REPORT OF THE DOMINICAN REPUBLIC ON THE PROGRAMS OF OZONE CONTROL MEASURES TROPOSPHERIC AND STRATOSPHERIC.

The Dominican Republic was recognized by the United Nations Environment Program (UNEP) and the World Meteorological Organization (WMO) for its progress in the Reduction of Substances that deplete the Ozone Layer through the National Ozone Program of the Ministry of Environment and Natural Resources. Through compliance with the Montreal Protocol, whose purpose is the conservation and protection of the Ozone Layer throughout the Caribbean zone.

At the Twenty-eighth Meeting of the Parties to the Montreal Protocol, an amendment on substances that deplete the ozone layer in the city of Kigali, Rwanda, which will substantially reduce the emission of the gases it generates, is being adopted at the Twenty-eighth Meeting of the Parties to the Montreal Protocol By lowering the production and use of hydrofluorocarbons (HFCs).

The HFCs, used mainly in air conditioning, refrigeration, insulation foams and emerged as a replacement for chlorofluorocarbons (CFCs), were found to be harmful to the ozone layer. Since then, it has been determined that HFCs have fostered global warming by trapping 23,000 times more heat than Carbon Dioxide.

The Multilateral Fund of the Montreal Protocol, approved financing to the Dominican Republic for the second stage of the hydrochlorofluorocarbon (HCFC) consumption reduction management plan, with the objective of reducing 40% of these substances, which are broad Use in the refrigeration and air conditioning sectors, these substances are exhausting the Ozone Layer and Global Warming Producer. The project will be implemented in the period 2017-2020 through the National Ozone Layer Protection Program (PRONAOZ).

The Dominican Republic it's in the status of compliance with the Montreal Protocol adopted the Vienna Convention and the Montreal Protocol on Substances that Deplete the Ozone Layer in 1992 and following the amendments of London 12/24/2001, Copenhagen 24/12/2001, the Montreal one 01/10/2009 and the Beijing amendment 01/10/2009.

It fulfilled its commitment to eliminate CFCs, Halon, CBT and Methyl Bromide by the year 2010. The HCFC phase-out schedule, achieving a 15% reduction of its baseline, greater than 10% required by the Protocol of Montreal by 2015.

In cooperation with the Multilateral Fund of the Montreal Protocol, had implemented more than 47 projects since 2000, including the Chlorofluorocarbon (CFC) phase-out plan and the Hydrochlorofluorocarbon Phase-out Plan (HCFC)), Which included the conversion of HCFC-based companies into the manufacture of rigid foams.

The Ministry of Environment and Natural Resources is working on the implementation of the HCFC management plan to eliminate 15.36 tons, which the country promised to reduce by 2020. With regard to tropospheric and stratospheric ozone.

The Dominican Republic has not carried out measurements of stratospheric ozone and ultraviolet radiation, there are no tropospheric ozone measurement programs at the surface level, it does not have the equipment or the technical preparation in this specific area in the ultraviolet UV, the National Office of Meteorology (ONAMET), only measures the sun hour.

The country is in the process of approving the criteria applied in other countries of the Caribbean region to participate in the network of countries that are carrying out these measurements of stratospheric ozone and ultraviolet radiation at a global level due to the large coastal extension of beaches That we already have the tourists that are, exposed to the sun.

The Spanish island is occupied by the Dominican Republic and the Republic of Haiti, two constitutionally separated governments, with different cultures and languages, the island covers an area of 76,420 km², and a coastal line that extends about 3,347 km of beaches and reefs. The Republic of Haiti occupies an area of 27,750 km² of territory and with a coastline of 1,771 km.

The Dominican Republic occupies an area of 48,670 km² of territory, with a coastline of 1,576 km, is one of the main tourist destinations in the Caribbean.

2012	2013	2014	2015
5,047,021	5, 163,682	5, 648,743	6,151003

Tables of visits of foreigners to the Dominican Republic

The decrease in the ozone layer in recent years has a direct consequence on all humans, due to the increase in UV-B radiation (290-320 nm), which reaches the Earth's surface. Although these proportions are small relative to the solar spectrum represented by UV-B radiation, these photons are capable of altering human DNA and its biological effects are directly dependent on wavelength and are represented by biological responses.

According to the organisms being studied, from skin cancer in human, to its effect on the seedling. The effect of exposure to ultraviolet light is given by the concept of doses, so we speak of erythematous (redness of human skin), daily or monthly.

 ⁽According to data from the Dominican Economy Report of the Central Bank).

There are three types of rays (UV): UVA, UVB and UVC. UVA rays are of long wavelength and are also responsible for the immediate pigmentation of the skin and tan, which penetrate slowly into the deeper layers of the skin, and cause changes in blood vessels, stains, aging Cutaneous lesions and precancerous lesions, although they have often been considered harmless.

The UVB radiation, of medium wavelength, possesses greater energy but penetrates little in the skin. Its effects are cumulative and are responsible for burns, increased thickness of skin and skin cancer. The short UV rays, or UVC, are the most aggressive but do not cross the stratospheric ozone layer because they are absorbed into the atmosphere.

In this respect, Dr. Guzman a specialist in skin surgery, revealed that in a study conducted in the Dominican Republic, where 365 patients were evaluated, and that 90% of these individuals had tumors in the face, 95% in Nose, cheek and mouth from high exposure to the sun. This said that the cell cancer is caused by excessive exposure to the sun and said that this type of jail does not tend to metastasize nor does it require chemo therapy in most cases, but surgery with removal of the area Affected.

The Dominican Republic, located between the Tropic of Cancer and Ecuador; the tropic of cancer is one of the states of the planet that is located in the Northern Hemisphere. In the parallel at a latitude of 23°26'50 "north of the equator, it travels south at a rate of 14.4 meters / year, in a half-second time (0.46s / y. Delimits the most northern points in That the sun, is placed in the Cenit (the vertical of the place), this phenomenon happens between the 20 and June 21 of each year.

For this reason it is termed as the solstice of June, where the solar rays fall vertically, on the ground, in the imaginary line of the northern hemisphere tropic (Tropic of Cancer). According to the Ecuadorean Civil Space Agency (EXA), quoted by the British Broadcasting Corporation: (BBC), the inhabitants of the equatorial strip and the Tropic of Cancer daily receive extreme ultraviolet radiation levels due to the deterioration of the ozone layer.

The study, says the British Broadcasting Corporation (BBC), World, bases its measurements made by the Ecuadorian Civil Space Agency (EXA) in the last six months and in the information provided by 10 satellites belonging to different space and environmental agencies around of the world. Data from satellite images and ultraviolet (UV) sensors indicate that this region is subjected most of the day to UV rates much higher than those recommended by the World Health Organization (WHO). The EXA warns that the short- and medium-term exposure of this phenomenon will be an increase in cases of skin cancer and other diseases related to excessive exposure to radiation.

The National Ozone Program of the Ministry of Environment and Natural Resources of the Dominican Republic requests the support of the United Nations Environment Program (UNEP) for its work to promote the cooperation of the member countries of which we are signatories. The Dominican Republic addressed the National Ozone Officers, where they undertook to establish coordination mechanisms with the countries of the region and their regional representatives before the Executive Committees and Implementation of the Montreal Protocol on issues relevant to the financing guidelines and fulfillment.

In addition, we wish to have the opportunity as a country to socialize our experiences, lessons learned and training opportunities in relation to ultraviolet radiation and motivate the National Ozone Officers who require such support, establish a bilateral dialogue or request that it be facilitated South-South cooperation and other regional mechanisms.

Finally, the Assistance Program for the implementation of the United Nations Environment Program (UNEP) for its work to promote the cooperation of member countries.

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