## Suely Machado Carvalho, PhD

Rua Frederico Guarinon 125 ap. 132H • São Paulo, SP, Brazil 05713-460 • Phone: +55-11-999799292 • E-Mail: suelymmc@gmail.com

Senior expert and independent consultant providing advice to national and international organizations and institutions, with 30 years of experience working to protect the Ozone Layer and Climate.

## Education

Bachelor of Science (BS) in Physics, Pontifícia Universidade Católica, São Paulo, BRAZIL

Master of Science (MS) and Doctor (PhD) degree from Purdue University, Indiana, USA

Technology and Economic Assessment Panel, TEAP and Related Experience

Senior Expert Member, TEAP (2016-2019), and member of the following Working Groups and Task Forces: TEAP Task Force on 'Cost and Availability of Low GWP Technologies that Maintain/Enhance Energy Efficiency, Decision XXX/5', 2019; TEAP Energy Efficiency Task Force (Co-Chair) on "Issues Related to Energy Efficiency while Phasing down Hydrofluorocarbons", 2018; TEAP "Working Group on Hydrochlorofluorocarbons, Decision XXIX/9", 2018; TEAP "Working Group on Energy Efficiency, Decision XXVIII/3", 2017; TEAP MLF Replenishment Task Force", 2017; TEAP "Working Group on the Climate Benefits and Costs of Reducing Hydrofluorocarbons under the Dubai Pathway, Decision EX.III/1", 2016.

Member Technical Advisory Committee, TAC (2016-now) of the K-CEP (Kigali Cooling Efficiency Programme).

Member Executive Group Kigali Project-Brazil, (2017-now), focusing on removing barriers for improvement of energy efficiency standards and labeling to accelerate the introduction of low GWP and energy efficient Air Conditioners". Project coordinated by iCS (Institute Climate and Society) and in partnership with Lawrence Berkeley National Laboratory (LBNL), Collaborative Labeling and Appliance Standards Program (CLASP) and ELETROBRAS / EPE/ Minister of Energy Brazil.

Member, The World Bank "Ozone Operations Resource Group," OORG (2016-2019). The Panel advises the World Bank in environmental policies related to international agreements and technology transfer to countries where the Bank operates.

Senior Expert/Consultant (2016). BRS Secretariat, Geneva. Led the development of cost calculation methodology and report on the "Assessment of Funding Needed to Implement the Stockholm Convention on Persistent Organic Pollutants, POPs (SC) for the period 2017-2021". The assessment results were used during GEF 7 Replenishment negotiations.

Co-chair (2015-2016). International Expert Panel for Energy Efficiency Testing of Air Conditioners in High Temperature Environment, funded by the US State Department and Department of Energy (DOE) and partnering with Oak Ridge National Laboratory, Tennessee, USA.

TEAP Co-Chair (1993-2001). First A5 to be a TEAP co-chair. As co-chair and TEAP expert member, provided TEAP with the leadership and guidance needed throughout the Assessments Reports and Replenishment studies.

Post-Doctor. "National Superconducting Cyclotron Laboratory", Department of Energy, DOE, Michigan, USA (1979-1980). Data modelling and cyclotron baseline measurements.

## National and International Positions

• <u>UNDP Director</u>, New York (2001-2013). Joined UNDP in 1997 as Latin America Montreal Protocol (MP) portfolio manager and deputy chief. Selected as UNDP-Montreal Protocol Trust Fund Manager and Director of the UNDP Montreal Protocol and Chemicals Unit in New York. Responsible for the MP and Chemicals global programme totaling over US \$ 650 million from the MLF, the GEF and other partner bilateral and multilateral organizations and programmes. The UNDP-Trust Fund of the Montreal Protocol (MP-Trust Fund) allowed the transfer of ODS-free

- technology to over 100 developing countries in industrial sectors that use medicinal aerosol, pesticides, insulating and other foams, fire protection, refrigeration and air conditioning, solvents and other products of great socio-economic importance.
- As UNDP-Global Environment Facility (GEF) <u>Principal Technical Advisor (PTA)</u> on Chemicals and Waste, (2001-2013), worked in close cooperation with the Climate Change focal area of the GEF, engaged in market transformation activities to foster replacement of ODS based equipment in developing countries, bringing partner finance institutions in multimillion dollar interventions across sectors in partner developing countries, mobilizing additional finance.
   Represented UNDP in meetings of the parties to the Stockholm Convention, Basil and Rotterdam Conventions as well as the Strategic Approach to International Chemicals Management, SAICM.
- <u>Director of Development and Technology Transfer at the Environmental State Agency/ CETESB</u>, Secretariat of State of São Paulo, Brazil (1995-1997). As director, was responsible for laboratory sample analyses and certification, environmental policies related to international agreements, bilateral agreements in the areas of chemical pollution, waste destruction technologies and resource mobilization. CETESB is currently one of the Regional Centers for the Stockholm Convention on Persistent Organic Pollutants, POPs. Responsible for the development and implementation of the first Ozone Layer Protection and Climate Change State programmes.
- Head of Air Quality Control Division at the Federal Secretary of Environment, Brasilia, Brazil (1988-1990). Air Quality
  and Ozone Layer Protection was under the responsibility of this Division. Member of the Brazilian delegation at MP
  meetings.
- Researcher at IPEN, Instituto de Pesquisas Energéticas e Nucleares, Brazilian Nuclear Energy Commission, CNEN, doing inspection and occupational and environmental impact studies at Brazilian fuel cycle installations. 1980-1988.

## Recognition/Awards

"Ozone Secretariat 30 Years Award" (2017). Award for 30 years of contribution to protect the global ozone layer and climate, as member of TEAP.

"Ozone Secretariat 25 Years Award" (2012). Award for 25 years of "contribution, dedication and work to protect the global ozone layer."

"Multilateral Fund Secretariat Award" (2012). For leadership and successful implementation of the UNDP Montreal Protocol Programme.

"Global Ozone Award" (2007). UNEP. Award to selected experts globally, celebrating 20 years of the Montreal Protocol, Montreal, Canada.

"The Stratospheric Ozone Protection Award" (1996) in recognition of outstanding contributions to the protection of the ozone layer of the earth, the United States Environmental Protection Agency (EPA).

"The Glenn Jenkins Award for Excellence in Research" (1979). Purdue University, USA.