

Energy: some blunt facts about sources...

THE power situation in the Philippines is much worse than we have always thought it was.

We always said before that fossil-fired generators or generators of machines that produce electricity constitute 75 percent of our sources of energy. That is not true. What is true is that 94 percent of our energy or our electricity is right now produced by fossil-fired generators. And it will serve no purpose for anyone, in any way, to mislead our people.

It is now necessary to inform our people pointblank, frankly, and candidly, that only six percent is produced from hydroelectric power. And it is now the program of government to move as fast as possible into the generation of electricity from hydroelectric sources as well as from the geothermal sources that we are developing right now.

There have been optimistic forecasts about our converting our entire country into consumers of electricity that would come from non-fossil fired generators by 1985. This just isn't possible. It is not possible to convert the entire country into a country that will utilize only hydroelectric and geothermal power within the next 10 years.

Even if we were to bankrupt ourselves—bankrupt the government and ourselves—we would do it. The most reasonable and feasible solution—the compromise that we may arrive at—would be to reduce the fossil-fired generators from 94 percent to 75 percent by 1985.

That's quite a big letdown isn't it? But I thought it necessary and wise to tell you the truth. I'm all right. I'm not horrified when I read that there are ambitious government programs to convert the sources of electric power by 1985 into non-fossil fired generators. This raises false hopes among our people.

We must accept the reality that while we were paying P2.2 billion be-

fore the oil crisis, we are now paying P7.2 billion every year. From \$200 million, we are now paying \$840 million. And before the next year is over, we will be paying about \$1 billion.

And, we can borrow only so much every year. And this year, it may be necessary to allocate these credits to various projects we have in mind.

While we are in the process of exploiting our geothermal and hydroelectric potential, we are also moving into nuclear power generation. We are presently studying the impact of a costly nuclear power plant which may cost as much as \$100 million or \$1 billion insofar as it may curtail other projects in our country. For, while our credit is good, we can borrow only so much every year. And this year, it may be necessary to allocate these credits to various projects we have in mind.

One happy development is that we have now discovered nuclear deposits or uranium deposits in the Philippines. The Philippine Atomic Energy Commission has successfully processed Philippine uranium ore and produced the formula of U-38 by a completely Filipino team.

The potential sources of uranium in the Philippines on geology considerations are: (1) Camarines Norte, (2) Samar, (3) Ilocos Norte, (4) others, like Negros and Mindanao.

For every 600 megawatt nuclear power plant, it costs 60 tons of uranium per year. It needs presently \$32 per pound, and the price is still on the rise.

Whether it is oil, uranium, or even the machinery for geothermal units for hydroelectric power, the production cost of energy is going up. Across this broad terrain of escalating prices, therefore, the logic of conservation becomes more valid and urgent.

—PRESIDENT MARCOS
at launching of ENERCON movement

...and about savings

LAND transportation and industry account for 35 percent and 32 percent, respectively, of all petroleum consumed in the country.

Power generation accounts for 18 percent. Meraleco alone consumes 14 percent of the 18 percent.

Shipping, aviation, fishing, and other sectors account for less than 10 percent of the balance.

Thus, the greatest savings in energy use will come through eliminating wasteful consumption of petroleum fuels in cars, trucks, and buses as one class; secondly in industry; and thirdly, by conserving electricity, particularly in the Metropolitan Manila area.

These three sectors together account for over 80 percent of all petroleum use in the country.

Simple, isn't it? Eighty per cent of all petroleum consumed in the country is in the hands of those who drive cars, trucks, and buses; in the hands of those who are in industry; and of those who live in Greater or Metro Manila.

This would make it simple for anyone to plan and say: "All right, all of you therefore, cut consumption by 10 percent or, say, 50 percent." But the plans are easier to make than to implement.

There are many steps that can be taken by everyone right now to eliminate wasteful consumption of petroleum.

The momentum of the energy conservation movement—which was, of course, started way back in 1973 when we had the system of allocation of gas

—was somehow lost. And now it is necessary to regain the momentum.

National demand for petroleum in 1974 was successfully reduced to 65 million barrels which was five million barrels less than 1973. But I am informed by the Philippine National Oil Company that the country will consume about 72 million barrels in 1975, which will be 10 per cent more than 1974. And consumption in 1976 is projected to grow by another 11 per cent to 80 million barrels, unless the energy conservation program is successful.

Let us remember that every barrel of oil saved means over \$12 of import savings, but that our percentage of consumption that is saved means over a \$9 million for the country.

I appeal to everyone for their full-hearted participation for the national economic reasons that I have already mentioned, knowing that each individual effort at saving of energy redounds to his own benefit as well as that of the country.

I am prepared to implement appropriate economic sanctions against those who waste energy, but I hope that this can be kept to a minimum. It is best that the State and the government do not step in, but that our people develop the capability to face up to a challenge and to a crisis without proddings or the coercive power of government.

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The new oil laws

THE thrust of the government's oil conservation measures is to offset the additional \$100 million in the country's oil bill as a result of the OPEC oil price increases.

To achieve this, President Marcos has issued the following directives:

Letter of Instructions No. 326
(Issued on 27 October 1975)

Under this Letter of Instructions, all government agencies were required to:

—reduce their oil, electricity, and power consumption by at least five percent except in cases where it would prejudice the national interest;

—desist from putting up Christmas displays or lights that consume electricity;

—avoid the purchase and use of big cars which are heavy users of gas and oil; and

—shut off all neon, advertising, and building lights not later than midnight daily except those that are needed for the protection and security of their premises.

LOI 328 also specified tasks for the following government agencies:

THE DEPARTMENT OF INDUSTRY

a. To direct all industrial plants, factories, commercial establishments and other entities consuming at least P3-million worth of fuel, oil and power yearly to formulate and submit comprehensive programs of power and energy conservation, the administration and implementation of which the DOI shall monitor.

b. To study, formulate, and recommend to the President, standards on energy use for industrial plants and factories.

c. To review the country's national development plans and attune these to available energy resources, in collaboration with the National Economic Development Authority and the Board of Investments.

THE PHILIPPINE NATIONAL OIL COMPANY, THE NATIONAL POWER CORPORATION, AND THE NATIONAL ELECTRIFICATION ADMINISTRATION.

To organize a pool of engineers and combustion efficiency experts to assist industrial concerns and factories in developing their conservation programs.

THE DEPARTMENT OF FINANCE

To review and study taxes for items considered significant power-users—such as big automobiles, sports cars, gasoline-powered trucks and luxury appliances—and recommend to the President the necessary imposition of taxes and policies to discourage the use of uneconomic machines. The LTC was to review the registration fees and requirements for such cars and trucks, and make recommendations to the President.

THE DEPARTMENT OF TRADE

To study and promulgate regulations on the use of all types of lighted advertising signs, particularly neon lights. Initially, the Trade Secretary was to prohibit the operation of all types of lighted advertising beyond midnight.

THE LAND TRANSPORTATION COMMISSION

The LTC, the Philippine Constabulary and all police agencies were to strictly enforce all laws and regulations prohibiting the operation of dilapidated, unroadworthy and inefficient motor vehicles and to intensify traffic-flow improvement campaigns.

The Defense Secretary was to make available the authority and resources of his office for other government agencies to insure that power conservation and efficient fuel and energy utilization programs, regulations and directives are enforced.

Letter of Instructions No. 329
(Issued on 27 October 1975)

This decree enjoined the entire country to conserve fuel and energy, or face gas rationing. It also directed the Commission on Audit to inform government officials and drivers that the unauthorized use of government vehicles is punishable with the arrest of violators.

Letter of Instructions No. 329
(Issued on 20 November 1975)

Under this LOI, the President directed the Philippine National Oil Company to be responsible for implementing the government's comprehensive programs for the development and use of the country's coal resources as an alternative source of energy.

ON 11 December 1975, President Marcos launched the "Energy Conservation Movement" in "Malacanan. This is a loose organization of private corporations and associations organized by the Philippine National Oil Company.

On launching the movement, the President issued three Presidential decrees designed to deter wasteful and uneconomic use of fuel.

Presidential Decree No. 843

Under this, the annual registration fees for private automobiles were fixed in accordance with their factory or seating weight, as follows:

Presidential Decree No. 844

PD 844 imposed an energy tax on private non-commercial aircraft.

Presidential Decree No. 845

This decree imposed energy tax on motorized watercraft used for pleasure and recreation. It also amended the Tariff and Customs code.

On the same occasion the President also issued Presidential Decree 846 which required all sectors of mass media to participate actively in the information and educational campaign for the conservation of fuel by providing free space and time in their newspapers or on radio and television stations. □

Rising cost of electricity

MERALECO, which consumes about 14 percent of the Philippines' total oil imports, paid only \$1.68 per barrel (C & F) for our oil imports in 1960. In 1972, the cost per barrel had risen to only \$2.15. In 1973, it rose to \$3.00 or P26.62 per barrel. In March of 1974, it had risen to \$9.55 or P83.62 per barrel. Up to October of 1975, the price had escalated to over \$11.00 per barrel, and now it is more than \$12.00 per barrel.

The Philippines is in the unhappy position of depending almost entirely on imported oil to prop up its economy. We have large rivers and waterfalls, and coal of low heating value, but all those contribute only eight per cent of the energy we need.

In 1964, we were importing only 30 million barrels of oil. In 1973, oil imports rose to 65.9 million barrels. In 1964, the country's oil bill was only about \$61 million dollars. In 1973, it had risen to \$750 million dollars.

In 1975, it will be about \$840 million dollars and in 1976, it is estimated to escalate to \$980 million dollars at present OPEC prices.

Considering that our country's total foreign trade in 1974 was about \$5.8 billion dollars, of which \$3.1 billion dollars was for imports, oil represented about 24 per cent of our imports. In 1975, the cost of oil is about 27 per cent of our import expenses. In 1976, it will represent about 32 per cent. □