

## **Marco Gonzalez Biography**

Marco Gonzalez is currently a consultant working to strengthen the Montreal Protocol to assure stratospheric ozone recover and to avoid climate tipping points. He has also remained active in the Montreal Protocol as a Senior Expert Member of the Technology and Economic Assessment Panel (TEAP).

He was Executive Secretary of the Vienna Convention and the Montreal Protocol from 2002 to 2013.

Mr. Gonzalez was trained as an engineer in Costa Rica and the United Kingdom (UK) to act and use the scientific method as a primary approach to solving engineering problems. He started his career as a power systems engineer in the National Institute of Electricity and Telecommunications of Costa Rica (ICE). This early work provided him on-the-job training and teamwork experience to grasp 1) the power of mathematics and the early computer skills in modelling complex transmission and generation systems, 2) the methods to satisfy the imperative of economic analysis, 3) appreciation of the benefits of energy efficiency and load shifting, and 4) the need to protect the environment while recommending alternative plans to develop the Costa Rican National Power Grid.

By the early 1980's, his responsibilities at the helm of ICE's Central Region included appreciating and resolving concerns of grass-rooted environmental and community groups. The opportunity to address developmental barriers and infrastructural needs became great sources of motivation that inspired him to participate in local and national politics.

After 8 years in office of elected positions, one 4-year term in the local government of his hometown and another 4-year term in the National Legislative Assembly of Costa Rica, he was appointed in 1994 Vice-Minister of Natural Resources, Energy and Mines. In the Legislative and Executive branches of the government of Costa Rica Mr. Gonzalez addressed local, national, and global environmental issues. He contributed to the creation of the Permanent Legislative Commission on Environment and spearheaded the constitutional amendment "to create the right to a clean and ecologically balanced environment".

At the Ministry of Environment, he contributed to the creation of the Costa Rican System of Payments of Environmental Services and the establishment of the National System of Conservation Areas. He represented Costa Rica in multilateral meetings including the Climate and Ozone Treaties, and promoted Costa Rica as a venue for hosting multilateral events, including the combined Sixth Conference of the Parties to the Vienna Convention (COP) and the Ninth Meeting of the Parties to the Montreal Protocol (MOP) hosted by Costa Rica in 1996. The 1996 MOP elected Mr. Gonzalez the Vice-Chair of the Executive Committee (ExCom) of the Multilateral Fund for the Implementation of the Montreal Protocol (MLF) and the 1997 MOP elected him the ExCom Chair.

In 2002, as Mr. Gonzalez was working in a sabbatical period to raise the level of competitiveness of Small and Medium Enterprises (SMEs), at the National Center of High Technology of Costa Rica, he was selected by the Secretary General of the United Nations, Mr. Kofi Annan, to lead the Ozone Secretariat.

His vision of the secretariat was of an outcome-relevant United Nation Institution with a clear mandate to advance the protection of life on Earth from the harmful ultraviolet (UV) radiation. He identified compliance with the obligations under the Montreal Protocol and a sound replenishment of the MLF, as the looming challenges for the Protocol, and made it a priority to strengthen the secretariat to better serve all parties.

Mr. Gonzalez's team served the parties in more than 100 multilateral meetings, including 12 MOPs, 2 Extraordinary MOPs, 4 Joint COP and MOP meetings, 4 replenishments of the MLF. During his tenure, among the most significant accomplishments of the parties were:

-Reaching the first climate-related adjustment of the protocol to accelerate the phaseout of HCFCs on considerations of climate impacts. This historic decision opened a new era for ozone treaties taking on responsibility to protect the climate. And once the Montreal Protocol was also a climate treaty it was natural to embrace energy efficiency and recovery and destruction of banks;

-Conducting the first ever paperless meetings in the United Nations in the combined Ninth COP to the Vienna Convention and Twentieth MOP to the Montreal Protocol in Doha, Qatar in 2008. And continuing strengthening the paperless meeting culture.

- Achieving universal ratification of the ozone treaties in 16 September 2009, an old dream of the Ozone Treaties, in fact a dream of all Multilateral Environmental Agreements and keeping this unique status ever since.

-Working together with the secretariat to galvanize political will to advance the protection of the ozone layer and after the 2007 adjustment to address the growing use of greenhouse gases(HFCs) as alternatives not controlled by the Protocol.

-In 2010, achieving complete success by Article 5 Parties with the total phase out of production and consumption of all chlorofluorocarbons (CFCs) and halons.

-Successful completion of all meetings organized by the Secretariat and stable replenishments agreed for the MLF.

Mr. Gonzalez has received numerous recognitions from Governments and Organizations around the world. In 2017, he earned the **UNEP Scientific Leadership Team Award** "For Building and Communicating the Scientific Foundation for the 2007 acceleration of the HCFC Phaseout and the 2016 Kigali Amendment and Decision to phase down HFCs and increase energy efficiency," (earned with Stephen O. Andersen, John S. Daniel, David W. Fahey, Mack McFarland, Guus J.M. Velders, and Durwood Zaelke).

Mr. Gonzalez published his first book with Stephen O. Andersen

Most recently, in September 2023 he earned the "**Planetary Guardians: Ozone Awards 2023**" by the **Planetary Guardians Organization and Virgin Unite** (earned with Dr Frank Sherwood Rowland, Dr Mario Jose Molina, Dr Stephen O. Andersen, Dr Suely Carvalho , Dr Helen Tope and Dr Jonathan Shanklin.

His tenure as Executive Secretary of the Ozone Secretariat was extended two years after the mandatory retirement age by the Secretary-General, Mr. Ban Ki-moon, attending the unanimous decision of the MOP in 2010 to retain Mr. Gonzalez at the Helm of the Secretariat. He then retired in 2013.

Mr. Gonzalez is a graduated Electrical Engineer from the University of Costa Rica and earned a Master of Science Degree in Power Systems Analysis and Electrical Machinery from the Imperial College of Science and Technology, University of London, England.

Marco has authored several articles and publications on the Montreal Protocol and climate interactions including his recent first book, coauthor with Stephen O. Andersen: **35<sup>th</sup> Anniversary Protecting the Ozone Layer**, the first and second digital edition published in Kindle Amazon, and the Condensed Second Edition, printed and published in 2023.