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SUMMARY OF THE NATIONAL REPORT SUBMITTED BY
THE DOMINICAN REPUBLIC*

This paper is the national report prepared by the Dominican Republic for the United Nations Conference on New and Renewable Sources of Energy to be held in Nairobi in 1981.

The first part of the report gives a brief analysis of the country's economic situation, with special emphasis on the adverse impact of frequent oil price increases on the trade balance. It provides data and information on total purchases and imports of petroleum and petroleum products.

In 1973, the country paid \$US 3.30 on average for a barrel of reconstituted crude, whereas in 1980 it paid \$US 32.40. In 1973, imports of hydrocarbons cost \$US 46 million, whereas by 1980 that cost had risen to \$US 540 million. This latter amount represented 42 per cent of total imports for 1980.

The report also describes and comments on the composition of and future prospects for energy supply and demand.

Until now, the country has used the following primary energy sources: petroleum, hydroelectric power, bagass, firewood and charcoal. Petroleum represents 67 per cent of the total energy supply, hydroelectric power an estimated 1 per cent and charcoal, firewood and bagass 32 per cent.

The national electric company is the main consumer of petroleum and petroleum products. In 1978, it consumed 32.39 per cent of the country's total oil imports and was followed by the transport sector, which consumed 24.07 per cent, the industrial sector with 23.56 per cent and the mining sector with 14.10 per cent.

* The designations employed, the presentation of material and the views expressed in this paper are those of the submitting Government and do not necessarily reflect the practices and views of the Secretariat of the United Nations in any of these respects.

Households are the main users of electric power after the industrial sector. In 1978, the two sectors consumed 38.16 per cent and 36.89 per cent respectively of the electric power supply.

With regard to institutional matters, the report describes measures taken by the Government with a view to reducing the country's dependence on hydrocarbons. They include the creation of an agency responsible for preparing short-, medium- and long-term plans and measures in the energy sector and for conducting programmes, studies and experiments which will lead to the development and large-scale use of the country's available new and renewable sources of energy.

The report lists and comments on studies made in the fields of solar energy, biomass and hydroelectric power, and also on work done, inter alia, on solar water heaters, energy farms and mini-hydroelectric plants. The main conclusions of some of those studies indicate that:

(a) The country's hydroelectric potential warrants consideration. The minimum potential which could be technically developed is estimated at 5 billion KWh a year, more than all the electric power now produced by the national electric company. Small hydroelectric sources could also be exploited to meet the basic needs of the rural sector and to help improve the living conditions of that sector of society.

(b) Energy farms are one of the country's most promising renewable sources of energy. It is estimated that the cost of generating electricity by applying this technology is 40 to 45 per cent of that of oil-burning plants.

(c) The characteristics and geographical location of the Dominican Republic make solar energy one of the most promising alternative primary energy sources, principally as a means of heating water.

(d) With regard to bio-energy, the energy potential of agricultural waste which could be used as a source of energy has been assessed at an estimated 7.2 billion KWh. With current heat production amounting to only 2.5 billion KWh, it is being recommended that the exploitation of that resource be encouraged.

The report also describes the obstacles which have thus far hampered the large-scale development of new and renewable sources of energy. The main obstacles are the shortage of specialized technical and administrative personnel in agencies dealing with energy problems, budgetary and financial constraints curtailing research and development and the lack of intraregional co-operation in research and development of new technologies.

Finally, the report indicates the international and national action required for better utilization and exploitation of new energy sources. At the international level, it emphasizes the need to expand facilities for financing and to accelerate the transfer of appropriate technology. At the national level, it highlights the need to promote greater integration and co-ordination among agencies dealing with energy problems, to provide incentives for industry to manufacture components and/or systems based on non-conventional energy technologies and to develop programmes to educate the public and make it aware of energy issues.