuel cells at other Dow sites in both the U.S. and Europe.

[www.dowfuelcell.com](http://www.dowfuelcell.com)

### **Business Integration**

In 2003, Dow established an Emissions Strategy Board to allow for better alignment of emissions objectives, synchronization of efforts, and optimization of resource use across the Company. The new Board will also provide the foundation for future business opportunities such as trading of greenhouse gas credits, regulatory interaction, and emission-related investment opportunities.

### **New Products**

WOODSTALK fiberboard building material product was certified as a "Climate Cool Product" by The Climate Neutral Business Network. As mentioned in our 2002 report, WOODSTALK building material is a fiberboard material made from wheat straw and a formaldehyde-free resin. Traditionally, wheat straw was burned in the field after wheat was harvested. But instead of burning, the straw is gathered and manufactured into a material similar to particleboard. Like particleboard, it can be used in building construction and it has superior properties for cabinet or furniture manufacturing. But WOODSTALK building material is not just carbon neutral. It actually reduces the amount of greenhouse gases introduced into the atmosphere and preserves trees that would otherwise be cut down for lumber.

Greenhouse gas emissions are reduced significantly and the reductions are real and permanent. Because of WOODSTALK building material, 240,000 tons of carbon dioxide (CO<sub>2</sub>) is not released into the atmosphere as a result of yearly wheat straw burning. Additionally, another 250,000 tons of CO<sub>2</sub> per year are saved due to forest sequestration. The trees not harvested as building materials remain in the ground, absorbing CO<sub>2</sub>. This savings is conservatively estimated as the same as removing 54,000 cars from the road every year. WOODSTALK building material is a demonstration that Dow products and technology provide significant solutions to the climate change challenge.

[www.dowwoodstalk.com](http://www.dowwoodstalk.com)

### **Stakeholder Involvement**

In 2003, Dow continued to publicly describe its climate change efforts, conduct dialogue with a variety of stakeholder groups, and submitted information about its climate change activities to socially responsible investor groups. For example, in November 2003, The Carbon Disclosure Project, a group of 87 institutional investors with assets of over \$9 trillion under their management, published a report which said,

"Dow Chemical, in particular, stands out as a sector leader. Dow is managing the issue via a four-pronged strategy which covers technology, business integration, new products, and stakeholder involvement. Implementation is spearheaded by a multidisciplinary Climate Change Opportunity Management Team."

[www.cdproject.net](http://www.cdproject.net)

While we are working to improve our greenhouse gas emissions (GHG) data collection, and have done our utmost to ensure the quality of the data, we acknowledge that there may be inaccuracies as a result of limited availability of some historical data.

As we refine our reporting tools, we will update the emissions data and be transparent about our assumptions and guidelines. Also, we are working with external stakeholders to bring our GHG data in line with generally accepted reporting protocols.

Please refer to page 45 at the end of this section to see our progress toward reducing greenhouse gases.

## Dioxin

The term “dioxin” refers to a family of chemical compounds that are unintentional by-products of certain industrial, non-industrial, and natural processes, often involving combustion. The concern about dioxin is that it persists in the environment and can accumulate in the body through the consumption of some foods containing fat.

It is well documented that dioxin levels in the environment have been steadily declining for the past 30 years. People today are exposed to less dioxin than at any time in the last several decades. In particular, industrial emissions have been reduced dramatically through regulation and voluntary actions. According to the U.S. EPA's Inventory of Sources of Dioxin in the U.S., the chlorine industry's total releases to the environment represented only three percent of total projected dioxin emissions from quantified sources for 2002 through 2004.

Today, the U.S. EPA believes uncontrolled burning of residential waste (backyard barrel burning), agricultural burning, and landfill fires are the largest sources of new dioxin, accounting for more than 50 percent of all current releases to the environment.

Dow plays an active role in the global reduction of dioxin emissions. In 1994, we set a 2005 Environment, Health, and Safety goal to reduce global air and water emissions of dioxin by 90 percent. This goal is being achieved through a comprehensive strategy of process improvement and technological innovation (refer to chart on page 42). Our reduction efforts are focused on lowering emissions at the sources where they are generated. We are optimizing our incinerators, using improved technology and operational excellence.

By year-end 2003, our emissions had been reduced by more than 80 percent, which means that we have made significant progress toward meeting our voluntary dioxin air and water emission reduction goal for the year 2005.

You can learn more about our global and regional efforts to reduce dioxin emissions at our web site.

[www.dow.com/environment/dioxin](http://www.dow.com/environment/dioxin)

## Biotechnology

Biotechnology holds vast promise for meeting some of the world's most pressing needs. At the same time, important questions are being asked about this family of technologies as part of a broad public dialogue that includes individuals, organizations, companies, academia, and governments.

We understand that these questions and concerns need to be addressed both in the context of science and in light of biotechnology's unique philosophical and ethical implications. To this end, Dow is engaged in dialogue with external stakeholders. We value these relationships for the perspective they contribute, the guidance they offer, and the opportunity they present for understanding societal concerns. In consultation with external stakeholder groups, we developed and implemented The Dow Chemical Company Guiding Principles for Biotechnology to further direct our approach and actions. The Guiding Principles can be found on our web site.

[www.dowpublicreport.com](http://www.dowpublicreport.com)

At the same time, we are committed and prepared to develop biotechnology-based capabilities and biotechnology-enabled businesses in a scientifically sound and responsible manner. We align our activities with Responsible Care as well as Dow's Values, Code of Business Conduct, and Sustainable Development Principles. We are hopeful that by considering biotechnology in an open, informed, and transparent process, and combined with scientific understanding, stakeholders can approach common ground, and this new set of technological tools can deliver on its promise.

### Energy Diversity

Chemical manufacturing is an energy-intensive business. The cost of energy is a fundamental factor in the profitability of chemical companies, and the industry has historically been driven to find new and less expensive sources of energy to meet its needs. But today, the challenge of producing or acquiring affordable energy for our production facilities has become particularly daunting. This is especially true in light of our desire to utilize the “cleanest” possible energy resources from an environmental perspective.

In the current business climate, the high cost of energy and potential shortages of energy supply—coupled with the environmental impact of energy production and consumption—make development of a sustainable energy plan a business imperative. Aggressive, proactive energy conservation and development actions are called for as part of that plan.

Our recent history suggests that we will meet the challenge. Between 1990 and 1994, we reduced our energy use by 20 percent. We are currently on pace to meet our goal of reducing the amount of energy we use per pound of product by two percent per year from 1995 to 2005—in 2003 alone, we had a 2.9 percent improvement. You will find examples of several recent energy conservation successes on page 29 of this report.

We are also actively investigating new energy resources that reduce our dependence on limited, uncertain, or unsustainable sources of supply.

- In March 2003, Dow joined The World Resources Institute’s Green Power Market Development Group. The alliance creates new markets for renewable energy.
- Since 1994, nine new cogeneration facilities supplying power to Dow sites have saved over 23 trillion BTU’s (6,700 gigawatts) of energy annually. Additional new facilities are expected to increase the savings to almost 47 trillion BTU’s (13,200 gigawatts) per year by the end of 2005.



## Promoting Green Power

In March 2003, Dow joined The World Resources Institute’s Green Power Market Development Group. The alliance creates new markets for renewable energy. The ultimate goal is to expand the green power options so that companies can reduce their global impact.

Dow has a history of using more efficient power sources in its manufacturing. In fact, “Dow was an early champion of cogeneration of steam and electricity,” said Peter Molinaro, leader of Dow’s Global Climate Change Team. Being involved in the Green Power Market Development Group is one more way Dow lives its commitment to find, develop, and increase use of renewable energy.

[www.thegreenpowergroup.org](http://www.thegreenpowergroup.org)

### Asbestos

The Dow Chemical Company and Union Carbide Corporation (UCC) continue defending asbestos lawsuits. These lawsuits have arisen even though both companies complied with government regulations and industry standards that were in effect for regulating the safe use and handling of asbestos. Particularly noteworthy is the sheer volume of personal injury claims (experts estimate between 80 percent and 90 percent) filed by plaintiffs who have no current health effects. As a result, the court system is clogged, significant resources must be devoted to defending against these claims, and the claims of those people who have contracted specific asbestos-related diseases due to exposure are not being met fairly or in a timely manner.

The runaway asbestos litigation in the U.S. is having a huge economic impact on companies and individuals. Most of the major manufacturers of asbestos-containing products—to date, nearly 70 companies—are in bankruptcy. A recent study co-authored by Nobel prize-winning economist Joseph Stiglitz said U.S.

workers have borne up to \$3 billion of the costs of soaring asbestos claims that pushed their employers into bankruptcy. The asbestos bankruptcies have led to a loss of as many as 60,000 jobs and the costs imposed on these displaced workers amount to between \$1.4 billion and \$3 billion in present value, or roughly \$25,000 to \$50,000 per displaced worker. These bankruptcies also increase the focus on solvent, but more peripheral, companies that would otherwise not bear a significant portion of the litigation burden.

We believe that federal legislation is needed to ensure justice for all those concerned. A bill establishing a privately funded trust is presently pending in the Senate, and the Company has urged Congress to act on this measure in 2004.

### Bhopal

The tragedy that occurred in Bhopal more than 19 years ago should never be forgotten. Industry, including Dow, has learned from such events and we try to do all we can to assure that similar incidents never happen again.

After the Bhopal tragedy, several provisions were made by agreements between Union Carbide Corporation, Union Carbide India Limited and the government of India, under the supervision (and with the approval) of the Indian Supreme Court, for the current and future health needs of the community, including opening of a new \$90 million hospital, health insurance and a settlement fund, of

which \$333 million remains after virtually all claims have been processed, as a result of accrued interest over the years. Substantial environmental remediation occurred at the site after closure of the plant in 1984. The Indian state government of Madhya Pradesh unilaterally revoked the lease under which the company then called Eveready Industries India Ltd. (owned by MacLeod Russell since 1994) operated the plant and took exclusive possession of the plant site in 1998, stating that it would assume responsibility for the remaining cleanup of the site. At that time, government-sponsored studies showed no adverse impact from the plant site to the community's groundwater.

We respect that, for some people, responsibility for Bhopal continues to be an unresolved issue. This doesn't change the facts that the Government of India, through the Settlement agreement, has full authority and responsibility over issues arising from the tragedy and that, upon acquiring Union Carbide, Dow inherited no responsibility. Still, some people would have us take action to resolve their concerns. We do not believe such action would be appropriate or consistent with our obligation to protect our shareholders' interests.

[www.bhopal.com](http://www.bhopal.com) 

## Recognition

We target our EH&S goals and practice our Sustainable Development mindset to achieve business excellence. Recognition from government agencies, other experts, and our peers help to confirm that we are focusing on the right things.

While we will never be without our critics, our commitment to dialogue and transparency serves us well in continuing our progress.

During 2003, Dow and its affiliates received the following EH&S awards:

### **Responsible Care Sustained Excellence Award**

In 2003, the American Chemistry Council awarded Dow the Responsible Care Sustained Excellence Award for the second year in a row. Given annually, the award recognizes companies that have demonstrated excellent safety records over the past three years. To be eligible for the award, a company must perform in the top 10 percent of its peers and be fully implementing the Responsible Care Employee Health and Safety Code at all of its sites.

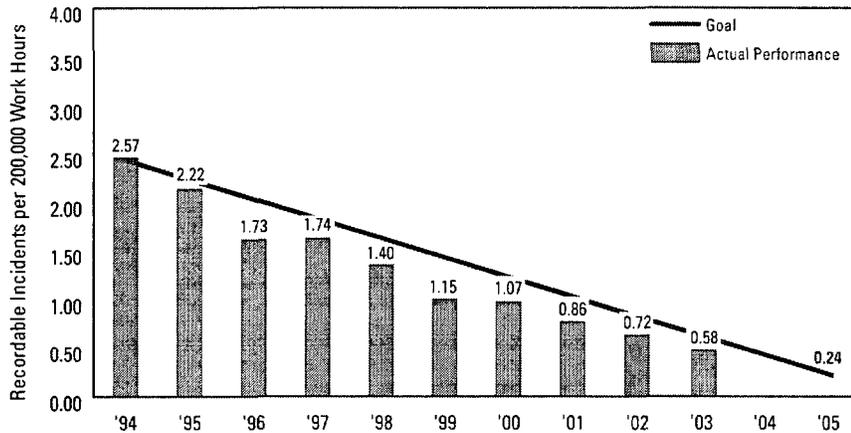
### **OSHA Star of Excellence**

The U.S. Occupational, Safety, and Health Administration (OSHA) recognized Dow "as one of the safest workplaces in the country." Seven of Dow's manufacturing sites have been certified or recertified as OSHA Voluntary Protection Program Star worksites. These sites—located in Russellville, Arkansas; Dalton, Georgia; Plaquemine, Louisiana; Ludington, Michigan; Greensboro, North Carolina; La Porte, Texas; and Freeport, Texas—were awarded the Star of Excellence, given only to sites that have achieved a safety performance 90 percent better than the national average within their industry during the past 12 months. Dow has a goal of 0.24 injuries or illnesses (per 200,000 work hours) for the entire organization, which is a 90 percent reduction from its 1994 rate of 2.57.

### **Cleaning Production Award**

The Dow Brazil Guarujá site has received the "Cleaning Production Award" from the State Environmental Agency of São Paulo (CETESB), as a result of an initiative regarding elimination of liquid effluents through a recycle methodology that took place in the Latex Plant. The removal of all hydrocarbon air emissions was accomplished by sending it to be burnt inside the existing boiler. Besides the production improvement, this new manner allows Dow Brazil a reduction of more than 5.5 thousand gallons per year of fresh water and enables additional steam production without fuel oil consumption.

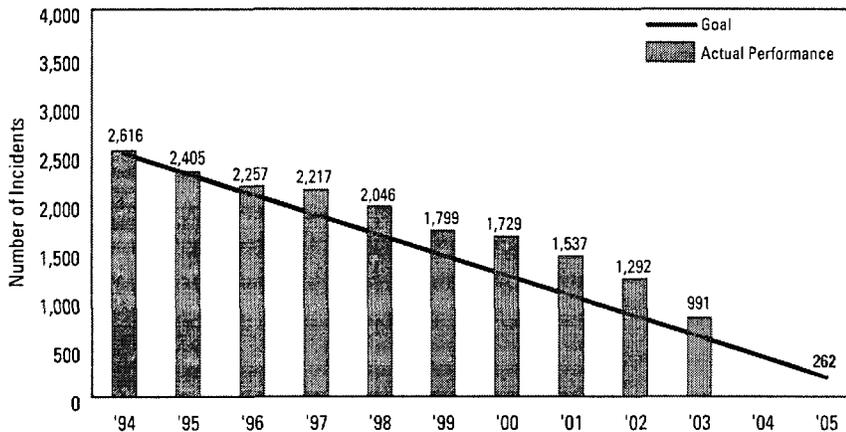
**Injury and Illness Rate, Dow Employees and Contractors—  
Goal: 90% Reduction**



In 2003, we realized a 19 percent improvement in our safety performance—including both Dow employees and contractors. We ended the year with our best-ever performance of a 0.58 recordable injury/illness rate, representing a 77 percent improvement since 1994. And over 70 percent of our facilities had no incidents at all.

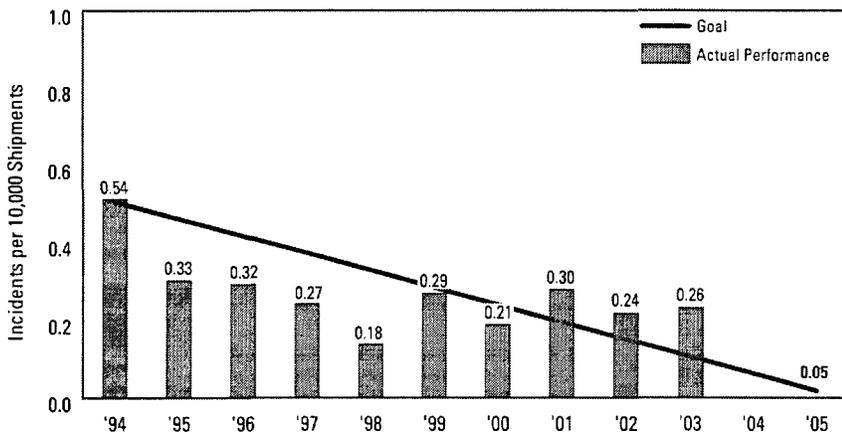
But it's not about numbers: it's about people. In January 2004, we achieved a significant milestone—10,000 people were NOT hurt as a result of our performance improvement since 1994. In other words, had we remained at our 1994 performance levels, that many more people would have been hurt.

**Leaks, Breaks, and Spills—Goal: 90% Reduction**



Continuing our focus on effective implementation of our LOPC (loss of primary containment) Reduction Initiative, we achieved a 23 percent reduction in leaks, breaks, and spills in 2003, our largest annual improvement ever. This measure includes loss of containment of materials, whether lost to the environment or captured in engineered containment systems. The goal focuses us on operational excellence—keeping materials where they are intended to be.

**Transportation Incidents—Goal: 90% Reduction**

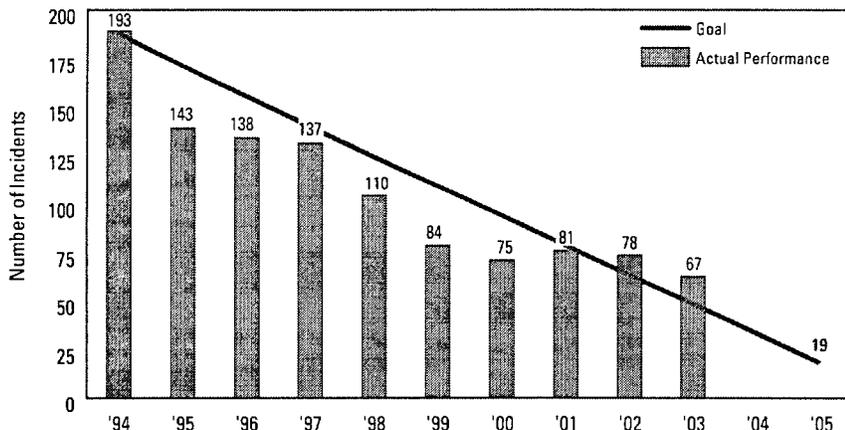


As part of this goal, we measure any incident during transportation of our products, whether or not any material was released. We continue to be challenged in making significant improvement. Our key focus is working with our contractor firms to promote best practices associated with behavior-based safety performance.

We also measure incidents involving the loss of hazardous material during transportation. We have achieved significant improvement—90 percent since 1994. We had four incidents in 2003.

Progress

**Process Safety Incidents—Goal: 90% Reduction**

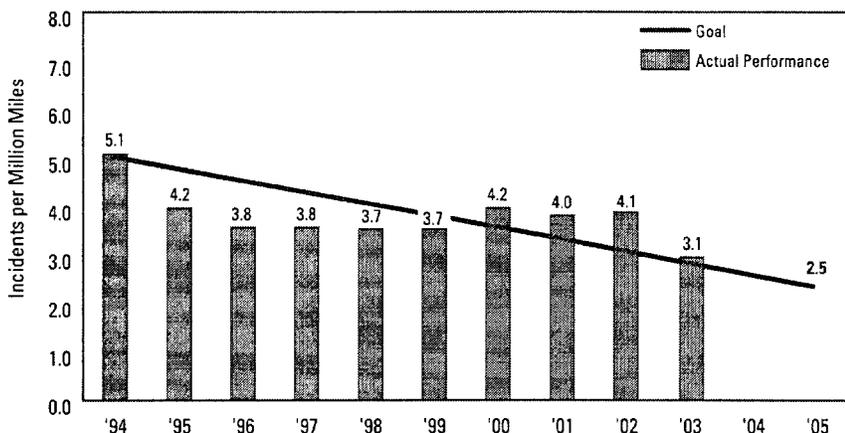


This goal tracks:

- Fires
- Explosions
- Chemical releases involving chemical processing equipment if they have resulted in a release above a defined threshold, a serious injury or fatality, or damages greater than \$25,000

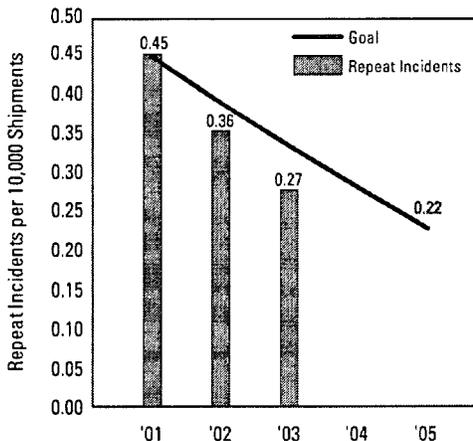
In 2003, we realized a 14 percent reduction in such incidents as compared to 2002, and since 1994, we have had a 65 percent reduction in these types of events.

**Motor Vehicle Incident Rate—Goal: 50% Reduction**



The motor vehicle measure is the number of vehicle accidents per million miles driven. These will range from minor fender benders that exceed a threshold dollar damage limit, to more serious accidents involving injuries. In 2003, we achieved our best ever performance in motor vehicle accidents, with a rate of 3.1. We are focusing on target groups such as Sales & Marketing, the use of Six Sigma methodology, and leveraging best practices to move us closer to achieving the 2005 goal.

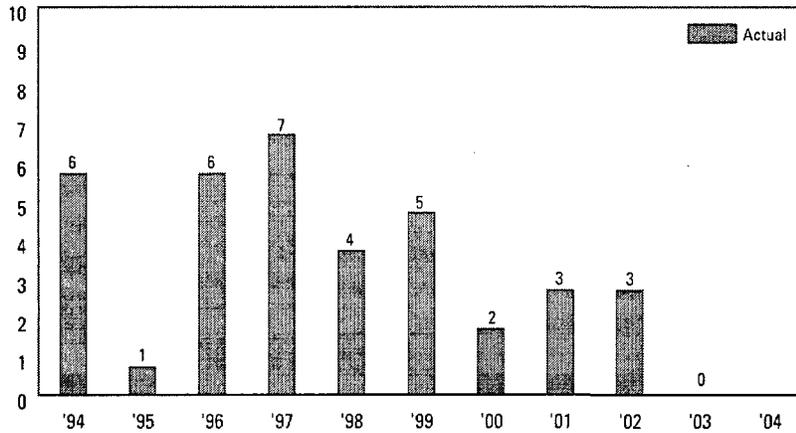
**Repeat Incidents at Customer Facilities—Goal: 50% Reduction**



This measure is the number of repeat incidents at our customer facilities per 10,000 shipments. The objective is to learn from the mistakes and assure actions are identified and implemented so that a repeat incident is prevented. The baseline and 2005 target were established in 2001, with the goal being a 50 percent reduction by the end of 2005. Since 2001, we have improved performance by 40 percent, well on our way to achieving the 2005 goal.

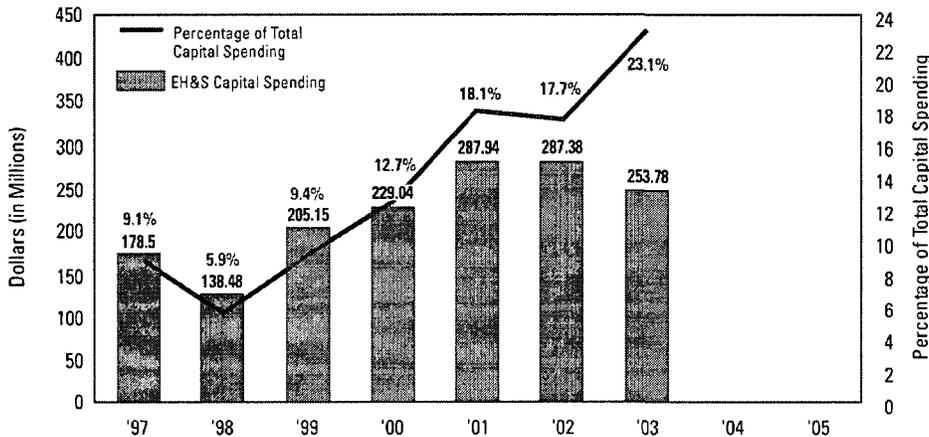
Progress

**Fatalities—Dow Employees and Contractors**



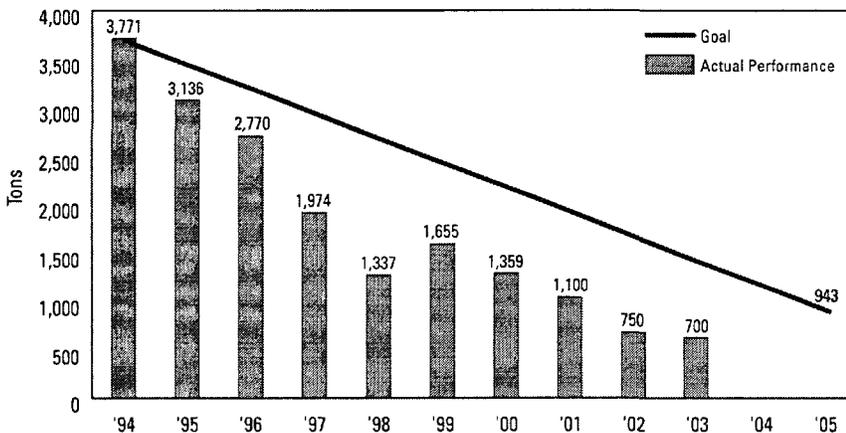
We had no employee or contractor fatalities in 2003. We continue to focus on safety, reporting and addressing the minor incidents to help assure we avoid the serious ones. In 2003, greater than 80 percent of employees' visits to Dow medical were either first aid or precautionary visits. Our goal is for every worker at Dow to go home safely every day.

**EH&S Capital Spending—Percentage of Total Capital Spending**



Another measure of a company's EH&S performance is by examining the amount of capital expenditures for EH&S projects relative to total capital expenditures. Even with Dow's commitment to reduce capital spending in 2003 by \$500 million, the percentage of spending on EH&S projects actually increased last year. And, though our action plan called for us to reduce costs, we will not compromise the reliability, safety, and security of our plants or the people who work there. Capital projects last year focused on air, water, safety, loss prevention and security enhancements.

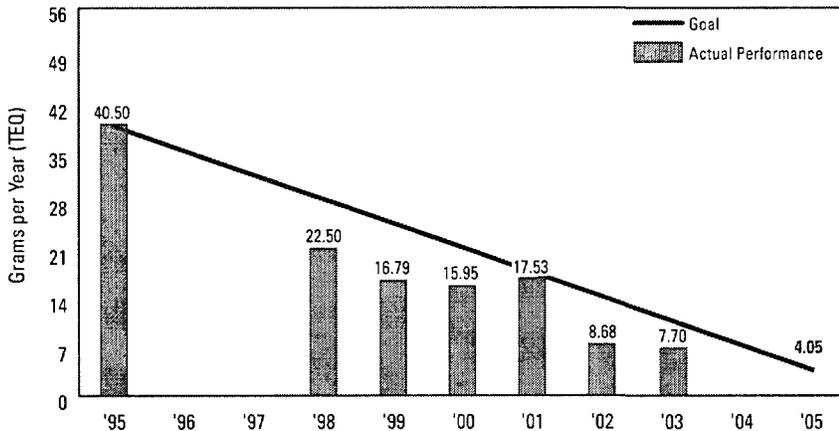
**Emissions of Priority Compounds—Goal: 75% Reduction**



We have reduced our emissions of priority compounds by 81 percent since 1994. Even though we have already achieved our goal, we are committed to continue our efforts to meet the challenge of maintaining our emission reductions while increasing production.

**Progress**

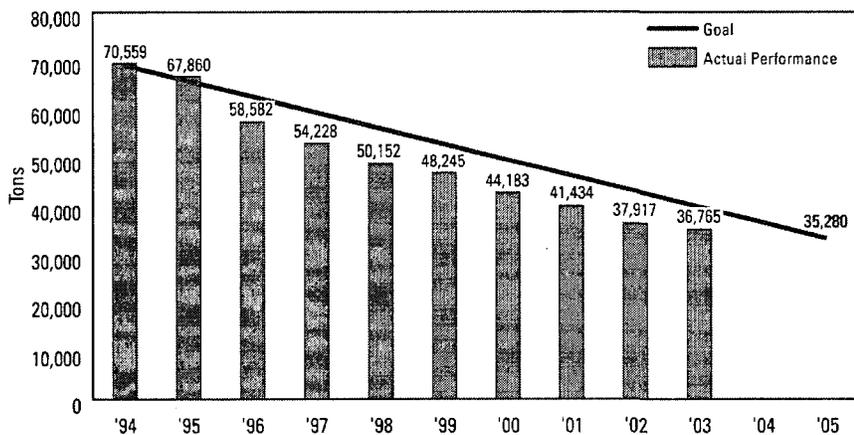
**Dioxin Emissions to Air and Water—Goal: 90% Reduction**



In 2003, Dow made significant progress on our dioxin reduction goal with total dioxin air and water emissions at less than eight grams globally. We are well on our way to achieving our objective, with over 80 percent of our targeted goal accomplished.

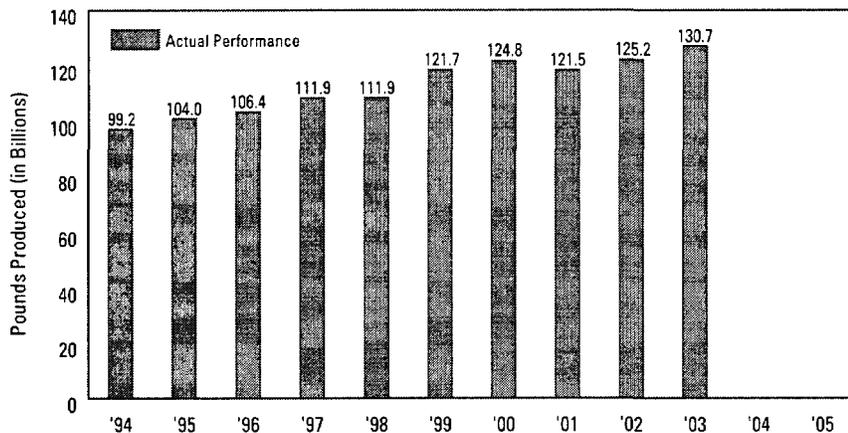
Note: In 1996 and 1997, no data are shown in the chart. This is due to the fact that Dow used monitoring data generated from 1995 through 1997 to document and establish its 1995 air and water emissions baseline.

**Chemical Emissions—Goal: 50% Reduction**



We are continuing to exceed our goal for reducing our chemical emissions and have achieved an overall reduction of 48 percent since 1994. We have achieved these reductions while increasing production by 32 percent during the same time period. This means that we not only reduced our existing emissions, but have implemented technology that allowed production growth without increasing emissions.

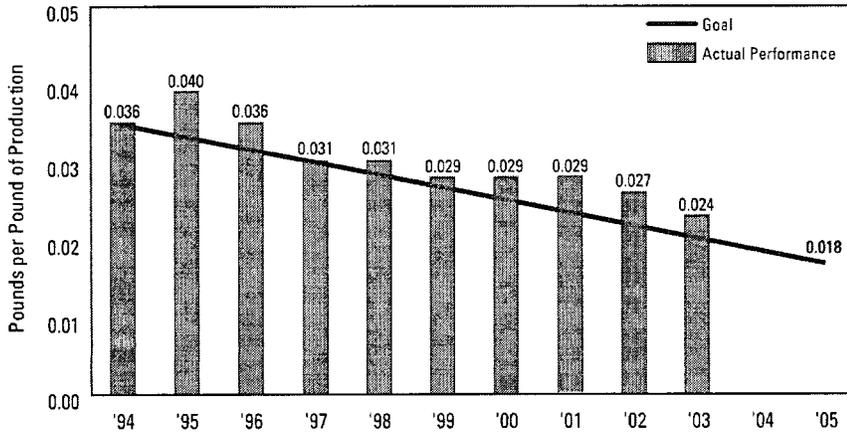
**Global Production**



Dow's global production increased 4.4 percent during 2003 for an overall growth of 32 percent since 1994. Our historic production data takes into account any divestitures, mergers, and acquisitions and may change to reflect those activities. Our energy use, waste, and wastewater goals are calculated as a percentage of global production.

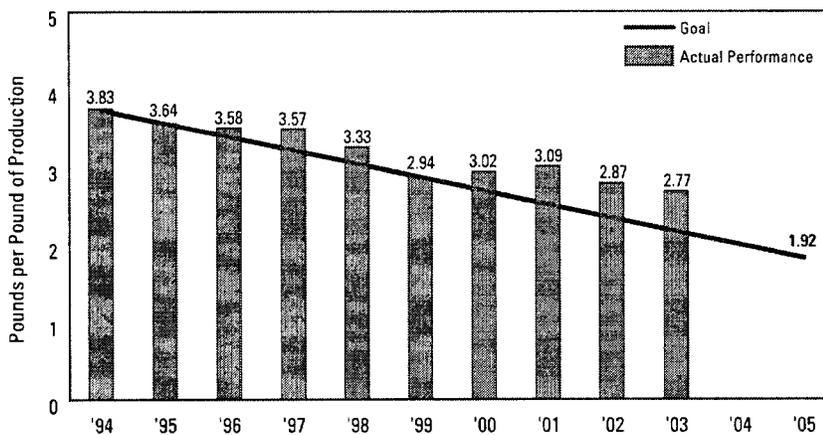
**Progress**

**Waste—Goal: 50% Reduction per Pound of Production**



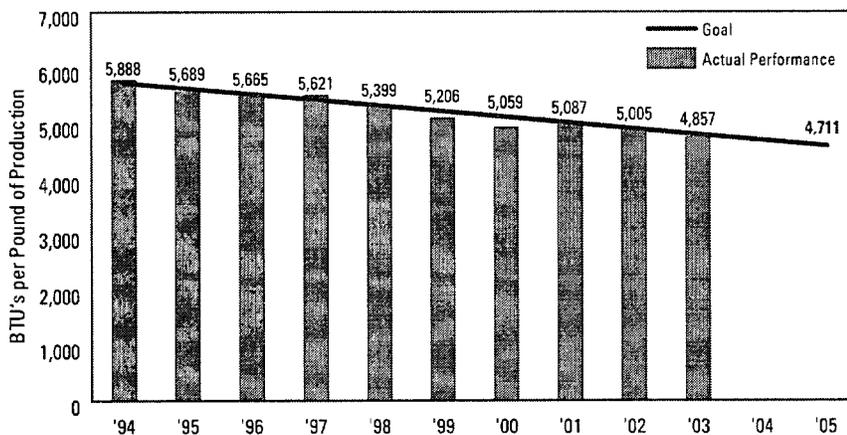
Wastes are materials that receive treatment. Our current focus is to find by-product synergies that allow waste to be used or recycled as useful products or raw materials. In addition, our Company-sponsored Waste Reduction Always Pays (WRAP) program contributed to over 500 million pounds in waste reduction since it was started. We are slightly above our target for this particular goal, but we are continuing to make good progress in reducing waste at the source or finding ways to recycle or reuse it.

**Wastewater—Goal: 50% Reduction per Pound of Production**



Wastewater is aqueous streams that receive treatment before discharge. Most of our process wastewater is treated in our facilities with only seven percent treated off-site. Our primary objective is to eliminate wastewater at the source, but we have also focused on activities to recycle wastewater when feasible. We are currently above our goal line for wastewater reductions, but are committed to continue our source reduction and recycle efforts to reduce fresh water consumption. These activities also support our commitment to work jointly with the public to share and better utilize our water resources.

**Energy Use—Goal: 20% Reduction per Pound of Production**

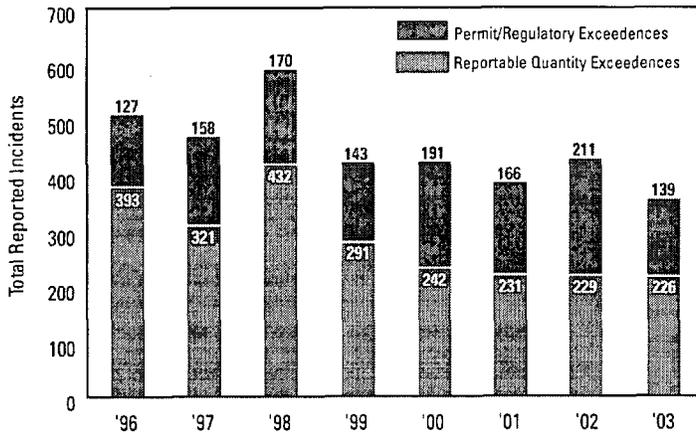


Our energy focus is on energy intensity—reducing the amount of energy needed to produce a pound of product by two percent per year from 1995–2005. This is in addition to a 20 percent improvement from 1990–1994.

There was an improvement in energy intensity of approximately 2.9 percent in 2003 compared to 2002. Improved operating rates and the contribution of over 200 Six Sigma energy efficiency projects in 2003 were major factors in the improvement. Overall energy intensity has improved 17 percent since 1994.

Progress

**Government Reportables**

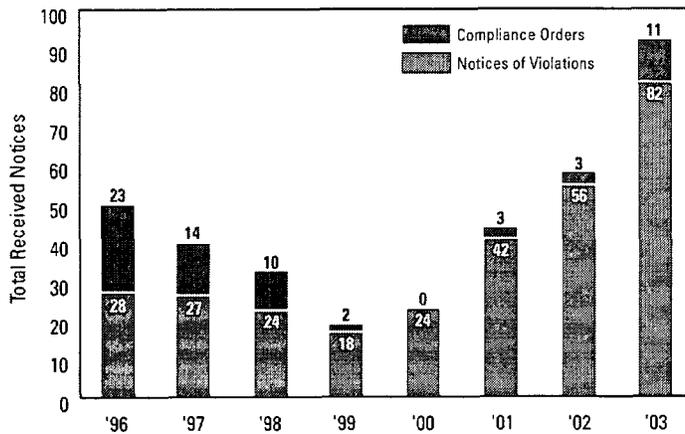


Government reportables are those incidents that are reported to government agencies, both voluntarily and required. They represent either spills or releases that exceed reportable quantities established by the government, or incidents that exceed our permit level.

In 2003, we reported a total of 226 reportable quantity exceedences and 139 permit/regulatory exceedences worldwide.

Government reportables are primarily triggered by loss of primary containment (LOPC) incidents and permit exceedences. As we have been successful at reducing our overall LOPC numbers, we are optimistic that an LOPC reduction initiative at just a few of our facilities will turn this performance around. Our approach to improvement includes not only reliance upon the LOPC initiative at targeted sites, but continued focus on assuring permit requirements are institutionalized in our management system and effective implementation of our improvement tools in that system.

**Notices of Violation and Compliance Orders**



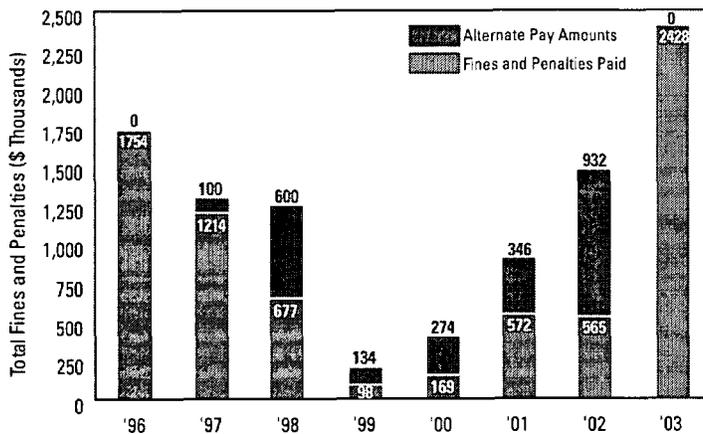
The number of notices of violation increased from 56 to 82 in 2003. The majority of these violations occurred within our North American operations. There is an overlap between government reportables and notices of violation (NOV's) and compliance orders. Government reportables typically use a self-reporting mechanism to commence their enforcement actions.

Compliance orders are issued by the government setting out the conditions a facility must meet to continue operation. In 2003, we had eight more compliance orders than in 2002.

NOV's also are primarily triggered by LOPC's. To improve this performance, we again are relying upon our LOPC reduction initiative applied at specific sites, which are currently experiencing the most difficulty in this area.

The use of NOV's and compliance orders are a reflection not only of our performance, but the enforcement culture of the governmental entities in authority.

**Fines and Penalties**

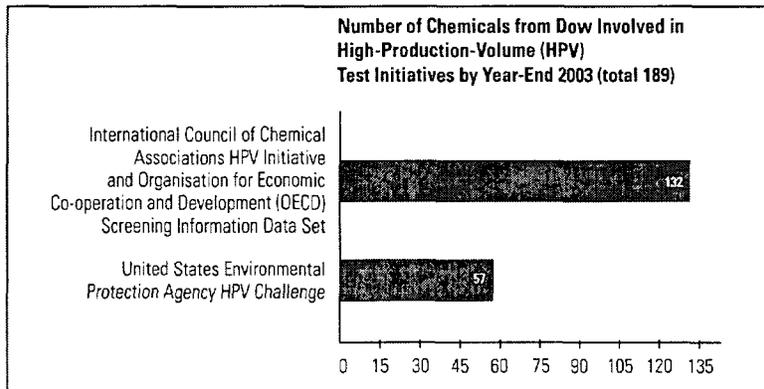


Fines and penalties are tracked globally and are recorded in the year they are paid. In lieu of paying a fine or penalty, alternate pay amounts usually encompass projects benefiting the environment or local community, such as pollution prevention or remediation programs, public awareness, education activities, or wetland conservation activities. Fines and penalties are troubling not only because they indicate government-mandated performance, but also because they require cash outlays at the same time we are so focused on cost containment within the Company.

In 2003, Dow paid \$2,428,070 in fines and penalties. One North American facility accounted for 92 percent of the fines. Because fines and penalties are again a lagging indicator, we expect that our recent improvement in LOPC performance will begin to reflect the progress that we have made.

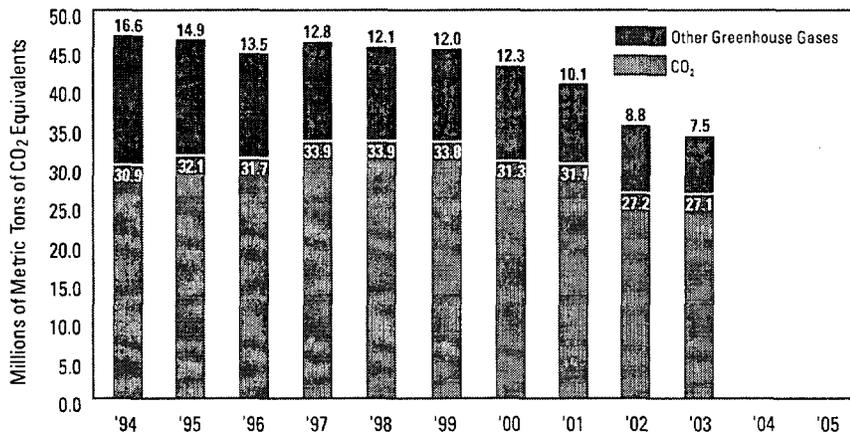
Progress

### High-Production-Volume Test Initiatives



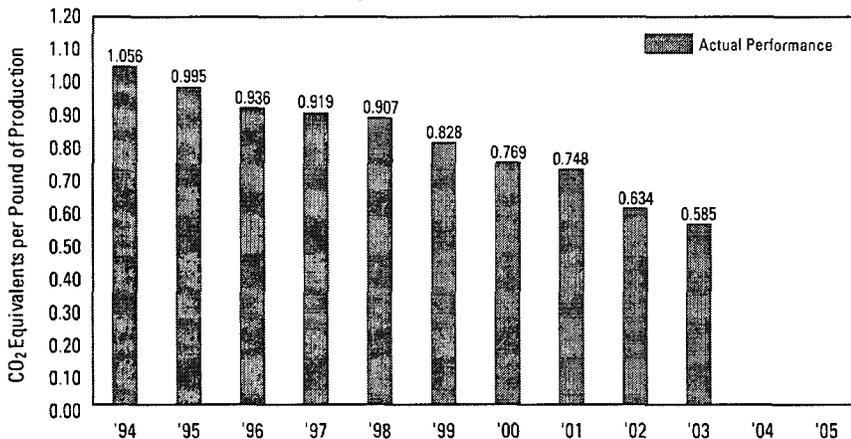
Dow actively participates in three international initiatives aimed at improving the quantity and availability of health and environmental information on High-Production-Volume (HPV) chemicals, contributing existing data as well as generating new test data, when appropriate. Improving public access to knowledge about these chemicals is a shared responsibility of the chemical industry. Dow is the sole volunteer for 33 of the chemicals and via participation in consortia is a cosponsor for the remainder. The time frame for these programs is 2000–2004. These numbers may change as a result of various business activities, including possible future business acquisitions or divestitures. We are currently on track to meet our commitments.

### Greenhouse Gas Emissions



Carbon dioxide (CO<sub>2</sub>) makes up the majority of our greenhouse gas (GHG) emissions. While production increased by 32 percent since 1994, our total direct emissions of GHG from our operations, measured in CO<sub>2</sub> equivalents, have been successfully reduced by 27 percent. We have achieved this by improving energy efficiency and conversion to more climate-friendly technologies. We remain committed to reduce our impact on GHG emissions.

### Greenhouse Gas Intensity



Dow's principal means of measuring progress on climate change is by improving greenhouse gas intensity—a measurement of direct GHG emissions per unit of production. While Dow has not yet set a specific numeric GHG reduction goal, our program to reduce the amount of energy used per unit of production by two percent per year from 1995 to 2005 continues to drive improvements in GHG intensity. An eight percent reduction of emission intensity was achieved in 2003 versus 2002, resulting in an overall reduction of 45 percent since the 1994 base year. We have achieved this through improvements in energy efficiency, and implementation of climate friendly technologies.

Progress

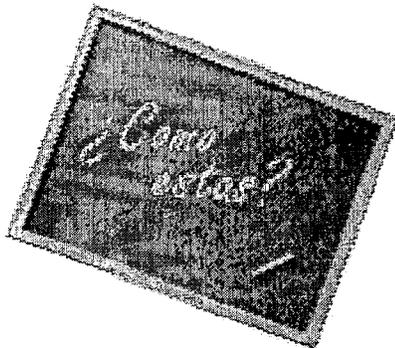


# Corporate Social Responsibility

Our commitment to social responsibility extends around the globe—first, to Dow employees and our neighbors in the communities where we operate. As they have a direct relationship with our Company, it stands to reason that they are the priority focus of our social responsibility policy and practice.

Dow employees—and the knowledge they possess—comprise one of our Company's most valuable assets. Our employees make invention and innovation possible, which is to say they breathe life into our Company, continuously renewing our science and technology. To

perform effectively, Dow employees need to know what to do, they need to know how to do it, and they have to want to do it. That is why Dow's "People Strategy" is so important. This strategy addresses all facets of our relationship with our employees. It helps us to attract and retain outstanding professionals, provide them with continuous learning, encourage performance excellence, achieve diversity, and develop leaders at all levels.



## ¿Como estas?

Dow has always had a tradition of helping employees learn other languages when it is important for their jobs; whether it is helping new employees who are not native English speakers to learn English or helping expatriate employees and their families to learn local languages so that they can better integrate with their new neighbors. Now, Dow is helping to provide free Spanish classes for employees in Michigan, Louisiana, and New Jersey. Dow's Hispanic-Latin Network (HLN) sponsors the classes. The HLN hopes classes will help strengthen ties between native and non-native Spanish speakers both at Dow and in communities around Dow sites.

Classes are free to participants and the teachers are Dow employees who are Spanish native speakers and volunteer their time to prepare and teach. A total of eight classes were conducted in 2003. The 170 students have been from the U.S., Europe, and Asia and include employees from all functions and job levels.

Maintaining strong relationships with our communities is also a priority and is covered by Dow social responsibility policies. Dow communities tend to be smaller in size and our corporate presence is often very significant. We interact closely with local businesses, governments, community groups, and individuals both collectively as Dow and individually as members of the community.

To ensure that our local operations reflect our global commitment to the Triple Bottom Line, we pursue community sustainability at each of our operating sites. There is no universal prescription to achieve the sustainability "ideal" in every community. However, by maintaining ongoing dialogue with community members, we are learning how we can best contribute to improved quality-of-life in each community where we operate.

### People Strategy

Over the past few years, the Dow management team underscored the critical importance of managing the Company's "human capital"—Dow people's knowledge—by introducing a comprehensive "People Strategy." Virtually every aspect of how Dow affects the employee's work experience has been reexamined and, where necessary, restructured. This includes Dow's ability to attract and retain outstanding professionals, provide them with continuous learning, encourage performance excellence, achieve diversity, and develop leaders at all levels.

The strategy uses valuable input from the regularly conducted Global Employee Opinion and Action Survey (GEOAS), an instrument that is also used for tracking progress in this vital area. The confidential survey encourages employees to give candid responses in three basic categories:

**Alignment**—Do you know how your work fits into Dow's overall Mission? Do you know what to do?

**Enablement**—Do you have the competencies, freedom, and resources to get your work done? Do you know how to do it?

**Motivation**—Do you want to do it?

While no specific individuals are identified, the survey data is used by the leadership teams of every business and function to manage their employees and improve employee satisfaction.

Please refer to page 58 at the end of this section to see GEOAS results.

In 2003, as part of our commitment to employee development, Dow employees completed more than 300,000 hours of Human Resource Development (HRD) classroom training involving general core competencies and about 400,000 other courses via web-based learning. In addition, there is a significant amount of specific expertise training (such as manufacturing and operations training) that is not currently included in these figures.

We also strive to have a workforce that reflects our global marketplace and culture, where different backgrounds, personal styles, and viewpoints are considered competitive assets. The number of female managers increased to 16 percent from 15 percent in 2002, and up from 11 percent in 1998.

Please refer to pages 57–58 at the end of this section to view our 2003 workplace and training statistics.

### **Employee Health Programs and Services**

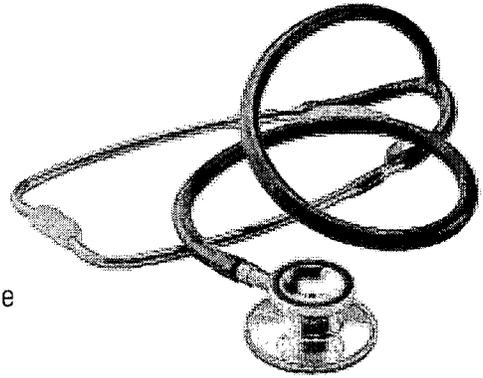
Dow continues to take a broad approach to employee health focusing on five different aspects related to an understanding of health.

- **Physical** health involves exercise, proper nutrition, rest, and relaxation.
- **Social** health is about meaningful relationships, working effectively with others, and feeling good about social networks.
- **Inspirational** health or spiritual health influences us to behave with passion, empathy, humility, and leads to empowerment.
- **Intellectual** health refers to both acquiring knowledge and using that knowledge to improve the quality of life.
- **Emotional** health addresses the pressures in a person's life, how one reacts to those pressures, and the ability to relax.

These five aspects of health are distinct but integrated. In the same way that health means different things to different people, these different aspects will have varying degrees of impact and significance for individual employees. Dow's focus on all five aspects is known as Total Health. The Total Health approach recognizes that any strategy for dealing with employee health issues must take all five aspects into account, as employees are the primary source of most competitive advantage.

#### ***Employee Assistance Plans***

Dow recognizes that taking care of business means taking care of the needs and well-being of the individuals who make up our organization. The Employee Assistance Program (EAP) is a global model that provides a comprehensive approach to address both human and organizational needs. Dow's EAP provides professional, confidential services for all employees and family members. EAP services include assessment, short-term counseling, referrals, and consultation. EAP covers a variety of problems that may affect employee well-being, such as emotional disorders, alcohol and drug abuse, marital, family and adolescent problems, and financial crises.



#### ***Walk-A-Weigh***

In terms of physical health, Dow used a walking program to stimulate employees and family members around the world to improve their fitness and reach a healthier weight. The program was offered in 23 countries and nine languages and had over 5,000 participants. Using online registration and communications, Walk-A-Weigh featured a nautical theme to emphasize the importance of physical activity and weight management, and taught skills and techniques to improve both. Of the people who reported their program results, over two-thirds were more active at the end of the program and had lost a combined 4,300 kilograms or 9,460 pounds in 2003.



## Better Cancer Treatment

ChelaMed radiopharmaceutical services from DOWPHARMA help drug companies develop better diagnosis and treatment methods for cancer patients. Custom-made radiopharmaceutical agents travel through the body and target the organ, tissue, or tumor that doctors wish to look at or treat. For diagnosis, a special camera is used to detect a mild agent as it lights up a problem area. For treatment, a stronger agent can be carried directly to the cancer site, generally with fewer side effects compared with other types of treatment.

To date, we have worked with Memorial Sloan-Kettering Cancer Center, Barnes Jewish Hospital, and others to develop radiopharmaceuticals. The team is now working with drug development companies on new treatments for a variety of cancers. For example, in 2003, we began working with Avidex Limited on a new treatment for lung and bladder cancer.

[www.chelamed.com](http://www.chelamed.com)

### **External Recognition**

During 2003 Dow received the following external awards and recognition for employee health programs and services:

#### **Bronze H.E.A.L.T.H. Award— Singapore**

In Singapore, Dow Chemical Pacific (Singapore) Pte Ltd. received a bronze H.E.A.L.T.H. (Helping Employees Achieve Life-Time Health) Award from the Singapore Government. The Singapore H.E.A.L.T.H. Award is an annual program organized by the Health Promotion Board to give national recognition to organizations with commendable workplace health promotion activities. Awarded by the Ministry of Health, the award is a national barometer of companies that organize programs to address the physical, emotional, and mental well-being of their employees. This is the fifth consecutive year that Dow Singapore has won a H.E.A.L.T.H. Award. In 1999 and 2003, it won the bronze award; and in 2000, 2001, and 2002, it won the silver award.

#### **Five Stars Companies (by COFIC)—Brazil**

For the third year, Dow Brazil Northeast sites were awarded as Five Stars Companies by COFIC for their occupational health and health promotion programs. Participating for the first time, Aratu's CELLOSIZÉ site was awarded with Four Stars. This award is promoted by Camaçari Industrial Committee to recognize industrial chemical plants that have outstanding programs in the area of EH&S.

#### **Gold Well Workplace— West Virginia Operations (U.S.)**

The West Virginia Operations (WVO) of Union Carbide Corporation was granted Gold Well Workplace status by the Wellness Council of America and the West Virginia Wellness Council. The award was presented in October at the annual West Virginia Governor's Conference on Worksite Wellness. There were only six recipients of the Gold Award in West Virginia and the smoking cessation program at WVO also merited a Certificate of Recognition.

**Sarnia-Lambton Healthy Workplace Award—Sarnia, Canada**

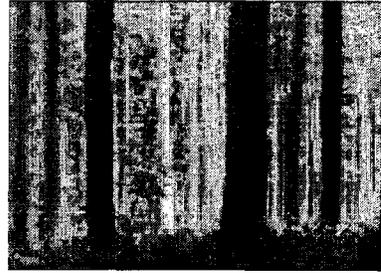
On October 28, Dow Chemical Canada Inc. (Dow Canada) was awarded the Sarnia-Lambton Healthy Workplace Award, Gold Prize Large Workplace Category for the third consecutive year. This award was established to recognize workplaces in Lambton County that strive to improve the well-being of their employees. Dow Canada was recognized for making workplace wellness a priority for over 25 years, making workplace health a part of the culture, and using a comprehensive approach that includes awareness raising and skill building activities. In addition, Dow Canada's program was praised for demonstrating excellence in leadership, planning, people focus, and evaluation and using programming to address the physical environment, the psychosocial environment, and personal health practices. Another highlight was that Dow Canada's health promotion program is not only supported by management but operates within a management system, thus recognizing the importance of creating positive role models for their employees.

**ACOEM Health Achievement Award in Occupational Medicine**

Dr. Catherine M. Baase, Dow's Global Director of Health Services, received the 2003 Health Achievement Award in Occupational Medicine awarded by the American College of Occupational and Environmental Medicine (ACOEM). The award recognizes an ACOEM member for unique contributions in occupational and environmental medicine. Dr. Baase was honored for conducting research and developing programs on health and human productivity at Dow, and for her achievements as a member of ACOEM's Special Committee on Health and Productivity. ACOEM is an international medical society of more than 6,000 occupational and environmental physicians and health professionals.

**American Board of Occupational Health Nurses Employer Recognition Award**

Recognizing Dow's ongoing commitment to providing opportunities for personal and professional growth, the American Board of Occupational Health Nurses (ABOHN) bestowed its Employer Recognition Award to the Company. The Award underscores the value that Dow places upon certification in occupational health nursing. The Board took note of the enhanced job responsibilities, project management assignments, external association support, and certification encouragement in making its decision.



**THERMAX  
Helps Use the Sun  
for Cooking**

In 2003, Dow donated enough of its THERMAX insulating foam to the Solar Oven Society to build 6,000 solar ovens. THERMAX insulating foam is generally used to keep warm or cool air inside buildings. But THERMAX insulating foam works so well that it can also be used in small ovens that need only heat from the sun for cooking meals. With a solar oven, people in developing countries can cook, bake, or boil water. Without a solar oven, these people would have to use fires to prepare meals.

The United Nations estimates there are 2.5 billion people who use fires to cook. These same people have to spend as many as 40 hours a week to gather firewood. If there is no wood, they have to spend money to buy fuel. Sometimes, they spend as much money on fuel as they do for their food. Plus, fires present many hazards. Smoke from fires is bad for the lungs of the people who must use them. Smoke and other gases from fires contribute to climate change. A solar oven helps prevent these problems and helps deliver healthier meals and safer water.

This is an example of an existing Dow product in a sustainable application.

[www.styrofoam.com](http://www.styrofoam.com)  
[www.solarovens.org](http://www.solarovens.org)

### **Global People Policies**

One of the more difficult dilemmas facing global companies is the task of attempting to “level the playing field” for all employees regardless of local economic conditions, traditions, and cultural biases. Dow has taken a proactive approach to this challenge by adopting and implementing a set of 13 global people policies. The latest addition is the new Labor/Human Rights Policy Statement, which affirms our belief that “respect for the dignity, rights, and ambitions of all people is a cornerstone of business excellence in the 21st century.” The policy statement also specifies that Dow “recognizes and respects all labor and employment laws—including those respecting freedom of association, privacy, and equal employment opportunity—wherever it operates.” Additionally in 2003, we developed a separate standard on child labor and updated our Code of Business Conduct to reflect the various changes in policies over the last several years. The Code of Business Conduct applies to all employees, officers, and directors.

### **Sound Corporate Governance at Dow**

Dow has endorsed sound corporate governance practices for many years. But what does this mean to our stockholders and other constituents?

*Good governance practices instill confidence in the Company and provide assurance that its financial statements are reliable, that transactions have been conducted without conflicts of interest, and that disclosures provide appropriate transparency. Good governance depends upon the quality and independence of Directors who fully meet their responsibilities to the Company’s stockholders. Directors come well-prepared to the Board and Board Committee meetings and participate in an active and constructive way, with no reluctance to ask the tough questions.*

The two other key players in good governance at Dow are the independent auditors and the Company’s management. Both of these groups have responsibilities that are met with competence and integrity.

These are the fundamentals of corporate governance at Dow. While recent regulatory initiatives such as the Sarbanes-Oxley Act of 2002 and CEO/CFO certifications of financial statements have added new procedures, the basic underlying approach to doing business in an honest and straightforward way remains the same.

*In 2003, the Board elected Harold T. Shapiro as Presiding Director, instituted new Corporate Governance Guidelines, adopted and disclosed Committee Charters for each standing Board Committee, launched a corporate governance web site with a link to email the Board, and decided to recommend to stockholders that the Company return to annual election of all Directors.*

## Ethics and Compliance

In July 2003, Dow updated its Code of Business Conduct (the "Code"). It was adopted by the Board of Directors, translated into 14 languages and published on our web site at:

[www.dow.com/about/aboutdow/code\\_conduct/ethics\\_conduct.htm](http://www.dow.com/about/aboutdow/code_conduct/ethics_conduct.htm)

The Code not only explains Dow's policies on complying with the law and what we expect of our employees, officers, and directors, but also now includes question-and-answer sections that use everyday scenarios to help further clarify the intent of the policies.

Dow's Office of Global Ethics and Compliance and regional and subsidiary Ethics and Compliance Committees oversee the implementation of the Company's ethics and compliance program. In 2003, Dow expanded its ethics training effort to ensure all employees globally understand their obligations under the Code. The training is available in 14 languages and will continue through 2004 until all employees have been trained.

Dow continues to encourage employees and others to report suspected violations of the Code and, in 2003, Dow enhanced and standardized its global internal process for reviewing and investigating such reports.

To make a report, employees or others can contact the Office of Global Ethics and Compliance or call the Dow EthicsLine, a globally accessible toll-free help line available 24 hours a day, seven days a week. The Dow EthicsLine is operated by an independent company and staffed by trained communications specialists whose only interest is listening to and reporting questions or concerns. Callers may contact the Dow EthicsLine, anonymously if they prefer, to ask questions and receive information, to seek guidance on a particular situation, or to report suspected violations of law or the Code.



## Clean Mangrove Program

The objective of this program is to protect the existing mangrove area inside the Dow property in Guarujá, Brazil. This is a long-term initiative focusing on promoting the awareness of the neighboring communities and minimizing the impact of urban occupation without harming this ecosystem.

The project has as its base the vision that Sustainable Development and the preservation of natural resources are conjunct responsibilities of all the segments of society. Therefore the "Projeto Mangue Limpo" (Clean Mangrove Project) has the objective of conserving the area as a natural resource and the continued commitment with environmental protection.

This initiative is developed along with a partnership with a local university and Guarujá CAP.

## Community Relations

In 2003, we continued our highly successful community relations programs. We did this by working on community sustainability at our operating sites around the world. As we try to further understand our role in 21st century society, we've conducted additional research on community leaders' priorities in improving the quality of life in their areas. Typical community priorities are: education, employment, energy, environment, and health.

We've also found that other quality-of-life priorities are highlighted, including community development, public safety, and cultural and recreational resources. These topics are increasingly being discussed in the meetings between site leaders and the Community Advisory Panels (CAPs). There are CAPs in place at 36 of our manufacturing sites around the world. These regular meetings provide local Dow leaders with vital feedback about the opinions of our neighbors during the development phase of local policies. In 2003, a global process was initiated to reinvest in our CAPs by capturing relevant experience and developing recommendations for change aimed at increasing effectiveness.

## Favorability Scores

In previous Public Reports, we have reported on surveys we regularly conduct to assess how we are perceived in the communities in which we operate. For each location, we set challenging targets based on the size of the site and our relative impact on that community. For example, in our major locations we want at least 80 percent of the residents to agree that Dow is a good neighbor and a valuable member of the community. In the last six years, 38 surveys have been conducted in Dow communities, all showing very good results.

Except for a few locations, perception surveys were suspended globally in 2003 as a temporary measure to improve our cash flow. However, we continue to apply what we have learned in past surveys, working with community leaders to participate in and fund projects that improve community quality of life. A limited number of surveys will be completed in 2004.

Please refer to page 59 at the end of this section to view the public favorability scores for Dow sites.

## Being Heard by Policy Makers

The United States is the only country in which corporations, labor unions, and other interest groups may legally participate in the political process through financial contributions. Dow and its employees play a relatively small but very important role in various advocacy programs.



## Treated Water Sustains A Better Life

Dow science helped turn the drought stricken village of Poleiros, Brazil, into an oasis. Using FILMTEC reverse osmosis membranes, the village purifies brackish well water making it fit to drink and to irrigate crops.

But the story does not stop there. Mineralized water is left over after the treatment process. The people have found a way to use this water to create a new source of food and income. In one of the most arid parts of Brazil, they have begun shrimp and fish farming for food and profit.

The rest of the wastewater is used to farm coconuts, avocados, mangos, passion fruit, and atriplex from Australia. Atriplex produces a food crop rich in vitamin A. People, goats, chickens, even fish and shrimp all benefit from atriplex cultivation.

[www.filmtec.com](http://www.filmtec.com)

Dow employees are empowered to participate in the political process through voluntary membership in company-sponsored political action committees in addition to grassroots advocacy initiatives. In 2003, Dow contributed \$133,750 in support of state candidates, and employee PACs contributed \$62,750 to state and federal candidates.

### Contributions

Dow's Corporate Contributions Committee implemented a global plan that not only ties contributions made to non-profit organizations more closely to Dow's Mission, it also strengthens existing networks and processes relating to how and where we give money. The plan, using a Sustainable Development framework, was developed in response to what the Committee felt are "stretched" expectations of global companies to be more accountable for improving quality of life where they have a presence, while, at the same time, assuring business success. Five geographic contributions committees now oversee Dow's global plan to significantly improve global reach, spending oversight, employee involvement in decision-making, and public awareness.

Unfortunately, because of our need for financial frugality in 2003, we felt that we had to reduce donation funding to a "maintain" level. This required working closely with non-profits on timing of payments. Rather than across-the-board decreases, spending was maintained at 2002 levels for those non-profits that demonstrated excellence in meeting community needs. The reductions were accomplished by not making new commitments and not extending or replacing commitments that were completed. Emphasis on personal outreach and alliances with community groups has helped stretch scarce funding. By the end of the year, all commitments were met. We did not extend any commitments as we had in 2002.

Please refer to page 58 at the end of this section to view donations per region.

An internal Company audit identified the need for a number of improvements relating to how we process and report donations spending. As an example, for the first time, donations were tracked in an accounting system using the Triple Bottom Line this year. We also made good progress in meeting our goal to give fewer donations but in larger amounts.

Here are some examples of Dow donations in 2003:

### Canada

- Recognizing the City of Fort Saskatchewan's 100th Anniversary and Dow's 40-year history in the community, the Company has donated \$670,000 and enough STYROFOAM insulation to help build a community recreation and cultural center. The facility will be named the Dow Centennial Center when it opens in 2004.
- As part of Dow's commitment to Sustainable Development, the Company supports Ducks Unlimited's mission to protect and preserve habitat and build awareness and understanding of the importance of wetlands to biodiversity. Dow will contribute \$500,000 (Canadian) over three years (2003–2005). To date, two wetland projects have been identified—the Stewart property near Sarnia and the West River's Edge urban wetland in Fort Saskatchewan. Additional projects are currently being evaluated using selection criteria developed jointly by Dow and Ducks Unlimited, reflecting a partnership approach to environmental protection and conservation.



## Partners for **Science**

Science grades are on the rise in Alberta Canada's Elk Island School Districts thanks to the Dow-funded Partners for Science program's hands-on learning approach. After a study of 10 years' worth of data, Elk Island confirmed a direct link between the learning method and superior academic performance in science. Under the program, students' overall test scores are consistently higher than the provincial norm.

Partners for Science has students enthusiastic about science. Teachers welcome the kit-based resources. Parents love the good report cards. Even the Alberta Legislature formally recognized the program in April 2003. The success of the elementary school program has led Dow to pledge an additional \$390,000 to launch a junior high school version.

### **Europe**

- Working with a network of regional universities, Dow initiated a research and education program centered around sustainable transformation management in central Germany. The program includes application of the concepts of Sustainable Development. Dow is supporting professorships focused on sustainability and global ethics and sustainability and global politics. This program benefits the academic community as well as society at large through a better understanding of the importance of balancing the economic, environmental, and social elements of Sustainable Development. The project also benefits the new member states of the European Union through the sharing of Dow's experiences in central Germany.
- In collaboration with the Korea Chemicals Management Association and the Korea Responsible Care Council, the Company has established the Dow Academy of Sustainable Development. The Academy sponsors a series of seminars promoting the integration of the Triple Bottom Line into the business practices of small- and medium-size companies in Korea. Customers and potential customers are among the targeted participants in the program.

### **Latin America**

- Dow employees are volunteering to improve the quality of education programs offered at a school near our Cartagena, Colombia, plant site. Areas for improvement are: communication, conflict resolution, leadership, money management, and job search. The Company has made improvements in the school infrastructure such as playgrounds, floors, and roofs, and has donated computers to start an information systems center.

### **Pacific**

- Working with the Dow Liquid Separations Business and a local science institute, Dow has donated water purification systems to several hospitals in Vietnam to provide a reliable source of clean water.

- “Trained For Life” is a unique education program for 9–12 year olds that uses motivational learning tools in such areas as self-esteem, teamwork, conflict resolution, staying in school, and environmental caring. The program reaches 1100 children at 10 schools close to our Bahia Blanca, Argentina, site. At the end of the program, parents are invited to share the experiences of the students. Dow has donated a 300-book library to each of the 10 schools.

#### **United States**

- A competitive community grant program designed to address specific community needs, solve problems, and improve quality of life for residents of communities surrounding our Plaquemine, Louisiana, site has helped a large percentage of the population. The program emphasizes community relationship building and interaction, particularly involving Dow volunteers. Project examples include home repair for the disadvantaged, restoring wildlife or recreation areas, park or waterway cleanup, community health projects, and expanding educational and workforce development programs for local students.

- Dow has committed \$5 million to Habitat for Humanity in donated STYROFOAM brand insulation through 2005. Also, we are halfway through our four-year \$2 million foundation commitment to build Habitat homes at our site communities around the world. These builds involve hundreds of employee volunteers.

- Our total corporate gift to United Way in 2003 was \$1.8 million spread among our communities. Employee giving was \$4.1 million. Dow was the recipient of the United Way Summit Award in 2003 for excellence in corporate giving programs.

#### **Volunteerism**

Dow maintains a tradition of not only investing in our communities, but also of encouraging our employees to make personal investments of their time in the civic and charitable organizations of their choice. We do that by providing support for employees who volunteer their time and talent to help their communities. Although Dow does not systematically track volunteer hours, we continue to take great pride in the enthusiasm and commitment of our employees who volunteer largely on personal time.



*In May 2003, Dow employees enthusiastically helped clean the bird reserve ‘de Hooge Platen’ in The Netherlands.*

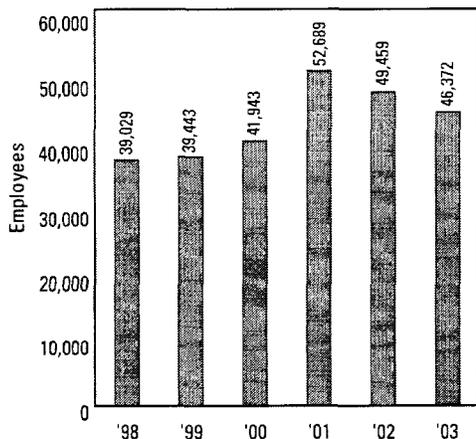
## **Employees Clean Up Bird Reserve**

Dow employees from our Terneuzen, The Netherlands, site routinely help with the periodic clean up of a nearby nature reserve—‘de Hooge Platen.’ The large sandbank is known for its rare birds. For a whole day the employees work to improve the daily living of the bird colony. This activity is in line with Dow’s Vision for Environmental Stewardship.

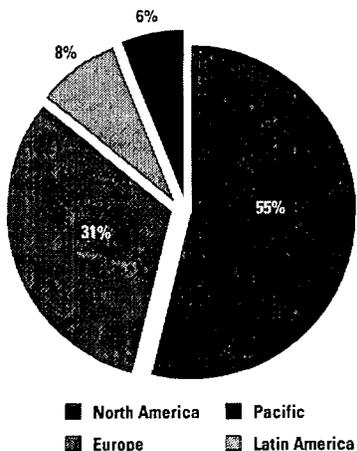
[www.dowterneuzen.com](http://www.dowterneuzen.com)



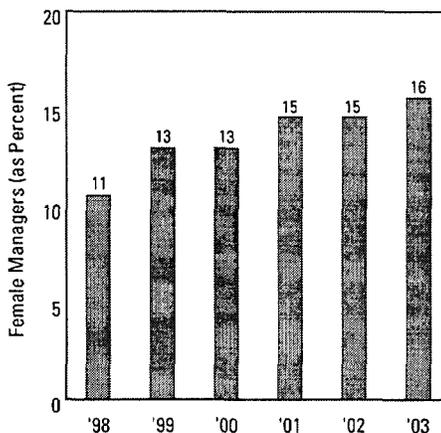
**Number of Employees**



**Employees per Region**



**Percentage of Female Managers**



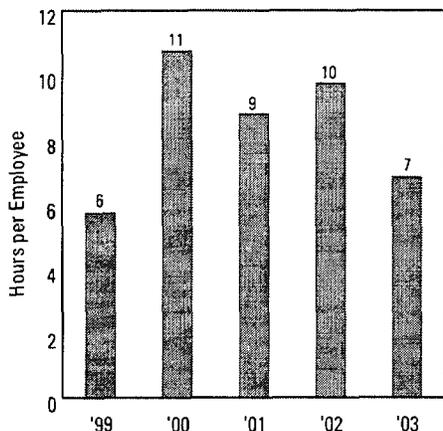
**Age and Gender for all Employees**

Age Category	Gender	1998	1999	2000	2001	2002	2003
<35	Female	9%	9%	8%	8%	8%	7%
	Male	14%	14%	14%	16%	16%	14%
35-50	Female	12%	12%	13%	12%	12%	13%
	Male	46%	45%	44%	44%	43%	43%
>51	Female	3%	3%	4%	3%	4%	4%
	Male	16%	17%	18%	17%	17%	19%
Total	Female	24%	24%	24%	24%	24%	24%
	Male	76%	76%	76%	76%	76%	76%

Note: Gender percentages are based on available gender numbers. Not all employees are identified by gender, as a result of local laws and regulations.

Progress

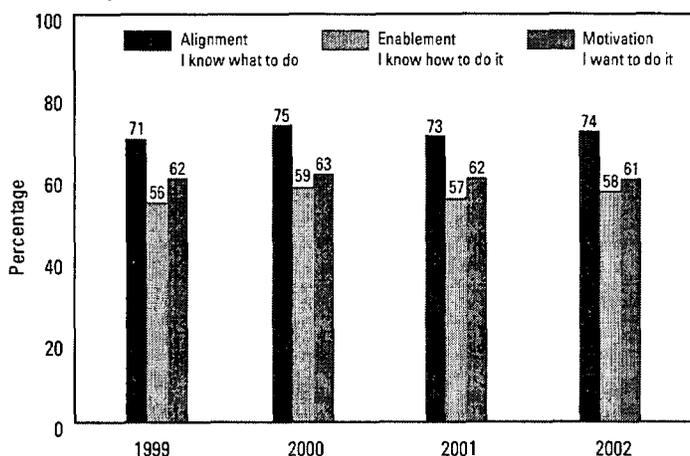
**Continuous Learning—Training Hours**



- While maintaining a significant level of employee training, we have been able to reduce the hourly costs of this training through increased use of web-based learning tools and our dedicated Intranet training site learn@dow.now.
- Average hours: Total hours divided by number of employees.
- Human Resource Development (HRD) classroom training only. Technical training, Leadership Development Network training, and the training of Dow AgroSciences employees are not included.
- 2001 number based on fourth quarter average number of employees due to integration of UCC employees into HRD Training during the year.

Training Costs per Hour				
	2000	2001	2002	2003
\$/Employee	\$61.00	\$37.00	\$32.00	\$24.00

**Empowerment**



The Global Employee Opinion and Action Survey (GEOAS) is used to track progress toward empowerment. The survey is built around three categories—alignment, enablement, and motivation, and the data is reported as percent favorable responses. In 2002, through a Six Sigma redesign project, the GEOAS was changed to an every-other-year event. The survey was conducted in 2002 and will be repeated again in 2004.

Progress

**Donations per Region (\$ Thousands)**

	1996	1997	1998	1999	2000	2001	2002	2003
North America	15,346	19,524	17,203	17,433	19,178	24,705	20,210	14,875
Europe	964	1,307	972	994	1,069	1,774	1,287	1,260
Pacific	229	456	240	191	349	373	546	518
Latin America/Mexico	297	704	298	297	337	372	318	212
<b>Total Global Spending</b>	<b>16,836</b>	<b>21,991</b>	<b>18,713</b>	<b>18,915</b>	<b>20,933</b>	<b>27,224</b>	<b>22,361</b>	<b>16,865</b>

Dow's corporate giving program is rooted in over 100 years of history. Our founder, Herbert H. Dow, regularly made personal contributions to people in need. Sharing the success of the Company has become a tradition. Global contributions funding was reduced to \$16.9 million in 2003 versus \$22.4 million in 2002 due to a company-wide effort to reduce cost.

**Public Favorability Scores for Dow Sites**

Plant Site	Goal <sup>1</sup>	1998	1999	2000	2001	2002	2003
Altona, Australia	60		63				
Aratu, Brazil	60				71		
Bahia Blanca, Argentina	60			48			
Dow Olefinverbund GmbH, Germany	80		54				77
Cartagena, Colombia	60				67		
Charleston (WV), USA	80				79	84	
Charleston (WV) <sup>2</sup> USA	80			77			
Drusenheim, France	60					69	
Fort Saskatchewan, Canada	80		81		81		84
Freeport (TX), USA	80		80		79		81
Guarujá, Brazil	60				75		
Jundiaí, Brazil	60				89		
King's Lynn, UK	60			79		74	
Midland (MI), USA	80		83		80		
Plaquemine (LA), USA	80		81			78	
Prentiss, Canada	60						69
Rheinmünster, Germany	60					74	
San Lorenzo, Argentina	60			63			
Sarnia, Canada	60		74		72		71
Seadrift (TX), USA	80				73		
Stade, Germany	80					77	
Taft (LA), USA	80				68		
Tarragona, Spain	60		57				
Terneuzen, The Netherlands	80	83		86		86	
Texas City (TX), USA	80				67		

<sup>1</sup> Favorability goals are based on an evaluation of the individual site's business importance and impact on the local community.

<sup>2</sup> This survey around the Charleston, West Virginia, location was done before the merger transaction involving The Dow Chemical Company and Union Carbide Corporation.

Progress

The type and extent of external assurance for our Public Report is an issue with which we continue to explore and experiment. We believe that some form of third party assurance is becoming more and more a critical factor in successful Sustainable Development reporting, as evidenced by the prominence given to this topic by external rating agencies. However, the nature and extent of various assurance mechanisms, and their costs and benefits, continue to be debated and discussed with various stakeholders, and Dow is committed to participating in this dialogue.

We believe our past process has served us and our various stakeholders well. While not an explicit "audit" as some might desire, we have chosen to use various existing governance structures in our Company, and a limited number of external experts, to review our report and provide comments. In other words, we sought—and will continue to seek—counsel on achieving transparency in terms of scope of report content, materiality of that content, and effectiveness of the public dialogue that is helping us to attain more useful and accepted Sustainable Development reporting mechanisms.

Where appropriate, we have incorporated their comments and suggestions. In cases where this was not possible, the comments and the reasoning behind them were documented for use in planning the next edition of our public report.

Globalization and increased access to information via the internet have helped expand the scope and direction of these reports. For this year, we have attempted to publish a report "in accordance with" the Global Reporting Initiative (GRI) 2002 Guidelines.

In future years, we will continue to explore various mechanisms for providing additional assurance as desired by our stakeholders and, as always, look for your comments to guide our exploration.

### **Corporate Environmental Advisory Council**

All members of our Corporate Environmental Advisory Council (CEAC) had the opportunity to provide comments to Dow on drafts of our 2003 Public Report. As one might expect from such a diverse group, we received a diverse set of responses, including...

"The Company's continued commitment to undertaking voluntary reporting and moving slowly, but steadily towards a Triple Bottom Line report deserves our admiration and applause. The Report contains many state-of-the-art elements—most notably its reporting of greenhouse

gases and its adoption of the GRI Guidelines. It is, deservedly, amongst the better (though not the best) of those reports produced by the larger companies. But, there is still a very long way to go before the Report satisfies the Company's own claims for "transparency and accountability". The Company must directly address issues of completeness and accountability in its reporting. The Report needs to address, especially, the essential conflict arising from, on the one hand, being a massive, quoted multinational company in pursuit of profit in an economically hostile world and, on the other, the demands for: a shrinking ecological footprint, the highest standards of morality, and the protection and respect for the vulnerable and the dispossessed. Capitalism has shown itself to be a highly capable system in many ways—it is, however, unable to deliver these essentials to human progress without considerable control from society."

Rob Gray, Professor and Director  
Center for Social and Environmental Accounting  
Research  
Glasgow University

"Dow deserves great credit for putting its cards on the table and describing the key elements that define its sustainability journey. Dow continues to set the bar for the systematic engagement of stakeholders about pressing strategy questions.

In this draft report, Dow has defined key principles and developed a framework and processes for reaching out. Substantively, the major challenge for Dow clearly lies in achieving the true integration of Sustainable Development considerations into product development and manufacturing, sales, and marketing (product stewardship). In areas like new product development, green chemistry, climate, energy, and water, Dow is asking the right questions and has the opportunity to educate us all on the challenges of truly integrating sustainability into its operations. (Six Sigma is a good example.) Dow needs to be as direct as possible in describing these challenges, because the journey is not easy and others will benefit from Dow's insights.

Sustainable Development strategy is clearly a 'work in progress.' Nonetheless, Dow is to be commended for its forthright efforts to improve and to continue to invite both constructive challenge and public support when appropriate as it proceeds on this difficult and important path."

F. Henry Habicht, II  
CEO of Global Environment & Technology  
Foundation

"The 2003 Public Report is an honest representation of what Dow has achieved during its 10 years of deliberate effort to improve the sustainability of its operations. It shows impressive progress in some of the areas chosen for attention and measurement, and tendencies to stagnation in the advance in other areas. Importantly, the Report demonstrates that it helps to focus corporate attention on selected issues.

The weakness of the Report is, of course, those areas not yet chosen for special attention and follow up. Even if some of those areas are speculative and hard to measure, the Report would have gained from including a section listing the major, not yet addressed sustainability challenges seen by Dow management.

I expect that Dow's new set of sustainability goals, advertised for the 10-year period starting 2006, will contain a broader scope of measures and inspire progress in new areas where Dow has undesirable impact."

Jorgen Randers, PhD  
Professor of Policy Analysis  
Norwegian School of Management

"At a most fundamental level, it is reassuring to an outsider that Dow sees a direct link between its Corporate Mission of 'improving life' and the principles of sustainability. This is the best guarantee of continued and proactive corporate commitment to these principles.

Plentiful case studies demonstrate that Dow not only tries to 'walk the talk,' but also succeeds in exciting ways. Dow's efforts to follow GRI reporting guidelines are laudable, and I am impressed that Dow is already reporting on 77 out of 92 criteria. The best news of all is evidence of improved systems thinking. For an innovative chemical company whose products and processes join so many of the earth's systems, this is the most important intellectual virtue to have.

I disagree with the claim that almost all the challenges and dilemmas Dow faces today are legacy issues. In particular, I find the discussion of dioxin disappointing. The goal of reducing dioxin emissions from global operations by 90 percent is definitely commendable and progress towards this goal worth reporting. However, the truth is that the chlorine chemistry industry, although directly responsible for only three percent of emissions from quantified sources, stands indirectly at the cradle of a percentage (who knows how large) of the emissions from uncontrolled burning, which the EPA lists as the greatest concern. These statistics encourage myopic blindness if not accompanied by information reporting goals and progress towards reducing dioxin formation in end-of-life incineration."

L. Mariette Hovy-van Wensveen, PhD  
Associate Professor Emerita, Department of  
Theological Studies  
Loyola Marymount University

### Community Advisory Panels

Dow is committed to maintaining an open dialogue with representatives of the local communities where we operate. The vital feedback Community Advisory Panel (CAP) members provide continues to guide us in our reporting activities at both the corporate and local levels. We place importance on sharing information openly with the public, and will again this year publish both the Dow Global Public Report 2003, as well as 21 local reports for 2003, online at

[www.dowpublicreport.com](http://www.dowpublicreport.com)

### The Public Interest Committee, Board of Directors, The Dow Chemical Company

We believe the 2003 Dow Global Public Report demonstrates the strong commitment of the Dow Board of Directors and Company Management to respond to the concerns of its stakeholders through transparent and responsible corporate conduct. This 2003 Report reflects the close relationship between our sustainability goals—economic, environmental, and social—and the other business interests of the Company.

Increased awareness has changed public expectations about the roles and responsibilities of corporations within society. The legitimacy of our enterprise is dependent on public trust. This Report demonstrates how our conduct is in keeping with societal expectations for socially responsible behavior.

We are pleased that this Report contains news of significant gains in many areas, as Dow continued to work diligently to achieve its 2005 goals in the face of challenging business conditions. But we consider it just as important that the Report also discusses those areas where Dow progress has fallen short of our goals. Dow as a company holds itself to high standards of business conduct. As a consequence, our goals are ambitious and encourage us to stretch to achieve them.

For the first time, Dow has sought to be “in accordance with” the guidelines set forth by the Global Reporting Initiative (GRI). We believe this is further evidence of Dow’s commitment to perform against accepted ways of reporting the Triple Bottom Line of Sustainable Development: Economic Prosperity, Environmental Stewardship, and Corporate Social Responsibility.

The Board of Directors remains committed to Dow’s ongoing pursuit of sustainability and continued open reporting of the Company’s progress. We hope you will find this report of interest.

---

Public Interest Committee of the Board of Directors  
J. C. Danforth, Chair; J. M. Cook; P. G. Stern;  
J. M. Fettig; J. M. Ringler; K. R. McKennon;  
W. S. Stavropoulos  
—April 2004

[www.dowgovernance.com](http://www.dowgovernance.com)

### Global Reporting Initiative

While we have been supportive of the Global Reporting Initiative since its inception, we have now progressed further to achieve the “in accordance with” conditions set out in the 2002 GRI Guidelines:

1. Report on the numbered elements in Sections 1 to 3 of Part C of the GRI Guidelines.
2. Include a GRI Content Index as specified in Section 4 of Part C of the GRI Guidelines.
3. Respond to each core indicator in Section 5 of the GRI Guidelines by either (a) reporting on the indicator or (b) explaining the reason for the omission of each indicator.
4. Ensure that the report is consistent with the principles in Part B of the Guidelines.
5. Include the following statement signed by the Board or CEO: “This report has been prepared in accordance with the 2002 GRI Guidelines. It represents a balanced and reasonable presentation of our organization’s economic, environmental, and social performance.”

The 2003 Dow Chemical Company Global Reporting Initiative Report—which provides both a reference to the GRI indicator covered in the GRI report and the specific Public Report web site reference as well—is available from our Public Report web site.

[www.dowpublicreport.com](http://www.dowpublicreport.com)

A gap analysis of the GRI Report for this year indicated that Dow was reporting on 77 of the 92 various criteria. We reported partial information on another six of the criteria, and have not reported any data on nine of the criteria. Of the 15 where there is currently only partial or no data, we are already working on five of these for next year's report—and we will evaluate the cost/benefit of the remaining indicators during the balance of 2004.

## Ongoing Validation

Ongoing validation and feedback of our overall efforts to manage and report on the Triple Bottom Line performance of Sustainable Development continued in 2003.

## Independent Ratings

The number of various rating agencies grew again in 2003 and we expect continued progress in the various methodologies for assessing performance.

In the spirit of transparency, we are providing the actual assessments of Dow from a few of the more well-known rating agencies. In some cases, we provided only the executive summary, as the detailed questions are considered proprietary by some of these institutions. This poses an interesting dilemma for the various rating agencies. The credibility of the rating organizations is highly dependent on the transparency to all of their respective processes, yet many consider this a part of their protected intellectual capital. It is not clear how this will be resolved in the future, but Dow believes that the fundamental principle of transparency will have to apply for these agencies, as well as the companies they are evaluating. Following are summaries of their reports, the full content of which can be viewed at

[www.dowpublicreport.com](http://www.dowpublicreport.com)



Once again, The Dow Chemical Company was included in the Dow Jones Sustainability Index (DJSI) as one of the top chemical companies in terms of overall corporate sustainability performance. Despite being in the top 10 percent, our overall position fell in 2003, although the difference between the top score and Dow is less than seven percentage points. The differences in 2003 are primarily based on poor economic performance, and a Media and Stakeholder Assessment (MSA) of various "legacy" issues by the research arm of the DJSI—Sustainable Asset Management (SAM). As a result of the assessment, Dow met with the analysts from SAM to dialogue and learn more about how Dow performed relative to the leaders and the chemical industry average.

BUSINESS *in the*

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## Innovest

### Strategic Value Advisors

In 2003, Innovest conducted its first “Intangible Value Assessment” for The Dow Chemical Company. Areas evaluated included sustainable governance, human capital, stakeholder capital, products and services, and emerging markets. Overall, Dow was awarded a “AA” rating, ranking third in the chemical industry.

In a separate assessment of overall environmental performance, Dow was downgraded on January 26, 2004, from a “AA” rating, to a “BB” rating—moving from eighth out of 30 competitors to 45th out of 69 competitors. The primary reason for the significant downgrading is due to the perception of increased risk (versus actual legal or market risk) to the Company of various legacy issues. Dow believes this downgrading is unwarranted, and has spent considerable time with the analyst at Innovest regarding the specifics of its assessment—providing additional dialogue, documents, and facts on some of the issues of concern.

Established in 2002, The Corporate Responsibility Index is a business management tool, developed to support companies in improving their impact on society and the environment. It enables them to assess the extent to which their strategy is translated into responsible practice throughout the organization, in managing four key areas—Community, Environment, Marketplace, and Workplace.

In 2003, Dow received an overall Index Score of 90.64 percent—placing it once again in the top 20 percent of all companies that provided information for the index. Overall performance for all companies reporting increased, with the average moving from 72 percent to 79 percent. Dow received top marks for overall corporate strategy, and performance and impact—relative to other companies within the chemical sector and overall. Areas for improvement based on this assessment include: more robust programs for assessment of suppliers and customers (note: this is a new task item for Dow in 2004!), linkage of performance on social dimensions with top management and board members, and pursuit of third party validation mechanisms for performance and reporting.

### Awards

Dow also benefits from validation of a different sort. From time to time, independent organizations bestow awards based on our Triple Bottom Line efforts. In 2003, Dow had the honor of receiving the following awards and recognition:

#### ***Dow Selected World Technology Corporate Award Winner***

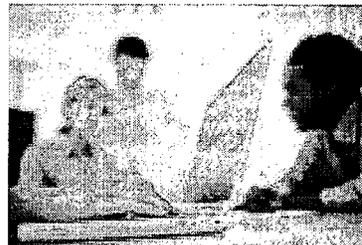
Dow is the 2003 winner in the corporate category of the World Technology Awards. The World Technology Network presented the award for Dow's innovative contributions to advanced materials technology and the positive impact the new technologies have had on society. This award honors individuals and corporations who are innovators and those "doing the work of the greatest likely long-term significance," according to James P. Clark, founder and Chairman of the World Technology Network.

#### ***Dow Receives Outstanding Corporate Innovator Award***

The Dow Polyolefins and Elastomers Business Group received the 2003 "Outstanding Corporate Innovator Award" from the Product Development & Management Association (PDMA). This was the first time in its 27-year history that the PDMA selected a chemical manufacturing company for the association's most prestigious honor. "The Outstanding Corporate Innovator Award" is designed to showcase those organizations that are the most successful in developing new products as well as an enterprise-wide commitment to innovation.

#### ***Dow XLA Fiber Wins R&D MAGAZINE "R&D 100" Technology Award***

Dow XLA elastic fiber, the new Freedom Fiber from Dow fiber solutions, won the *R&D MAGAZINE* prestigious 2003 "R&D 100" technology award. This award is given to the most technologically significant products introduced into the marketplace over the past year. Recipients are selected by an independent judging panel consisting of professional consultants, university faculty and industrial researchers, as well as the editors of *R&D MAGAZINE*.



### **U.S. EPA Recognizes Dow for Saving Energy**

Turning a computer monitor off saves energy and money. A function that will turn 50,000 computer monitors off saves more! Each new Dow computer has a setting that turns the monitor off when it is idle. Dow saved so much power this way, the U.S. Environmental Protection Agency (EPA) named Dow a "2003 Energy Star® Million Monitor Drive Contributor."

The monitor shut-down function helped Dow save \$2.5 million in energy costs in 2003. Dow also reduced the amount of carbon dioxide equal to taking 6,395 cars off the road.

This was one of many efforts during 2003 that showed how Dow is working to save energy, money, and the environment.

[www.energystar.gov](http://www.energystar.gov) 

**Dow Receives ASTD 2003  
"BEST" Award**

Dow received the 2003 BEST Award from the American Society for Training & Development (ASTD) in Washington, D.C. on October 29. Emily DeRocco, Assistant Secretary for the Employment and Training Administration of the U.S. Department of Labor, presented the award.

The ASTD BEST Awards recognize organizations that demonstrated enterprise-wide success as a result of employee learning and development. Ranked eighth, Dow is among 23 organizations from the United States, Canada, Hong Kong, and India receiving an ASTD BEST Award.

**Dow Brazil Wins Sesi Quality  
in the Work Award**

In Brazil, two units received the Sesi Quality in the Work Award: Aratu and Pindamonhangaba. The award is given to companies whose policies improve the quality of life, productivity, and offer social benefits to employees.

**Dow Among Argentina's  
Most Admired**

*CLARION*, Argentina's largest newspaper, listed Dow as one of the country's most admired companies. Dow was ranked number 41 out of 100 and number one in the chemical manufacturing sector. Dow was the company with the most improved ranking in 2003, moving up from number 74 in 2002.

**2003 Lantern Award presented  
to Dow in Louisiana**

Dow's Louisiana (U.S.) sites were awarded the 2003 Lantern Award. The Louisiana Economic Development and the Louisiana Industrial Development Executives Association presented the award to Dow for "outstanding contributions to the Louisiana economy and responsible stewardship within the community."

**Outstanding Corporate Directors**

Dow's Directors are often recognized for achievements in their respective areas of expertise as well as in corporate governance, all of these skills collectively contributing to a stronger Board.

During 2003, two of Dow's outside directors were recognized for their leadership by *Director's Alert* magazine. J. Michael Cook, former chairman and CEO of Deloitte & Touche LLP, and John C. Danforth, partner of Bryan Cave LLP and former U.S. Senator, were named "Outstanding Directors in Corporate

America" by the publishers and editors of *DIRECTOR'S ALERT* magazine. *DIRECTOR'S ALERT* launched the program in 1998 to honor outstanding independent corporate directors. Mr. Cook was praised by his peers for "bringing new levels of sophistication, rigor, and energy to audit committee work," and Mr. Danforth was extolled for his "integrity and tough standards to enhance social responsibility."

Barbara Hackman Franklin, president and CEO of Barbara Franklin Enterprises and former U.S. Secretary of Commerce, is the fourth current Dow director to receive this Outstanding Director in Corporate America award and will be honored in mid-2004. Harold Shapiro, president emeritus and professor of economics and public affairs, Princeton University, was so honored in 1999. Dr. Shapiro and Ms. Franklin, a board member of the National Association of Corporate Directors (NACD), both served on the NACD Blue Ribbon Commission on Executive Compensation and the Role of the Compensation Committee. Ms. Franklin acted as co-chair.

## What Do *You* Think?

We want our communications to be a two-way dialogue with our stakeholders around the world. With that goal in mind, could we ask you to take a few minutes and share your thoughts and opinions with us? Just visit our web site and let us know "What Do *You* Think?" about our Sustainable Development report and practices by completing our brief, online survey.

[www.dowpublicreport.com/survey](http://www.dowpublicreport.com/survey) 

The forward-looking statements contained in this document involve risks and uncertainties that may affect the Company's operations, markets, products, services, prices, and other factors as discussed in filings with the U.S. Securities and Exchange Commission. These risks and uncertainties include, but are not limited to, economic, competitive, legal, governmental, and technological factors. Accordingly, there is no assurance that the Company's expectations will be realized. The Company assumes no obligation to provide revisions to any forward-looking statements should circumstances change, except as otherwise required by securities and other applicable laws. In addition, this document may reference non-GAAP financial measures. Where available, a reconciliation to the most directly comparable GAAP financial measures and other associated disclosures are provided on the Internet at [www.dow.com](http://www.dow.com) in the Financial Reports page of the Investor Relations section.

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**EXHIBIT C**

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# 2002 → The Dow Global Public Report

## Environmental Stewardship

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### Climate Change

In 2001, a detailed strategy was developed with four key elements, each with actionable objectives. Dow's efforts to reduce its footprint on the global climate accelerated in 2002, delivering the following progress:

*"Dow contributes to the solution of climate change by developing and commercializing sustainable, climate-friendly products and technologies and by reducing greenhouse gas emissions per unit of production."*

- Samuel L. Smolik, Vice President, Environment, Health and Safety

### Technology

In 2002, we accelerated R&D efforts to identify product and process improvements that reduce carbon emissions. For example, we are exploring advanced catalysts to convert alternative raw materials into chemical feedstocks while reducing energy inputs and greenhouse gas emissions. Proposals have been made to government agencies in both Europe and the U.S. for joint participation in this research. Dow also began efforts to meet more of its energy needs through renewable sources. A Dow team has entered into an agreement to harness landfill gas to power a manufacturing site. Wind and fuel cell projects are also being developed.

### Business Integration

All Dow businesses have been instructed to incorporate consideration of global climate change into their strategic plans. The level of climate change consideration is evaluated as we measure progress toward implementation of Dow's Sustainable Development Operating Plan. In 2002, work was initiated to determine how to establish an internal price signal for carbon. While economic conditions have slowed our work in this area, some businesses are informally considering the cost of carbon in their proposals for energy reduction projects. In late 2002, Dow developed the role of "Greenhouse Gas Champion" to help improve internal greenhouse gas accounting systems and create tools that will help businesses identify reduction opportunities.

### New Products

A number of Dow teams are exploring new business opportunities, leveraging Dow expertise to develop new products or services with the global climate in mind. One team exploring energy opportunities has set carbon reduction or neutral carbon impact as a criterion for pursuing new opportunities. Dow's Growth Center is exploring opportunities to make chemicals from biomass and has been working with environmental groups to help identify areas of the world where an abundance of waste organic materials are available to serve as building blocks for this new chemistry. In the transportation sector, Dow Automotive is working with its customers in the European and U.S. auto industry on technologies that will lower greenhouse gas and other air emissions from cars and trucks.

### Stakeholder Involvement

Dow has made numerous presentations to external groups to describe its climate change strategy. Members of Dow "Solutions" teams have engaged in dialogue with environmental groups to help identify opportunities for change that are beneficial to the climate as well as to Dow. In late 2002, Dow became a member of the World Resource Institute (WRI) Green Power Market Development Group, a small group of forward thinking companies that is exploring ways to promote greater use of renewable energy. Dow is also actively participating in the development of voluntary climate change initiatives sponsored in the U.S. by the Business Roundtable (BRT) and the American Chemistry Council (ACC). These initiatives will encourage greater action by broader segments of American industry. In 2002, Dow has responded to information requests from numerous groups. For example, the Friends of the Earth requested that Dow include a discussion of its climate change benefits and liabilities in its official filings with the U.S. Securities and Exchange Commission (SEC). Dow also submitted a detailed response to a survey by the Carbon Disclosure Project, which represents a group of institutional investor groups concerned about climate change. That response can be found at [www.cdproject.net](http://www.cdproject.net).

In Europe and Canada, progress continues to be made on climate change policy. In addition to participating in voluntary climate change programs in Canada, the Netherlands, the United Kingdom, and Germany, Dow is working to assure that any mandatory programs do not competitively disadvantage us. The Dow Climate Change Team will continue to drive and monitor progress in 2003.

While we are working to improve our greenhouse gas (GHG) emissions data collection, and have done our utmost to ensure the quality of the data, we acknowledge that there may be some inaccuracies as a result of limited availability of some historical data. As we refine our reporting tools we will update the emissions data and be transparent about our assumptions and guidelines. Also, we are working with external stakeholders to bring our GHG data in line with generally accepted reporting protocols.

→ [Greenhouse Gas Emissions](#)

→ [Greenhouse Gas Intensity](#)

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# 2002

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## Environmental Stewardship

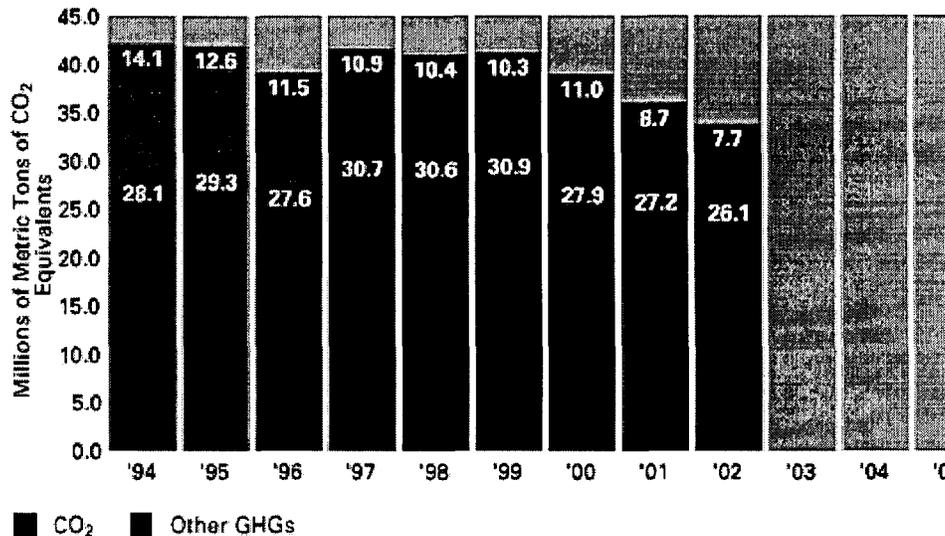
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### Greenhouse Gas Emissions



The total emissions of Greenhouse Gases continue to decline following the trend which was started in the mid nineties. CO<sub>2</sub> makes up the majority of the Greenhouse Gases Dow emits. These results are based on the best available data at the time of this report. Results for 2002 reflect, in part, the fact that our facilities continued to run at reduced production rates as a result of challenging industry economic conditions.

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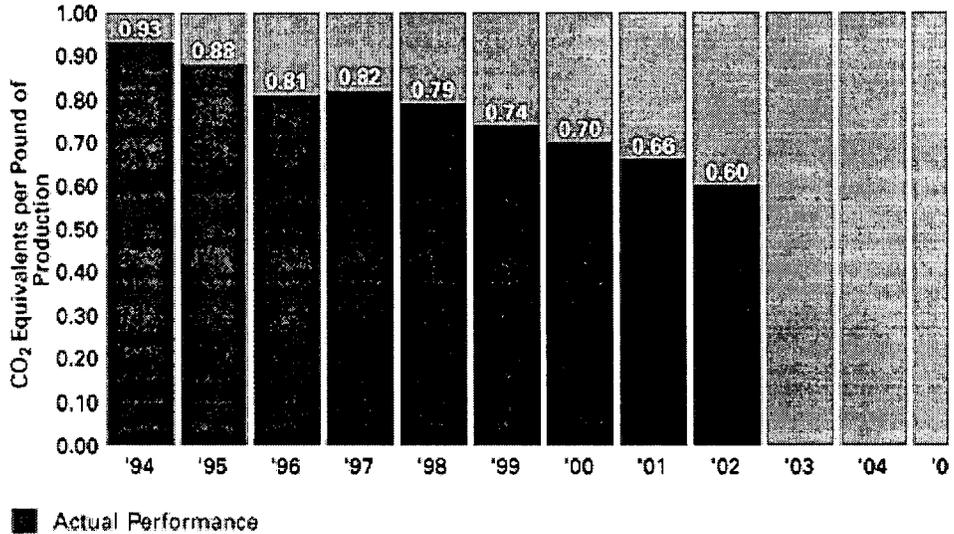
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**Greenhouse Gas Intensity**



Dow's principal means of measuring progress on climate change is by improving greenhouse gas *intensity*-a measurement of GHG emissions per pound of production. While Dow has not yet set a specific numerical GHG reduction goal program to reduce the amount of energy used per pound of product by 2% per year from 1995-2005 continues to drive improvements in GHG intensity.

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**EXHIBIT D**



## Our Commitments Issues & Challenges

### Global Climate Change

#### Description

Global climate change and its potential causes are some of the most heavily debated environmental issues today. Many believe that industrialization has resulted in a material increase in atmospheric greenhouse gases (GHG), and that this increase is contributing toward a warming of the earth's atmosphere.

#### Dow's Position

Dow believes that increasing atmospheric concentrations of greenhouse gases is a cause for concern and warrants diligent efforts from all members of society, and all sectors, to reduce these emissions. We support a balanced approach to reducing GHG emissions without harming economic growth or competitiveness.

Dow is committed to contributing to the solution of climate change by developing and commercializing sustainable, climate-friendly products and technologies, and reducing greenhouse gas emissions per unit of product.

#### Dow's Actions

Dow has taken a leadership role globally to reduce GHG emissions and improve energy efficiency.

- Dow has realized a 20% improvement (reduction) in energy intensity from 1990-1994 and an additional 22% improvement from 1994 to mid-year 2004.
- Since 1994, Dow has reduced its GHG emission intensity – CO<sub>2</sub> equivalents per pound of production – by 45%.
- We make products that enable lighter vehicles, improved insulation for buildings, more efficient wind power turbines and many other solutions critical to efforts to minimize GHG emissions.
- Dow has established a Climate Change and Energy Policy Strategy Board. The role of this board is to integrate climate change and energy efforts among the various Dow businesses, teams and functions and to have a fully comprehensive energy business strategy that meets societal and stakeholder expectations.

Last Updated: October 19, 2004

#### What Do You Think?

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## Our Commitments Case Studies

### Energy Efficiency and Conservation Efforts



High energy prices and energy price volatility – coupled with the environmental impact of energy production and consumption – make energy use a critical issue for Dow. Implementing an aggressive energy efficiency and conservation effort is an important part of Dow's plan to address this critical issue.

Business and Site energy efficiency teams have been established throughout the Company to focus both up and down as well as across the product chain. As a result of focused business and site efforts, over 700 Six Sigma projects have been chartered in the past four years to

address all aspects of energy production, use, efficiency, and cost reduction.

Below are a few of the many projects that made significant contributions in 2003:

- Two older and less energy efficient ethylene crackers were shut down at Seadrift and Texas City, Texas (U.S.). A portion of the production from these units was shifted to newer, more efficient facilities resulting in 15-20 percent less energy consumed for this incremental volume.
- Dow Central Germany's Boehlen site reduced the import of natural gas by 25 percent through efficiency improvement and energy optimization projects. This saved the site five million Euros.
- The Plaquemine, Louisiana (U.S.), EO/EG plant was able to save \$7.5 million in energy costs through a comprehensive variable cost reduction program.
- Implementation of new seawater pump operation procedures at the Terneuzen, The Netherlands, site resulted in savings of over 4,000 megawatt hours of electricity.
- The MDI plant in Stade, Germany, successfully completed a project to burn hydrogen instead of natural gas for a furnace. This resulted in a reduction of natural gas purchases worth over 1.6 million Euros.
- The Chlor-Alkali, EDC/VCM, and Ethylene plants at the Fort Saskatchewan, Alberta, Canada, site focused on reducing electrical energy consumed by motors. The combined effort resulted in yearly savings of almost 12,000 megawatt hours.
- A simple, yet elegant change in the process control strategy and operating procedures eliminated wasted steam in the Polycarbonate plant in Stade, Germany. The project resulted in a 20 percent reduction in total steam consumption.
- Implementation of a new boiler steam dispatch protocol at the Freeport, Texas (U.S.), site resulted in natural gas savings of over 800 million BTU's per day.
- A benchmarking study conducted by Polyolefins and Elastomers at Tarragona, Spain, resulted in a site utility optimization program that saved \$625,000 in the cost of steam, compressed air, and nitrogen.
- Polypropylene operations at Freeport, Texas (U.S.), saved \$865,000 on energy cost through process design upgrades, improvement of operating practices, and product mix rationalization.

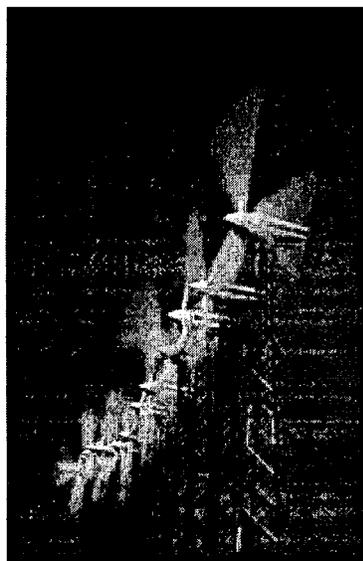
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**What Do You Think?**



## Our Commitments Case Studies

### Promoting Green Power



In March 2003, Dow joined The World Resources Institute's [Green Power Market Development Group](#). The alliance creates new markets for renewable energy. The ultimate goal is to expand the green power options so that companies can reduce their global impact.

Dow has a history of using more efficient power sources in its manufacturing. In fact, "Dow was an early champion of co-generation of steam and electricity," said Peter Molinaro, leader of Dow's Global Climate Change Team. Being involved in the Green Power Market Development Group is one more way Dow lives its commitment to find, develop, and increase use of renewable energy.

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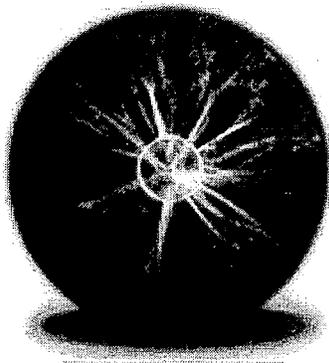
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## Our Commitments Case Studies

### Fuel Cell Program



#### World's Largest Fuel Cell Project

Dow and General Motors (GM) Corporation are inaugurating the world's largest fuel cell project to-date for power generation. The project is based at Dow's Freeport, Texas, site, where hydrogen is created as a co-product. GM's fuel cells will convert hydrogen to electricity. When complete, the fuel cells will provide a portion of the power used at the plant.

#### In this section

- [Overview](#)
- [How a Fuel Cell Works](#)
- [Press Kit](#)
- [Frequently Asked Questions](#)
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Hydrogen fuel cells offer a cleaner, more efficient option for power generation than coal, natural gas, or other fossil fuels. Both greenhouse gas and air pollution are reduced. Fuel cells could also reduce need for foreign oil and provide an option to costly natural gas.

If the project proceeds as planned, up to 400 fuel cell units could be producing up to 35 megawatts of power at Freeport. That is enough energy to power 25,000 homes for a year. And, it is more than 15 times greater in scale than any other fuel cell system to date. Although the fuel cells will provide only two percent of the total power the Texas plant uses, the project is a first step in developing fuel cells into a major power source. Dow and GM are discussing future use of fuel cells at other Dow sites in both the U.S. and Europe.

[Read more about the Dow and GM Hydrogen Fuel Cell Collaboration](#)

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TINA S. VAN DAM  
Corporate Secretary

The Dow Chemical Company  
2030 Dow Center  
Midland, Michigan 48674  
989 • 636-2663  
(FAX) 989 • 638-1740

January 21, 2005

*Via Federal Express*

Office of the Chief Counsel  
Division of Corporation Finance  
Securities and Exchange Commission  
450 Fifth Street, N.W.  
Washington, D.C. 20549

Re: *Securities Exchange Act of 1934, Rule 14a-8  
Withdrawal of January 4, 2005 Request on  
Stockholder Proposal of the General Board of Pension and Health Benefits of the United  
Methodist Church et al.*

Ladies and Gentlemen:

On January 4, 2005, The Dow Chemical Company (the "Company") through its counsel, Gibson, Dunn & Crutcher LLP, requested that the staff of the Division of Corporation Finance concur that the Company could properly exclude from its proxy statement and form of proxy for its 2005 Annual Meeting of Stockholders, a stockholder proposal and statement in support thereof (the "Proposal") submitted to the Company in November 2004 by the General Board of Pension and Health Benefits of the United Methodist Church and co-filed by the Board of Pensions of the Evangelical Lutheran Church in America (the "Proponents").

Enclosed is a letter to the Company dated January 19, 2005, from the representative of the Proponents stating that the Proponents voluntarily withdraw the Proposal. In reliance on this letter and on behalf of the Company, I wish to withdraw the no-action request relating to the Company's ability to exclude the Proposal pursuant to Rule 14a-8 under the Securities Exchange Act of 1934.

Please do not hesitate to call me at (989) 636-2663, or Ronald Mueller at Gibson, Dunn & Crutcher LLP at (202) 955-8671 if you have any questions relating to this matter. Thank you.

Sincerely,

  
Tina S. Van Dam

Enclosure

cc: Vidette Bullock Mixon  
General Board of Pension and Health Benefits of the United Methodist Church

Heather Williamson  
Board of Pensions of the Evangelical Lutheran Church in America

Ronald O. Mueller, Esq.  
Gibson, Dunn & Crutcher LLP

January 19, 2005

GENERAL BOARD OF PENSION  
AND HEALTH BENEFITS OF  
THE UNITED METHODIST CHURCH



Ms. Tina Van Dam  
Corporate Secretary  
Dow Chemical Company  
2030 Dow Center  
Midland, Michigan 48674

1201 Davis Street  
Evanston, Illinois 60201-4110  
1.800.851.2201

**RE: 2005 Shareholder Proposal**

Dear Ms. Van Dam:

On behalf of the General Board of Pension and Health Benefits The United Methodist Church and the Board of Pensions of the Evangelical Lutheran Church in America (ELCA) this letter will serve to withdraw the 2005 shareholder resolution filed by our organizations with Dow Chemical Company in November 2004.

We interpret that the 2003 *Dow Global Public Report* in the "Environmental Stewardship" section responds in part to some issues raised in the resolution about the company's endeavors to reduce carbon dioxide and other greenhouse gas emissions. The resolution proponents look forward to learning about Dow's international operations and the European Union Emissions Trading Scheme.

Representatives of the United Methodist and Evangelical Lutheran pension funds are pleased that Dow management is willing to dialogue with us on climate risk issues. We hope that a mutually agreeable date in February can be arranged for constructive dialogue. My contact information is: (847) 866-5293 or videttebullock\_mixon@gbophb.org

Sincerely,

Vidette Bullock-Mixon  
Director, Corporate Relations

CC:

Heather H. Williamson  
ELCA Board of Pensions

Pat Zerega  
ELCA SW PA Synod