## The Address-Mr. Davis

linked to the best possible technology. As new techniques are devised, our standards are continually tightened up. Every new plant in this country must make use of this new technology. Here I would emphasize the word "ideas". Already as a result of this technologically-oriented policy of ours we have developed a good deal of fresh and valuable Canadian know-how. Not only has this been beneficial, in environmental terms, in Canada, but it has an important dollar sign attached to it. It is a new industry which is selling its expertise not only to firms here but also widely in the United States, in Sweden and the USSR. With these multiple dividends to Canadian workers and to our scientific community in mind we have launched a number of research projects for broader programs. They are essentially co-operative with nature and industry. In our pulp and paper mill industry, the research is increasingly being undertaken on a dollar for dollar or 50-50 basis, the taxpayers putting up half of the money for this and industry the other half.

## • (2050)

We have already scored a number of important breakthroughs. Here are a few which also show considerable promise and which may be highly successful not only from an environmental point of view but also from a financial point of view. The first is the use of oxygen to bleach wood pulp rather than using other chemical ingredients. Over a period of time this would make a pollution-free industry of one which is now largely responsible for much of our pollution. I have no doubt that the pollution outstream from those mills using the new process could be eliminated in its entirety. Preliminary estimates of cost benefits over a decade are interesting and show a benefit cost ratio of better than six to one.

Second is a new process for treating waste waters from mining operations. This would be invaluable for salmon rivers like the Miramichi and the Fraser. This technology, which is also transferable, is now in an advanced stage. I think it will be suitable not only for Canada but for other countries as well. It promises to have a benefit cost ratio in the area of ten to one.

Third, we are exploring a new process for controlling the emission of sulphur dioxide from smelter gases. By eliminating the expense of the limestone washing process, savings would result to both the smelter and the refinery. This process would have benefit both at home and abroad. It has an indicated benefit cost ratio of more than three to one

Fourth, other investigations are under way in laboratories and more particularly in industry across the country. Many of them are in the chemical, food and allied industries. Others promise considerable savings to municipalities in respect of sewage collection and sewage treatment.

These are among the reasons, Mr. Speaker, why Environment Canada is entering into numerous contracts with industry and occasionally with universities, that is, to develop new technology which can not only create a pollution abatement industry in this country but can also provide meaningful and well paid jobs for many Canadians.

What I have described is clearly an integral part of our over-all industrial strategy. It turns losses into gain; it converts present day wastes into products of future value;

it adds to our efficiency in a very material way; it will improve our earnings and at the same time it will help to clean up our national surroundings.

I believe quite sincerely, Mr. Speaker, that it pays to be clean. It may cost some industries more than others to be clean, but the total Canadian community is bound to benefit. We will have to expend less effort in tidying up our surroundings. We will not have to use as much paint, to suffer as much wear and tear or feel as badly as we have at times. Indeed, we will be a lot healthier and depreciation of our assets will be slower. Our great Canadian outdoors, if we are careful and plan far enough ahead, will be preserved for all time.

In over-all national terms, the cost of an abatement pollution program is unlikely ever to exceed 2 per cent of our national income. It may have fallen to as little as 1 per cent by 1980. In narrow economic terms—which does not look insurmountable—the savings in dollars and cents to individual Canadians may be several times that amount. The over-all benefits accruing to the whole Canadian community may be several times the actual financial cost to industry and to individuals in this country.

As I have said before in this House and in other places, and I say it again now, we in Canada can have a substantial rate of economic growth and a clean environment. We can expand our industrial output as long as we do it intelligently and put into effect the best possible technology, particularly a technology to suit our own Canadian problems in our own industries and eventually by selling the results abroad in our own interests and in the interests of others.

Mr. Speaker, I have very little time left and I should like to deal, not with matters which are largely internal to Canada but with matters which relate to our coasts and the sea. Not only do we have the longest shoreline in the world but we have the largest continental shelf which adds roughly 40 per cent to the area of our nation. How we manage these seas and direct the quality of the living resources which they nourish is very important to us.

In their forthcoming review of our departmental estimates, hon. members will see that we are adding substantially to the surveillance of these waters. In the fisheries and marine services alone, we are adding three large ships and a dozen medium-sized patrol craft by 1975. We are adding other shipping capacity in the area of research. In co-operation with the Department of National Defence we are stepping up surveillance from the air. A number of scientific expeditions are being planned, some in co-operation with other nations, which will also let us know more about the continental shelf which joins our shores.

Hon. members will be glad to know that we have gained a greater measure of control over the dumping of oil and other wastes near our coasts. The strong position which Canada took at the United Nations Conference on the Human Environment in Stockholm in 1972, and again at the Conference of Maritime Nations in London last fall, led to a convention which gives the coastal state certain powers of intervention which it never had before. For instance, Canadians could take emergency action against ships not only coming and going from Canadian ports but also passing close to our shoreline.