

A Cleaner Canada

Imperial Oil's chairman examines the state of the environment and finds much to applaud. The fact is, he says, substantial progress has been made

BY ROBERT PETERSON

IT WILL COME AS A SURPRISE TO MANY PEOPLE TO LEARN THAT THE QUALITY OF the environment in Canada has been steadily improving for a long time and continues to do so. Surveys indicate that a majority of Canadians believe that the environment in this country is deteriorating rapidly. In fact, the historical record shows just the contrary. During the past three decades, air quality, water purity and other important indicators of environmental health have all improved – some of them very substantially

Personally, I would have been very surprised if this had not been the case. Whenever I visit the various sectors of Imperial Oil's operations, I see evidence all around me of what our company is doing to eliminate or minimize pollution and to improve efficiency in its use of resources. In Western Canada, our crude oil and natural gas production operations now generate less waste. Our refineries, which process crude oil into gasoline and many other oil-based products, have substantially improved the quality of the water discharged from operations into sewers as well as their energy efficiency (energy use per unit of output at Imperial refineries has been reduced by more than 20 percent since the mid-seventies). They have also reduced waste. As for the gasoline we manufacture, that too has been changed considerably to minimize atmospheric emissions while, at the same time, providing the motorist with the best possible product.

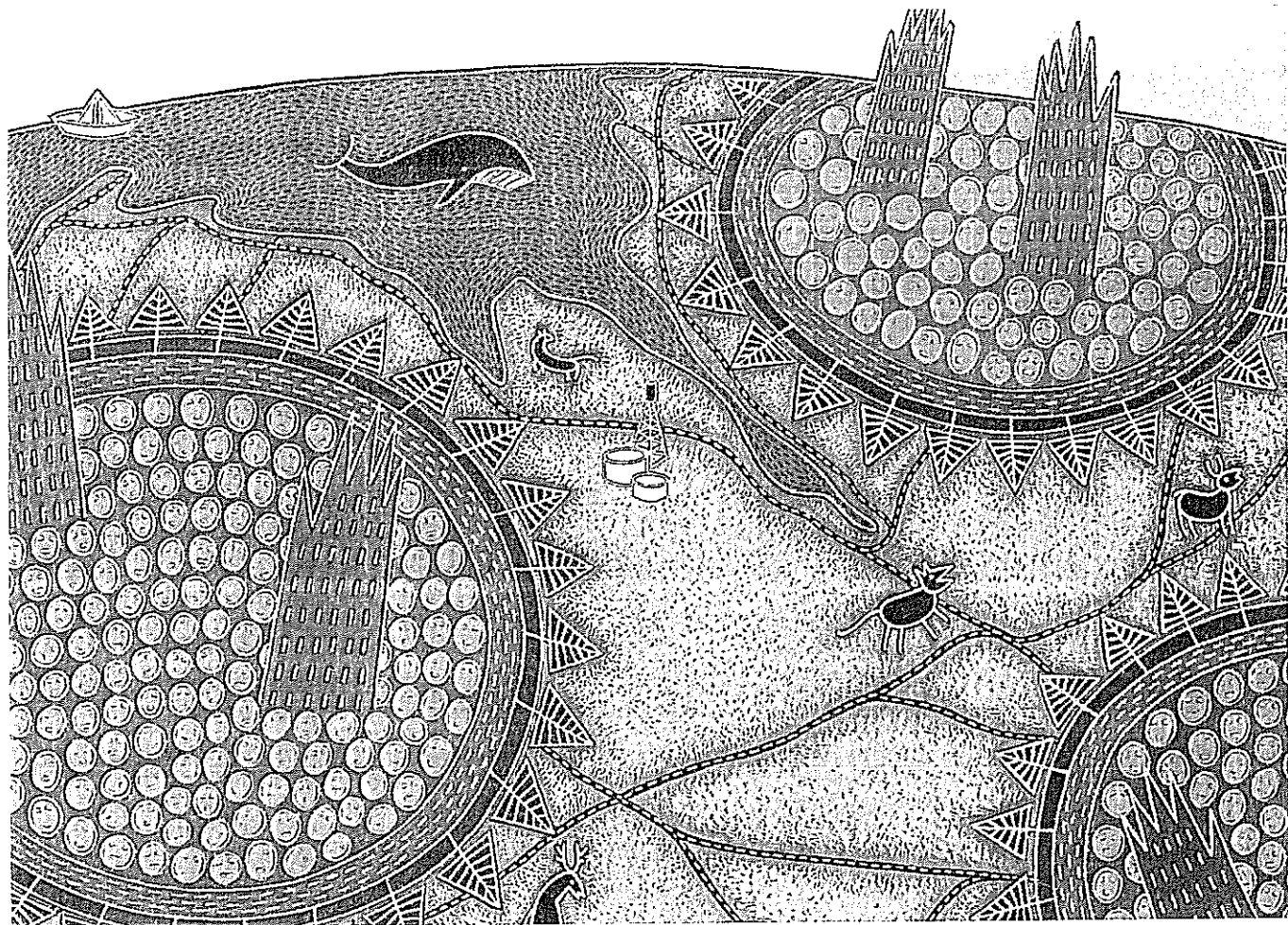
Over the past 10 years, Imperial has invested \$472 million in new processes and procedures designed to be more efficient, use fewer resources and have less effect on the ecology than those used previously. This year alone, Imperial has earmarked

\$30 million for capital investment directed towards improving the environment. Like any other investment we make, we expect these expenditures to produce measurable results.

And here, of course, I'm speaking of only one company. In total, Canada's petroleum industry spent more than \$600 million between 1993 and 1995 on environmental protection. The country's resource industries as a whole committed a total of \$3.4 billion over the same period. If this kind of spending hadn't resulted in an improved environment, we'd have been squandering an awful lot of our shareholders' money.

But this considerable investment on the part of Canadian industry has produced results. Let's take a quick look at what has happened in some of the more important sectors of the environment.

Among all the environment categories, air quality shows the clearest trend of improvement. The air we breathe today in this country is, without a doubt cleaner than it was 25 years ago. According to a 1997 study produced by the Fraser Institute, an independent Canadian economic and social research organization, five of the six major contributors to atmos



pheric pollution, measured in terms of "ambient pollution" (that is, the actual concentration of a pollutant in the air), have shown decreases over the years. For example, levels of sulphur dioxide, a major contributor to acid rain, decreased by 54 percent from 1975 to 1993, while ambient levels of lead in the air decreased by no less than 97 percent between 1975 and 1992, mainly as a result of the phasing out of leaded gasoline. Ground-level ozone, which contributes to urban summer smog, was the only identified substance to show an increase in ambient levels, but even these levels are lower than those indicated as acceptable in federal guidelines. (Ground-level ozone is formed partly as a result of emissions associated with gasoline use.)

In recent years, Imperial and other companies have worked actively to help governments find practical, cost-effective answers to Canadian air-quality concerns. To help reduce smog, Imperial and other Canadian refiners have progressively lowered the volatility of gasoline sold during the summer. In addition, systems have been installed at fuel distribution facilities to capture emissions caused by evaporation. Refiners have also invested heavily in equipment to

produce low-sulphur diesel fuel and to reduce the benzene content of gasoline. All these actions have contributed to the measured improvement in Canadian air quality.

Of course, car manufacturers have also made significant improvements to their products to improve air quality. Since 1970, tailpipe emissions of hydrocarbons and nitrogen oxides – both contributors to ground-level ozone – from new vehicles have been reduced by more than 90 percent. In fact, the situation today is that half of all exhaust pollution comes from 10 percent of vehicles – those that were made in 1988 and before or are poorly tuned. The Ontario government, with the support of the petroleum industry, recently announced the introduction of a motor vehicle inspection and maintenance program, while British Columbia has been operating a pilot program since 1996 to provide financial incentives to get high-polluting vehicles off the road.

Progress in improving water quality is more difficult to measure. While comprehensive statistics for all provinces are unavailable, a 1996 federal government report states that water quality in Canada in general, compared with most countries, remains rel-

actively high. This is particularly true of drinking water – about 87 percent of all Canadians receive treated municipal tap water. (Most problems arise from human consumption of water from untreated sources, such as private wells.)

In recent years, there has also been a greater awareness of the polluting effect of human activities on large bodies of water. The Great Lakes are a case in point. The International Joint Commission, which administers water treaties between Canada and the United States, believes that there is still much work to be done in improving water quality in the lakes. Nevertheless, there are some encouraging trends. While levels of nitrogen have increased in the Great Lakes, they are still well below the threshold for safe drinking water. Levels of phosphorus (which generally enters the water in detergents and fertilizers) have declined by one-third in Lake Ontario and have remained static in Lake Huron and Lake Superior. In fact, I read

the St. Clair, says that the river water has shown a steady improvement over the years.

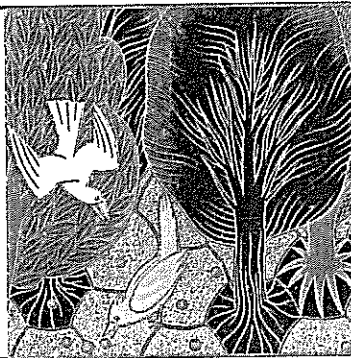
In other key environmental areas, the news is also encouraging. A 1997 joint study by the Fraser Institute and the Pacific Research Institute for Public Policy in the United States found that “in most instances objectives for protecting human health and the environment are being met, pollution and wastes are being controlled, and resources and land are being sustainably and effectively managed. Environmental quality in both Canada and the United States is *improving*, not deteriorating.”

The overall conclusion of this comprehensive study was that “fears about increasing environmental degradation in Canada and the United States are unfounded.”

Does this kind of report card provide us with any room for complacency? Of course not; there is still much to be done. But I *do* think that we can, as Canadians, take the time to recognize what has been achieved so far. In fact, I think we need to do this so that we can arrive at a realistic assessment of where we stand.

Unfortunately, Canadians rarely get the opportunity to hear the good news. Human nature being what it is, the fact that Canada's air quality has been steadily improving is unlikely to make front-page news. Nor are we likely to hear that

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recently that some people are complaining that Lake Erie has become too clean and that fish stocks are diminishing as a result (phosphorus and nitrogen promote the growth of algae and other plant life, an important link in the Great Lakes food chain).

One important area in which we have seen a major improvement in water quality is that associated with industrial activities. For example, the petroleum and chemical plants that stretch along the St. Clair River (which connects Lake Huron to the Lower Great Lakes) near Sarnia, Ont., constitute one of the largest industrial concentrations in Canada. A key reason they are located there is so they can draw their water supplies from the river. Imperial's refinery at Sarnia is one such plant, and the workforce there takes great pride in the fact that the water returned to the river after being used is actually cleaner than when it was taken out. In fact, despite all this industrial activity, the water of the St. Clair is today among the cleanest river water in the Great Lakes system, and to keep it that way, industry spends millions of dollars a year on pollution control. Scott Munro, the general manager of the Lambton Industrial Society, which constantly monitors the quality of the water in

kind of good news from those individuals who are convinced that no aspect of the environment is improving and for whom every pronouncement on the subject must be couched in terms of a doomsday scenario. Despite the substantial progress that has been achieved in such key areas as air and water pollution, toxic discharges, acid rain emissions, waste reduction and the recycling of many kinds of material, nearly every statement on the state of the environment appears to be wrapped in gloom and doom. It seems to be politically incorrect to say anything good about it. Little wonder that most Canadians think that things are getting worse even though they are getting better.

This is not meant to be an attack on environmentalists. I respect many of their beliefs and salute their achievements. I think the world as a whole would be in a much sorer state today if it were not for the efforts of a group of dedicated people who have devoted their time and energy to increasing public awareness of ecological matters and to pushing governments to give priority to the protection of the environment. They have had some notable successes.

I do, however, regret the polarization that has

come to characterize relations between the business community and some segments of the environmental movement. Too often, it seems to me, they resemble islands shouting across a sea of misunderstanding, unable – or, perhaps, unwilling – to see each other's point of view.

I believe there is a clear and positive connection between strong economic growth and a healthy environment. Indeed, I view economic growth as a prerequisite for fulfilling the aspirations of all Canadians by providing a better standard of living, advances in education and improved public health, and by generating the funds for the protection of the environment. Some environmental activists, on the other hand, are more inclined to view continuing economic growth as a destructive force, resulting in the depletion of our country's natural resources and damage to the environment.

The link between economic growth – driven largely by fossil fuel consumption – and environmental quality continues to be a subject of great debate. Recently, a major study conducted at Princeton University in the United States attempted to define the link between these two factors. The study found that initially environmental quality declines as a result of economic growth. But as people's incomes rise, a turnaround occurs. At a certain level of per capita income, the quality of the environment improves and continues to improve as incomes rise. This suggests that economic growth and environmental improvement are compatible.

FINALLY, I WOULD LIKE TO TURN TO A TOPIC THAT MANY people think is related to air quality and pollution. I refer to global warming. The debate over this controversial issue centres around whether the burning of fossil fuels, by emitting so-called heat-trapping "greenhouse" gases (primarily carbon dioxide), will cause temperatures around the world to rise to the point where we will be faced with a planetary disaster.

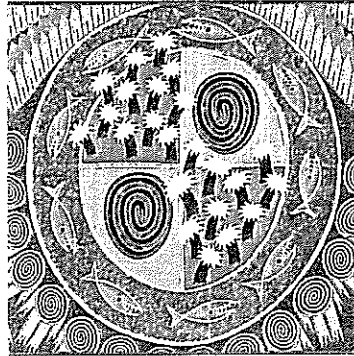
It is important to understand that this issue has absolutely nothing to do with pollution and air quality. Carbon dioxide is not a pollutant but an essential ingredient of life on this planet – the plant world cannot live without it. Furthermore, the question of whether or not the trapping of "greenhouse" gases will result in the planet's getting warmer – and I will comment on this shortly – has no connection whatsoever with our day-to-day weather.

Nevertheless, it seems to have become fashionable for some media and environmental groups to lay

the blame for every unusual variation in normal weather patterns – whether it be floods in California, tornadoes in Florida or ice storms in eastern Ontario and Quebec – on global warming. This is, quite simply, a fallacy. In fact, the Intergovernmental Panel on Climate Change, which is made up of a group of international scientists, has found no indications that instances of extreme weather have increased in a global sense through the 20th century.

One thing is clear in this debate. There is absolutely no agreement among climatologists on whether or not the planet is getting warmer or, if it is, on whether the warming is the result of man-made factors or natural variations in the climate. As an article in the May 1998 issue of *National Geographic* stated: "If the [warming] trend continues, it could alter climate patterns worldwide...."

"Or it might not. Global climate depends on combinations of factors interacting in subtle and complex



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ways that we do not yet fully understand. It is possible that the warming observed during this century may have resulted from natural variations...."

Nor is there any agreement on whether or not the impact – if the planet does get warmer – will be serious and what should be done about it. There has been no shortage of experts willing to testify for either side in this debate. Space does not allow me to summarize the various scientific arguments that have been marshalled for and against the case for global warming. I will say that given the amount of money and scientific resources that are being allocated to this matter in many countries, I believe that, over time, an answer will emerge that will meet with general consensus among the international scientific community. However, we are a long way from that answer today and, at this stage, I feel very safe in saying that the view that burning fossil fuels will result in global climate change remains an unproved hypothesis.

This thought, however, is not shared by the government of Canada. At an international conference on climate change held in Kyoto, Japan, at the end of last year, the federal government undertook to reduce Canadian emissions of carbon dioxide and