

## **Ing. Oscar Coto**

Nationality: Costa Rica  
Professional Interests: Climate Change Mitigation, Energy-Environment Dynamics on Global Change, Energy Sector and Renewable Energy Project Development, Rural Energy Services in Developing Countries.  
Phone: 506-271-3210  
E-mail: [ocoto@amnet.co.cr](mailto:ocoto@amnet.co.cr)

### **I. Education**

Oscar Coto has a B.Sc. in Mechanical Engineering from the University of Costa Rica in 1977, followed by Master Degree courses in Energy Systems Engineering at the Pennsylvania State University during 1978, with concentration on Power Plant Design and Thermal Engineering.

Through a scholarship granted by the British Council, he obtained a Ph.D. in Energy Systems Engineering from Reading University in England in 1984, concentrating on research related to Renewable Energies, specifically in the area of solar water pumping systems and decentralized energy services.

Dr. Coto was a Visiting Fellow at the Massachusetts Institute of Technology (MIT) from 1986-87 under a Fulbright Postdoctoral Fellowship, having worked at the Energy Laboratory in Renewable Energy Systems Integration. He was also a Visiting Scholar at the Division of Applied Sciences at Harvard University having worked on the development of models to study energy-economy-environment interactions and policy issues in developing countries, where he undertook research into the application of dynamic input/output models for consideration of renewable energies and energy efficiency technologies in energy planning in Latin America.

### **II. Professional/institutional Affiliations**

**2003 -present. Centro Agronómico Tropical de Investigación y Enseñanza (CATIE), Costa Rica.**

Part Time Consultant with the Global Change Group at CATIE in issues related to climate change mitigation and CDM training and project development.

Co-coordinator of the recently started FORMA Project related to strengthening of capacities for CDM project development in the forestry and bio-energy sectors, financed by INIA (Spain) and CIFOR.

Coordinator of the "Sustainable Biomass/Bio-energy and CDM Project" supported by the Central American Energy-Environment Partnership, executed in conjunction with the University of Juvyskala in Finland.

Lecturer on CDM and Bio-energy project design, for the "Curso Regional en Cambio Climático y Diseño de Proyectos MDL en los Sectores Forestal y Bioenergía" being offered by CATIE for the last 3 years.

Member of CATIE's delegation to COP 10 in Buenos Aires, Argentina.

## **2002 – present. Independent Consultant.**

Responsible for developing projects for different clients, amongst others:

BUNCA (2005): Development of innovative concepts for financing of energy efficiency projects in Central America, based on analysis of project portfolios in Costa Rica, El Salvador and Panamá.

Econergy (2005): consultant services on a study developed for the WB Carbon Finance Business for program based CDM activities concentrating on methodological issues for energy efficiency and fuel switch project activities.

Fundación Solar/CD4CDM (2005): assistance to CDM development of project portfolios in Guatemala.

OLADE (2004-2005) Consultant responsible for implementation of an Energy/Climate Change initiative, working in: assessment of institutions for CDM in the LAC region, evaluation of energy sector portfolios in OLADE member countries, provision of technical assistance to DNA in the region in aspects related to approval processes, scoping of sectoral CDM projects, and provision of training of project developers in 4 target countries in the region.

Fiorello La Guardia Foundation (2003): Development of a Central American background paper on Renewable Energy and Energy Efficiency, supporting start-up operations of the REEEP partnership supported by the British Government. Development of manual for small scale emission reductions projects as part of the work involved in implementing the Prep Assist facility for support to REEE projects.

CAEMA (Andean Center on Natural Resource Economics) (2003-2005): in the valuation of renewable energy sector CDM projects in Colombia (hydro), Ecuador (wind) and sugar mill cogeneration in Colombia and Peru. At the same time he has participated as an associate lecturer of CAEMA in several CDM-Renewable Energy sector CDM capacity building activities in Colombia, Peru and Brasil. He was also participant on a study developed for IDB on estimation of CER marginal production costs for Central American countries as well as assessments for project portfolios.

E+Co LAC (2003): on the development of a market assessment for renewable energy grid connected projects in Central America, as part of on-going activities for development of financial facility's for renewable grid connected projects in reformed markets.

UNIDO 2003-2004): assessment of rural renewable energy and energy efficiency projects and CDM potential in the island states of Grenada, St. Lucia and Dominica.

## **2002 -2004. UNFCCC Secretariat, Germany**

Served as a member of the Methodologies Panel organized by the Executive Board of the CDM. Responsibilities included follow up to specific methodology evaluations for CDM projects in the energy, waste water and industry sectors, and participating in the development of consolidated methodologies, as well as on supporting technical contributions to issues under the request of the EB.

### **1995 – 2002. Fundación Solar, Guatemala**

Coordinator of the Renewable Energy Project Support Office (REPSO) Program, supported by Winrock International and USAID, focusing on Renewable Energy Project Development; aiming at bridging policy issues, development of new models for innovative rural energy service and financing for sustainability of renewable energy interventions in the central American region.

Coordinator of the Environmental Services and Climate Change Program, involved on issues linking renewable energy technologies and LULUCF in the provision of environmental services related to GHG emissions reductions. The program provided support to the Government of Guatemala through the implementation of the First National Communication of Guatemala to the UNFCCC by developing the GHG gas inventory and mitigation strategies in the energy sector, developing sectoral and project specific baselines for energy sector projects, and developing and implementing a first of a kind small scale agro-forestry carbon sequestration protocol involving small peasants in the Atilán lake.

Coordinator of the design and implementation 2 GEF related projects in the area of rural energy service provision in the framework of OP6 related to climate change, having worked in the implementation of a PDF Type B project in Guatemala and the design of a Full Size approved project in the field of rural energy, and environmental services in rural areas of Guatemala.

Responsible for development of solar P.V programs for rural communities: design of financial and program interventions in a program that installed around 2,000 systems for rural household applications as well as other community systems including illumination, and productive uses applications.

Participated with the PCF Plus program on a study to evaluate CDM transactions costs for SSC type projects, having worked on evaluation of several small scale hydro village projects.

Dr. Coto participated in different COPs and SUBSTA meetings as representative of CAN LAC.

### **1993 - 1996. IFREE, USA.**

Manager of the Central America Renewable Energy Project Preparation Facility, providing administrative and technical support for a pre investment support office for renewable energy projects in the region. Based in Costa Rica and then in Guatemala, overlooked a fund of ½ million dollars providing early stage financial support to a portfolio of biomass cogeneration, hydro and wind projects in the region for a total capacity of about 60 MW. Implementation of a series of training events related to financing of small scale renewable energy in the region, business plan development for REEE projects in the Latin American region.

### **1990 - 1993. PEICCE Project, Costa Rica.**

Renewable Energy Project Specialist for the PEICCE project, EU sponsored project aimed at developing local and regional capacities for renewable energy usage in the Central American region. Through this time, he worked in several projects aimed at biomass use for drying operations in agricultural processing (small scale rice milling and coffee processing) in rural areas of Nicaragua and Honduras, as well on technical issues of sugar mill cogeneration in Nicaragua and Guatemala. Dr. Coto was also in-charge with the development of a cluster of micro hydro projects in northern Nicaragua serving micro grid applications for small rural villages as well as providing technical design expertise for hydro plant development in Costa Rica at the Cano Grande I and II Power Plants.

**1988 – 1995. Biomass Users Network Central America (BUNCA), Costa Rica.**

Consultant: Responsible for assignments in projects related to sugar cogeneration and diversification in Central America and the Caribbean, developments of energy efficiency and biomass furnaces in the coffee processing industry, and strategic assessment of innovative fund structures for financing of renewable energy and energy efficiency.

**1984 – 1994. University of Costa Rica, Costa Rica.**

Professor of Mechanical Engineering: Responsibilities included teaching courses on Renewable Energy and Thermal Systems, Engineering Economics and Project Evaluation; as well as Thermodynamics/Energy Conversion. Conducted research into optimization of energy systems especially on energy efficiency and development of hybrid systems linked to RE technologies.