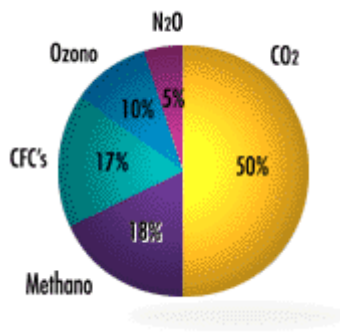


Environmental, Health &
Safety Report
1997

In Harmony with Nature



GREENHOUSE GASES



The International Panel of Climatic Change (IPCC) reports that the Earth's atmosphere contains different gases which absorb solar radiation and retain the heat of the Sun? This is universally known as the greenhouse effect.

CEMEX TODAY

Founded in 1906, Cemex is the largest cement company in the Americas and one of the three largest cement companies in the world, with close to 51 million metric tons of production capacity. Through its operating subsidiaries, Cemex is engaged in the production, distribution, marketing and sale of cement, ready-mix concrete, aggregates and clinker. Cemex has operations in 22 countries and, through its extensive network of distribution centers and marine terminals, trade relations with more than 60 countries around the globe.



Cemex has market-leading operations in Mexico, Spain, Venezuela, Panama and the Dominican Republic, and a significant presence in Colombia, the Caribbean, the Philippines and the southwest United States. It is also the world's leading producer of white cement and the world's largest trader of cement and clinker, marketing more than 10 million metric tons in 1997.

SUSTAINABLE DEVELOPMENT STRATEGY

Since 1994, we at Cemex have implemented a strategy designed to create and carry out all of our activities in a responsible manner, securing sustainable development:

To employ cutting-edge technology in our operative processes;

To foster environmental, health and safety awareness within the company and the community following the principle: "You only care for what you know";

To use the most effective equipment and systems available to protect people in Cemex's community, the installations, and the environment.



CHAIRMAN'S MESSAGE

FOR CEMEX, 1997 was a year characterized by success and effort.

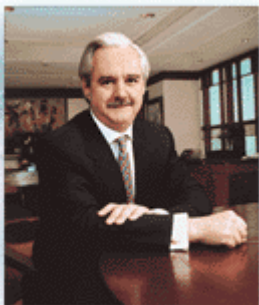
Our Barrientos plant in Mexico became the first cement plant in the Americas to receive ISO 14001 certification. Similarly, three of our 40 cement plants operated throughout the year with no lost-time accidents.

Nevertheless, we have learned through recent experience that we must strengthen our programs, particularly in recently acquired companies.

Accordingly, in order to minimize and prevent company risks, we initiated a project in which both external firms and our own technicians conducted independent safety audits. As a result of this project, we immediately implemented a comprehensive action plan to improve the well being of our people, equipment, communities and environment.

Health, safety and care of the environment are fundamental values at Cemex, and form the foundation for our sustainable development strategy.

With the work of our teams and a continuously positive attitude, we will successfully achieve our mission to be the world's most efficient, profitable and safe multinational cement company.



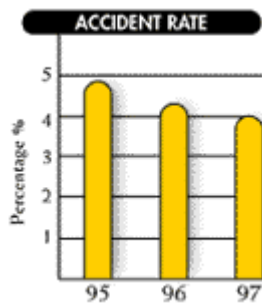
Lorenzo H. Zambrano
Chairman & CEO



HEALTH AND SAFETY



RESULTS



In 1997, the consolidated indicators reported a slight advance, moving us closer to our primary goal of an accident rate of not more than one. We plan to achieve this goal by the year 2000. Of the seven cement plants which have reached this objective, Mexico's Monterrey plant, the USA's Balcones plant and Venezuela's Guayana plant operated with zero lost-time accidents during the year.

SAFETY AUDITS



At the direction of our CEO, international firms conducted comprehensive safety audits in all of our 40 cement plants. Similar audits were conducted at other business units on a random basis.

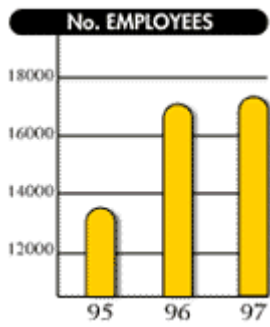
INTERNAL COLLABORATION AND SYNERGY

In order to reach our planned goals, we must work as a team to capitalize on the experiences of each business unit. Therefore, we implemented an electronic information system called "SISTER" to share indicators and relevant health and safety facts from every Cemex plant.

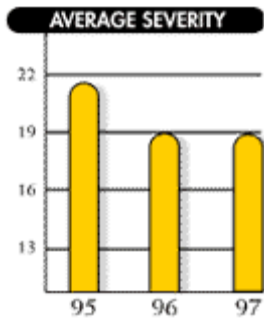
We further formed a Corporate Team with representatives from the Risk Management, Human Resources, Security, Health and Safety areas.

Our children: a powerful reason for prevention of accidents.





Statistics include all personnel employed directly in the business units.



This indicator presents the average number of days lost for each incapacitating accident.

SPECIAL INTERNAL TEAM



In addition to the external audits, Cemex formed an internal multi-disciplinary team of cement experts confirm the safety of our cement production practices. The information obtained by these experts will also be used to update the "safe operational practices" section of Cemex' health and safety manual.



The crisis drill and the emergency team are very important tools for preventing accidents and responding in the event of an accident..

DID YOU KNOW...?

It is possible to add metal particles during the production of concrete which alters its electric conductivity and makes possible, among other things, the construction of highways with heating systems that can de-ice highways surfaces and improve safety?



ENVIRONMENTAL PROTECTION

SUSTAINABLE DEVELOPMENT AND ECOEFFICIENCY

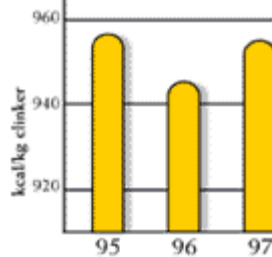
As a fundamental part of Cemex' environmental protection activities, we strive to make the very best use of raw materials and energy, to recycle and re-use materials, and to reduce the environmental impact of our production processes.

TECHNOLOGICAL DEVELOPMENT



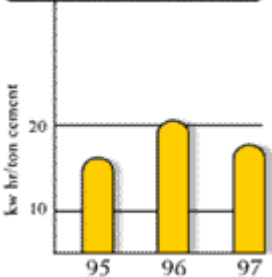
Cemex introduced calcination technology to the cement production process in the Torreon, Mexico plant, enhancing clinker production and reducing thermal and electric energy consumption by 11% and 14%, respectively. Likewise, this innovation reduces 6% of the CO₂ combustible product emissions. The company will apply this technological development to its other cement plants.

THERMAL ENERGY CONSUMPTION



Although Cemex acquired companies with less technologically advanced processes, it has still maintained energy consumption indicators oriented toward continuous improvement by making investments based on its collective experience and know-how.

ELECTRIC ENERGY CONSUMPTION



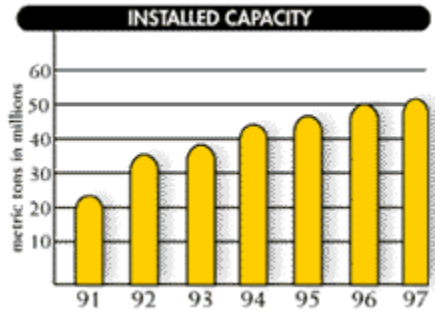
Cemex' use of high-efficiency ventilators, improved technology, automation and its systematized operations practices allow the company to maximize the efficient consumption of electric energy.



The Guadalajara, Mexico plant's use of equipment to dry pozzolana with the process gases' residual heat is an example of ecoefficiency, producing ecological and economic benefits. This innovative dryer, using in-house technology, saves 12.4% and 4.5% in thermal energy and electric energy consumption, respectively.



Restoration of deposits in the operations of Venezuela and Colombia.



The company's growth represents both a challenge and an opportunity to apply its technical experience, creativity and innovation to improve the efficiency, to increase the productivity and to ensure the safety of its personnel, its plants and the environment.



In a collaborative project with the World Environment Center (WEC) and the World Bank, Cemex conducted environmental evaluations in cement plants in India.



Cemex optimized its dust collection systems at the loading area of Venezuela's Pertigalete plant, increasing its productivity and minimizing its environmental impact.



Mexico's Environmental Minister at the First International Environmental Forum of the World Environment Center held in this country, which Cemex supported.

INTERNATIONAL TRADING



Cemex operates the largest cement fleet in the world, comprised of 24 ships.

With the continued use of, and adherence to, international navigational criteria, we operated accident free during 1997, benefiting the crews and the environment.

PRODUCT DISTRIBUTION



Cemex Mexico's implementation of a new expert concrete distribution system has increased on-time deliveries to 98%, enhanced productivity by 30% and reduced energy use and vehicle traffic. We are expanding this innovative system to other sectors of the business.



ENVIRONMENTAL OPTIMIZATION

In 1997, Cemex Spain initiated projects to meet the European Union's coming environmental cement industry regulations. These projects occurred in Alcanar, Tenerife, San Vicente, Lloseta and San Feliu. The total investment is currently US\$6.7 million.

DID YOU KNOW...?

The current cement production technology is capable of recycling sub-products from other industrial processes, such as blast furnace slag, cinder and alternate fuels, without altering the quality of the product or the emissions into the atmosphere?

Deteriorated pavement can be demolished and used as aggregate to make concrete?



ENVIRONMENTAL CONSERVATION AND CULTURE

ENVIRONMENTAL CULTURE

Cemex initiates and participates in several programs promoting environmental culture. For example, Cemex collaborates in the production and dissemination of magazines that promote conservation, depicting the beauty of nature and stressing the importance of its care. Cemex recently supported Nature's Best in its participation at the first global cybernetic environmental conference, "Environment '97."

ECOLOGICAL BOOKS



Since 1993, Cemex supported the production of 78,000 issues of eight ecological books, which have been distributed to support nature conservation projects and foster the ecological culture of the world.

More than 300,000 people in seven countries have visited photograph exhibitions on display in museums as part of the events surrounding the presentation and donation of these books.



The president of the US World Wildlife Fund (WWF) and a member of the United States Senate, during the launching event for the book, "Celebration of Life," in the Capitol in Washington, D.C.

MEGADIVERSITY - THE BOOK



In 1997, Cemex, in conjunction with the Sierra Madre Association, published the book "Megadiversity: Earth's Biologically Wealthiest Nations." This book, conceptualized by Conservation International, will be donated to conservation organizations from ten different countries. The book's thesis states that 17 nations make up almost 70% of our planet's biological diversity.



Some members of Cemex's Board of Directors, with the Ambassador of Mexico in the United States, during the presentation of the book, "Megadiversity: Earth's Biologically Wealthiest Nations", at the Mexican Cultural Institute in Washington, D.C.

PARTICIPATION IN INTERNAL ORGANIZATIONS

Since 1994, Cemex has participated in various international organizations, such as the Business Leadership Program for Sustainable Development of Latin America (PLEDS), the Environmental Committee of the Pacific Basin Economic Council (PBEC), the Townley Global Management Center for EHS (TGMC) and the World Environment Center (WEC).

A presentation in Venezuela of a collection of photographs, "Natural and Cultural Diversity of Mexico," attended by the First Lady of the Republic, the Environmental Minister, Cemex' directors and other personalities.



As part of our quality of life programs, we supported an expedition to 11 mountain peaks in the Andes in Peru, Bolivia and in Ecuador.



Participants in the Bi-national Mexico-USA meeting, conducted at Cemex' Santa Maria Camp. Nuevo Leon, Mexico.

SUPPORT OF ENVIRONMENTAL CONSERVATION



*Cuare wildlife refuge.
Venezuela.*



*Jaguar research.
Campeche, Mexico.*



*Monitoring of wildlife
species in the Canal
Zone. Panama.*

Because Cemex considered fundamental the ecological balance of our planet, it initiated in 1989 formal support of several conservation and biodiversity organizations. To date, almost 40 projects in ten countries around the world have been established, including:

- SIERRA MADRE ASSOCIATION: more than 24 projects in Mexico.
- UNITED FOR CONSERVATION CAMPAIGN: 3 projects in Mexico.
- NATURE DEFENSE FOUNDATION: a project in Venezuela.
- CONSERVATION INTERNATIONAL: projects in Venezuela, the United States, Colombia, Brazil, the Philippines and Indonesia.
- GOVERNING COMMISSION FOR THE BANCO DE LA PLATA HUMPBACK WHALE SANCTUARY: a project in the Dominican Republic.
- NORTH AMERICA NATURE PHOTOGRAPHER ASSOCIATION: a project in the United States.
- WORLD WILDLIFE FUND: a multinational project.
- NATIONAL ASSOCIATION FOR THE CONSERVATION OF NATURE: a project in Panama.
- NATURE FOUNDATION: a project in Colombia.



CONTINUOUS IMPROVEMENT SYSTEMS

INDIVIDUAL COMMITMENT

Because of our culture of continuous improvement, Cemex is seriously committed to guarantee that each of its business unit's operations are safe for its people, the community and the environment. We define this as: "Taking a positive attitude of common responsibility to constantly renew the organization and applying to our daily work the personal challenge of continual improvement."

EHS STEERING COMMITTEE

In January 1997, Cemex established an Environmental, Health and Safety Steering Committee, comprised of Cemex' first-level executives, to review quarterly the performance indicators and the progress of Cemex' environmental, health and safety programs and projects.

Participants in Cemex' first multinational Environment, Health and Safety meeting, where we capitalized on the company's synergy and shared experiences.



COMMUNITY PARTICIPATION

The Monterrey plant in Mexico operates a continuous good-neighbor program called "Victoria", in which the entire community, authorities, other businesses and the Universidad Autonoma de Nuevo Leon participate.

This marathon, organized by Venezuela's Mara plant, is another example of Cemex community involvement.



ISO 14001 CERTIFICATION

The Barrientos plant of Cemex Mexico became the first cement plant in the Americas to achieve ISO 14001 certification. The certification process was also initiated at Cemex Spain. These standards are now being used as one benchmark for the continuous improvement program for the rest of our business units.



TRAINING



The empowerment and training of personnel is a basic component of Cemex' environmental, health and safety management systems in our plants.

RECOGNITION



The President of Mexico delivered to Cemex a recognition for the completion by six cement plants of the Mexican government's voluntary environmental audits program.

EMISSIONS CONTROL



Cemex Spain developed a system for the prediction and control of emissions in its cement plants and expanded the equipment for its mobile environmental laboratory.

GLOSSARY

- ⌘ **Accident rate.**
Result obtained by multiplying the number of disabling accidents recorded in a certain period by 100 and dividing by the number of unit or plant personnel in the same period.
- ⌘ **Aggregate.**
Granular material; may be sand, gravel, crushed rock or scoria, used as a medium to make concrete or hydraulic mortar.
- ⌘ **Clinker.**
Intermediate product in the cement making process. Limestone, clay, and iron oxide sinter (presence in a single mass under the influence of heat without achieving fusion) in a rotary oven at 1,450 degrees Centigrade to produce the clinker. A ton of clinker is used to produce approximately 1.1 tons of gray Portland cement.
- ⌘ **Concrete.**
A mixture composed of hydraulic cement, fine aggregate (sand), coarse aggregate (gravel), and water, which sets with the passage of time, acquiring greater mechanical resistance.



- ⌘ **Ecoefficiency.**
To achieve greater economic success, increasing the capacity of raw materials and energy, reducing negative environmental impact, and promoting the integral development of human resources. The prefix "eco" refers to both ecology and economy.
- ⌘ **Ecology.**
The study of the interaction of living beings with each other and with their inanimate environment of matter and energy; the study of the structure and functions of nature.
- ⌘ **Ecosystem.**
A community of living beings which occupies a certain place in nature and which maintains an interrelationship with the environment.
- ⌘ **Emissions.**
Materials that enter the air and water currents, noise, vibrations, light, heat, rays, and similar phenomena generated by productive processes or installations and services.
- ⌘ **Environment.**
The air, bodies of water (oceans, rivers, lakes, and streams), areas of surface and underground soil, natural resources, flora, fauna, human beings, and their interrelationships.
- ⌘ **Environmental impact.**
Change in the environment caused by the presence of man or natural phenomena. From a business standpoint, environmental impact is "what goes out of the business without an invoice."
- ⌘ **Fossil fuel.**
Any organic fuel formed naturally by the earth, such as petroleum, coal, or natural gas.
- ⌘ **Kilocalorie (kcal.).**
A calorie is a unit of energy defined as the amount of heat necessary to raise the temperature of a gram of water at normal pressure from 14.5° C to 15.5° C. A kilocalorie is a thousand calories.
- ⌘ **Particles.**
Term associated with negative environmental impact; they are fine materials emitted by different sources, which are expected to exist in the ambient air as small solid masses.
- ⌘ **Pozzolana.**

Natural material that, in combination with water and Portland cement, react to form compounds with cementing properties.

≈ **Recycling.**

Collection and reprocessing of a resource so it can be made into new products.

≈ **Residue.**

The amount of substance not converted into product and not consumed or transformed during the production process.

≈ **Sustainable development.**

A balanced development of economic growth, social equity, and sustainable use of natural resources, for the purpose of satisfying present needs without compromising those of future generations.

≈ **Synergy.**

Combined action of various sources tending to achieve an effect greater than that which would be achieved with the sum of each of the sources in isolation.

≈ **Ton.**

Unit of weight equivalent to a thousand kilograms or 2,205 pounds.

≈ **Total days lost.**

The number of days lost due to disabling accidents.

≈ **Total disabling accidents.**

Those which result in a one day or longer disability leave, granted by the plant physician or Social Security.

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