



Dr. Fernando Quevedo, a Guatemalan national, was appointed director of ICTP in October 2009.

Dr. Quevedo is a well-known theoretical particle physicist with wide-ranging research interests in string theory, phenomenology and cosmology. He was awarded the 1998 ICTP Prize in recognition of his important contributions to superstring theory.

He was born in 1956 in Costa Rica and obtained early education in Guatemala. He obtained his PhD from the University of Texas at Austin in 1986 under the supervision of Nobel Laureate Steven Weinberg. Following a string of research appointments at CERN, Switzerland, McGill University in Canada, Institut de Physique in Neuchatel, Switzerland, and the Los Alamos National Laboratory, USA, as well as a brief term as professor of physics at the UNAM (Mexican National Autonomous University), Mexico, Dr. Quevedo joined the Department of Applied Mathematics and Theoretical Physics at the University of Cambridge, UK, in 1998, where he is currently Professor of Theoretical Physics and Fellow of Gonville and Caius College.



Diana Alarcón is the Chief of the Development Strategy and Policy Analysis Unit of the Development Policy and Analysis Division (DPAD) in the United Nations Department of Economic and Social Affairs (UN/DESA). She leads the writing team for the World Economic and Social Survey and has contributed to several reports by the Secretary-General on issues related to the United Nations development agenda. Diana co-led the creation of the MDG Gap Task Force in 2008 and the subsequent publication of the MDG Gap Report. She had a leading role in the creation of the UN Task Team for the Post 2015 Development

Agenda and in the preparation of the initial analytical inputs from the United Nations system to the inter-governmental processes that defined the 2030 Agenda for Sustainable Development. Before joining UN/DESA, Diana worked 10 years in the Inter-American Development Bank and has experience working at UNDP and the ILO. She has a PhD in Economics from the University of California, Riverside and has taught in several Universities both in Mexico and the United States.



Eduardo Zepeda is inter-regional policy coordinator of the Development Policy and Analysis Division, Department of Economic and Social Affairs at the United Nations General Secretariat. He was previously a senior associate in the Trade, Equity, and Development Program at the Carnegie Endowment for International Peace, where his research focused on employment, poverty, and development policy.

Prior to joining the Endowment, Zepeda was senior researcher at the International Poverty Centre of UNDP in Brasilia, Brazil, taught at the Universidad Autónoma Metropolitana-Azcapotzalco in Mexico City, and served as the economic and social policy coordinator in the Analysis Unit of the Chief of Staff in the Office of the President in Mexico. He was also a visiting fellow at the Center for U.S.-Mexican Studies at the University of California at San Diego.



Austria.

Dr. H-Holger Rogner holds an MSc in industrial engineering (1975) and a PhD in energy economics (1981). For most of his career, he has been engaged in comprehensive energy system analysis, energy modelling and integrated resource planning. Until his retirement from the International Atomic Energy Agency (IAEA) in 2012, he directed the IAEA programme on Capacity Building and Nuclear Knowledge Maintenance for Sustainable Energy Development. Dr. Rogner holds positions of Affiliate Professor, Royal Institute of Technology (KTH), Stockholm, Sweden and Senior Research Scholar at the International Institute for Applied Systems Analysis (IIASA) in Laxenburg,



Mark Howells directs the division and holds the chair of Energy Systems Analysis (KTH-dESA) at the Royal Institute of Technology in Sweden, and is an Honorary Affiliate Prof at the University of Technology in Sydney and Editor in Chief of Energy Strategy Reviews. KTH-dESA spearheads the development of some of the world's premier open source energy, resource and spacial electrification planning tools. Mark he has published in Nature Journals; coordinates the European Commission's think tank for Energy; is regularly used by the United Nations as a science-policy expert; and is a key contributor to UNDESA's 'Modelling Tools for Sustainable Development Policies'. His division contributes to efforts for NASA, IRENA, ABB the World Bank and others. Prior to joining KTH-dESA he has an award winning career with the International Atomic Energy Agency. Mark's graduate and post-graduate studies were undertaken at the University of Cape Town, South Africa. Within that time he was also an international research affiliate at Stanford's Program on Energy and Sustainable Development: spokesperson for the

World Energy Council's student program; lead RSA's Integrated Energy Planning (IEP) process as well as other national initiatives.



Dr. Claudia Octaviano is General Coordinator for Climate Change Mitigation at the National Institute of Ecology and Climate Change of the Federal Government of Mexico. She oversees scientific and technical research that supports climate mitigation policy in Mexico, including the work for the National GHG Emissions Inventory, emissions projections and low-carbon development pathways. Prior to this appointment, she was a post-doctoral Associate at the Massachusetts Institute of Technology (MIT) Joint Program

on the Science and Policy of Global Change where she researched on the economics of large-scale integration of renewable energy. She has also worked on the design of environmental regulations for the electricity and oil sectors, as former Deputy Director for Oil Refining and Electricity at the Ministry of Environment and Natural Resources of Mexico. She has consulted for the World Bank and the UN on energy policy in Latin America. She holds a PhD in Engineering Systems: Technology, Management and Policy from the MIT, a Masters in Environmental Science from Yale University and a B.A. in Economics from Monterrey Institute of Technology.



Rodolfo Lacy is the Deputy Secretary of Planning and Environmental Policy at Mexico's Ministry of Environment and Natural Resources (SEMARNAT). He holds a PhD in Science and Environmental Engineering from the Metropolitan Autonomous University in Mexico (UAM) and a M.S. in Environmental Planning from Massachusetts Institute of Technology (MIT).

He coordinated and edited the first State of the Environment report in Mexico and is author of the book "Air Quality in the Valley of Mexico". In 1994 he was awarded a Rockefeller Foundation fellowship in the program Leadership for the Environment and Sustainable Development -LEAD. He is the founding President of the Environmental Engineers Association of Mexico, former Head of Advisors to the Minister of SEMARNAT, Research Coordinator for Energy and Environmental Projects at the Mario Molina Center, and General Director for and Control of Environmental Pollution at the Mexico City Government, among other positions in the public sector.



Monica Nogara is the Head of Programme Development in the Capacity Development Office of UNDESA since September 2015. Prior to that she held different positions in the Office of Ecosoc Support and Coordination (OESC\UNDESA) focusing on a variety of issues, from economic policy analysis, to aid effectiveness, and capacity building. She also consulted with the World Bank on financing for development issues and with UNFPA on capacity development. Ms. Nogara holds a Bachelor's degree in Political Science from the University of Padua and a Master's degree on International Economic Policy from Columbia University.



Yann Loic Tanvez works as an Energy Specialist with the World Bank Sustainable Energy Department, Strategy and Operations. Since joining the Bank in 2012 Yann has been focusing on public sector innovations and private sector development strategies supporting energy access and clean energy scale-up globally. Yann also currently leads the practice work on open data and analytics aiming at leveraging data innovations towards accelerating progress towards universal access to affordable, reliable, sustainable and modern energy. Prior to joining the World Bank Group, Yann held various positions in the private and non-governmental sectors, including as advisor to CEOs and Executive Committees of major global energy companies. French national, Yann holds bachelor and master degrees in law from Lyon III University, a BA in classic philosophy from Paris I Sorbonne University as well as a MA in international affairs from the Institute d' Etudes Politiques of Paris – Sciences Po.



Dr LUONG Van Khoi, Deputy Director General, National Centre for Socio-economic Information and Forecast (NCIF), Ministry of Planning and Investment, Vietnam. Dr. LUONG Van Khoi is a standing Member of Experts and Consultants Group of Minister of the Ministry of Planning and Investment; a member of the Global Think Tank Planning Committee of the Global Think Tank Community; The President, Scientific Committee of the NCIF.

Dr LUONG, Van Khoi is acting as a policy adviser for the government of Vietnam. His subject expertise includes Macroeconomics and Microeconomics, International economics, Economic Growth, Enterprise in Economic Development, Investment Effectiveness Analysis, SME Promotion and Local Economic Development, Productivity and competitiveness, and modelling.

He has extensive field experiences in studying macroeconomic and microeconomic issues in Vietnam, as well as forecasting world economic developments and measuring the impacts of

world economic development and international integration on Vietnamese economy. Before moving to the National Centre for Socio-economic Information and Forecast of Vietnam, he has worked for the Department of Investment Project Appraisal and Agency for SME Development with his main tasks involved appraising and providing his advice to the Minister, Prime Minister and the National Assembly of Vietnam to approve investment projects, and providing supports of the state to the development of small and medium sized enterprises in Vietnam.



María del Pilar Garrido Gonzalo Viceministra de Planificación y Política Económica. Estudió Ciencias Políticas, la Maestría en Ciencias Políticas y Gobernabilidad Democrática de la Universidad de Costa Rica y la Maestría en Desarrollo Internacional de la Universidad de Dublin, Irlanda. También ha complementado su formación con cursos en economía aplicada y econometría en el Kings College of London. Habla 5 idiomas: español, inglés, francés, alemán y mandarín.

Anteriormente, se desempeñaba como consultora para el Programa de Naciones Unidas para el Desarrollo (PNUD) y la Diputació de Barcelona en procesos de planificación participativa subnacional y derechos humanos. También ha trabajado como investigadora para la Universidad de Costa Rica, Funpadem y el Parque de la Libertad en temas de política social, participación y acceso a la información, y empoderamiento económico y político de poblaciones vulnerabilizadas.

Entre sus responsabilidades principales como viceministra, se encuentran la de coordinar la secretaría técnica de los Objetivos de Desarrollo Sostenible en Costa Rica, coordinar el proceso de adhesión al Comité de Gobernanza Pública de la OCDE, actuar como punto focal ante la Comisión Económica para América Latina y el Caribe para el Consenso de Montevideo, y apoyar el proceso de recuperación, en el componente de reactivación económica post-Huracán Otto.



Dr Kristen MacAskill is the Course Director for the Construction Engineering Master's programme at the Laing O'Rourke Centre for Construction Engineering and Technology in Cambridge University's Engineering Department. She originally trained as a civil engineer and then completed a Masters degree in Engineering Management in New Zealand.

She has also obtained an MPhil in Engineering for Sustainable Development and a PhD from Cambridge University, where her research base was in the Engineering Department's Centre for Sustainable Development. Before returning to a role in academia, Kristen has worked as a consulting engineer in both the water and transport sectors. Her experience covers various areas of infrastructure development, including strategic level options assessment, post-earthquake

damage assessment, infrastructure design, project management and sustainability assessment. In addition to her work on the masters programme, Kristen teaches a sustainable development course to engineering students from across the department. Her core research focus is in the area of disaster risk reduction and post-disaster recovery, exploring how governance arrangements impact on the recovery process and the subsequent emphasis given to 'building back better'.



Taco Niet, graduated with his M.A.Sc. from the University of Victoria (Canada) in 2002 and has been teaching mechanical engineering at the British Columbia Institute of Technology (Canada) for the last twelve years. He feels strongly that we need to focus on the sustainability of the entire energy system and not assume that a specific project is sustainable just because it is labelled 'renewable', 'clean' or 'green'.

Taco's research on energy systems modelling focusses on sustainability in how we provide energy services. His current work considers the system level implications of utilizing variable renewable energy for electricity generation. When not working, Taco enjoys sailing, camping and hiking.



María Amparo Martínez Arroyo holds a Bachelor in Biology and a Master on Sciences from the National University Autonomous of Mexico (UNAM) and a PhD. in Ecology from University of Barcelona, Spain (Cum Laude Honors) Cum Laude. PhD. Martinez Arroyo worked as Director of the Center for Atmospheric Sciences (CAS) of the UNAM from 2009 to August 2013, and is still Senior Researcher and Atmospheric Aerosols Group Coordinator. Has been pioneer in the study of atmosphere-biosphere interactions in aquatic systems, analyzing photosynthesis processes (carbon dioxide capture and oxygen production), as well as emission and biogenic catching of other gases climatically active (dimethyl sulphide, methane) in continental, coastal and marine ecosystems. Ph.D. Amparo Martinez is an expert in environmental problems analysis, and in the relations between science and society.

This research line has allowed her to contribute to different aspects in the science application to public management. Also, has collaborated, for example, in the design and implementation of the National Clean Beaches Program; in the elaboration of a scientific strategy for the establishment of a Marine Protected Natural Areas network in North America to the Climate Change; and has lead the Climate Change issues in the Science, Technology and Innovation in the Citizens Agenda, among several academic, scientific and legislative institutions. During the time she worked at the CAS, she designed and launched, among other projects, the network of Atmospheric

Observatories in universities. Her research includes the effects of climate variability and climate change on aquatic and terrestrial ecosystems and the possible scenarios of evolution of these under different climatic and environmental conditions. María Amparo Martínez Arroyo has published articles in international journals, book chapters, papers and technical reports. She has participated in different research projects with national and international funding. She has directed bachelor, master and doctoral thesis. Also, she has participated in several activities of scientific dissemination and capacity building.



Patrick van Weerelt is at the Head of Office at United Nations System Staff College (UNSSC) - Knowledge Centre for Sustainable Development.

Patrick has extensive capacity development, policy and program experience in the field of sustainable development, democratic governance and human rights and has served at HQ, Regional and country level for the United Nations. Prior to joining the UN System Staff College in Turin in 2011, Patrick served as UNDP Practice Leader for Democratic Governance in West- and Central Africa (based in Dakar) covering 23 countries in the sub-region, and as Senior Human Rights Adviser at UNDP HQ in New York. He began his UN career at UN OHCHR in Geneva following which he moved to UNDP in South Africa. Patrick is a lawyer by training and also served (from 2006-2009) as Adjunct Professor at Washington College of Law, American University, Washington D.C. He is married with two children.



Mr. Sahele Tamiru Fekede is a senior energy analyst at the Ministry of Water, Irrigation and Energy of the Federal Democratic Republic of Ethiopia since October 2009. He had previously served at the national electricity regulator, the Ethiopian Electricity Agency, in various positions specializing in the technical regulation of the electric power sector, including technical inspections of power plants and network components for compliance with safety and technical standards. He started his career as a distribution engineer at the national electricity utility, the Ethiopian Electric Power Corporation.



Professor Deepak Sharma is the Director of the Centre for Energy Policy (CEP), in the School of Systems, Management and Leadership, Faculty of Engineering and Information Technology (UTS). He holds a bachelor's degree in electrical engineering and master's and doctoral degrees in energy economics and policy. He has more than thirty-five years of professional experience in academia, public and private sectors. He is actively engaged in teaching, research, and consulting on infrastructure and environmental policy themes – in national and global contexts. Such themes include energy-water-economy-climate change interfaces; environmental policy analysis; evaluation of infrastructure investments; infrastructure regulation; energy and water market reforms; industry productivity; and institutions, governance and political economy. He is currently co-ordinating a major research project focusing on Energy-Food-Water security challenge in a global context. The general tenor of his work is multidisciplinary, policy oriented – underpinned by a recognition of the significance of global cultural, political and geo-strategic contexts. He has consulted extensively for several national agencies, regional governments, and multilateral institutions (including the World Bank, OECD, Asian Development Bank, International Atomic Energy Agency) – on a range of infrastructure policy themes.



Adrian Tompkins is a research scientist in the Earth System Physics section of ICTP and (subject to pending UNESCO approval) Senior Visiting Research Fellow in the School of Mathematical, Physical and Computational Sciences (Walker Institute) at the University of Reading in the United Kingdom.

His research interests focus on cloud and convection dynamics and physics, and their representation in weather forecast and climate models.

In addition he examines how tropical weather and climate is represented and predicted in these models, especially at seasonal timescales. A key question is how weather prediction and climate models can be better applied in developing countries, particularly concentrating on their use for health impacts. Some of this work has been carried in the framework of two EUFP7 projects on climate and health, namely QWeCI and HEALTHY FUTURES.

He presently serves as a member on the World Climate Research Programme (WCRP) Working Group on Seasonal to Interannual Prediction (WGSIP). He has also been recently elected to the scientific advisory committee (SAC) of the West African Science Service Center on Climate Change and Adapted Land Use (WASCAL)



Nebojsa Nakicenovic is Deputy Director General/Deputy CEO of the International Institute for Applied Systems Analysis (IIASA) and former Full Professor of Energy Economics at the Vienna University of Technology.

He was born in former Yugoslavia, is originally from Montenegro, and a citizen of Austria. Most of his youth he spent on the Adriatic coast in the family's village high up in the mountains, while his professional life he spent in the U.S., Germany, Japan and mostly Austria. Through his personal and professional experiences he is acutely aware of the challenges posed to developed and developing nations from climate change, devoting much of his career to understanding these impacts and their respective mitigation and adaptation options.

Nebojsa Nakicenovic primary research focus has been on how energy-systems can be transformed toward a sustainable future within planetary boundaries. This includes strategies for successful technology diffusion, financing and adoption consistent with local circumstances and with the objective of improving human equity and wellbeing. His work is especially based on comprehensive assessments of energy technologies and scenarios such as those of the Millennium Ecosystems Assessment (MEA) (2005) and the Global Energy Assessment (GEA), (2012). GEA was the first ever fully integrated assessment analyzing energy challenges, opportunities and strategies for developing, industrialized and emerging economies and provided the scientific basis for the Sustainable Energy for All (SE4ALL) initiative, of which he is an advisor (Member of the UN Secretary General High-Level Technical Group on Sustainable Energy for All, and the UN Secretary General Advisory Group on Energy and Climate Change).

Most recently Nebojsa Nakicenovic was Project Leader of the Austrian Panel on Climate Change Assessment Report (APCC-ARR14) which represents the first comprehensive analysis of climate change in Austria, including climate impacts, vulnerability, and mitigation options. For this, the IPCC approach was applied to a national level assessment, rooting it deeply in the traditions of IPCC and related works such as GEA. He has been engaged in the work of the Intergovernmental Panel on Climate Change (IPCC) in various roles since its inception.

Nebojsa Nakicenovic has published more than 300 publications and has served on over ten Journal Editorial Boards. His scientific contributions have enriched the debate and the knowledge on the links between climate and development, the synergies of the pillars of sustainable development, the urgent need to build and strengthen bridges between science and policy, and most importantly the pressing need for a transformative agenda as a conduit to a sustainable world.



Dr Paul Deane is a Post-doc Researcher in the Energy Policy and Modelling Research Group at the University of College Cork, Ireland. He has been working in the energy industry for approximately 9 years in both commercial and academic research. Paul completed an Eirgrid funded PhD in April 2012 researching the topic of Pumped Hydro Energy Storage. His research interests include modeling the technical and economic impacts of renewable generation on power systems using PLEXOS, full energy system modeling using TIMES, storage and emerging technologies.



Prof. Jürgen-Friedrich Hake is Head, Systems Analysis and Technology Evaluation at Forschungszentrum Jülich and Professor for Energy Policy and Energy Economy at Aachen University of Applied Sciences. He received his Diploma in Mathematics/Physics from Bielefeld University.



Dr. Reily is the Co-Director of the Joint Program on the Science and Policy of Global Change and a Senior Lecturer in the Sloan School of Management at MIT. Much of his research career has focused on the economics of climate change, including modeling of energy use and greenhouse gas emissions and the impacts of climate change on agriculture as well as consideration of agriculture and forestry sinks. He has published numerous articles on the economics of climate change and on other issues related to natural resources, technology, and energy use and supply. He was a principal author for the IPCC Second Assessment Report and has served on many US Federal government and international committees. He was the Co-Chair of the recent US National Agricultural Assessment on Climate Change, published as a book Agriculture: The Potential Consequences of Climate Variability and Change, Cambridge University Press, 2002. Prior to joining MIT in 1998, he spent 12 years with the Economic Research Service of USDA, most recently as the Acting Director and Deputy Director for Research of the Resource Economics Division. He has been a scientist with Battelle's Pacific Northwest National Laboratory and with the Institute for Energy Analysis, Oak Ridge Associated Universities. He received his Ph.D. in economics from the University of Pennsylvania in 1983 and holds a B.S. in economics and political

science from the University of Wisconsin. He is a member of the American Economics Association and the American Geophysical Union.



Emanuela Colombo has achieved both a **PhD in Energetic and a Nuclear Engineering MSc at Politecnico di Milano** in Italy where she is currently **Associate Professor in “Engineering for Cooperation and Development” and “Advanced Thermodynamics and Thermoeconomics”** and serve at the **Department of Energy**. She has also been covering the role of **Rector’s Delegate to Cooperation and Development** at Politecnico di Milano since 2005

She gained a considerable working experience in different industrial energy sectors working for Ansaldo Energia”, “ABB Research”, Fluent France and Fluent Italia branches of Fluent Inc. (now ANSYS-FLUENT).

In 2001 she has moved to an academic career where her interest was originally focused on heat transfer devices and processes for power generation, turbulence phenomenology and modelling.

Over the last decade she has been developing a strong interest in the **interrelations between Energy, Environment and Sustainable Development, access to energy in developing countries and advanced exergy methodologies** for performance and impact evaluation of energy systems are other topics of high interest.

She is currently the scientific coordinator of **4 European projects** and one international tender on Green Innovation (**Egypt**), Sustainable Energy Engineering (**Kenya, Tanzania and Ethiopia**), Water Energy and Food nexus (**Egypt**), Modern Energy services in refugee camps (**Lebanon, Somalia, RCA and Colombia**) and Capacity Building in Engineering (**Tanzania**). She is also working on consultancy and advocacy projects on access to energy for different Italian private players and NGOs active in **Mozambique, Malawi, Congo, Angola**. She is author of more than **120 scientific papers**, 63 of which are in Scopus (H-index, and co-author of the book “*Renewable Energy for Unleashing Sustainable Development*” by Springer.

In line with this interest in 2004 she was **one of the founders of *Engineers Without Border in Milan***. For her personal and professional interest, **in 2005 she was named Rector’s Delegate to Cooperation and Development at Politecnico di Milano** where she is still working for promoting the role of the academic education and research in coping the complex challenges of global development and human promotion.

Since 2007 she is coordinator **of a Network of Universities focus on Cooperation and Development (CUCS)** which includes 29 Universities. In 2009 she has been awarded by the Club

Mille Miglia Foundation in Italy as **“courageous intelligence”** for her research interest and social commitment in developing country.

For her experience on energy for sustainable development, she worked as international expert for the United Nations Industrial Development Organisation (UNIDO) and for the Africa Europe energy Partnership (AEEP). In 2011 She introduced a new path in the MSd in **Energy Engineering focus on “Energy for Development”** at Politecnico di Milano and she promoted an honours programme for the Schools of Engineering focus on **“Engineering for Sustainable development”** to promote global dimensions within engineering education launched in 2015. In 2012 she has been named Chair holder of the **UNESCO CHAIR on Energy for Sustainable Development** assigned to the Department of Energy and **adjunct professor at the Nelson Mandela African Institute of Science and Technology in Arusha**. In 2016 She has been appointed by the Italian Conference of the Rector (CRUI) as representative of the academic system within the “National Council for Cooperation and Development”. She was member of the **Sustainable Development panel of Electricité De France (EDF) from 2012 to 2016**.



Dr Linus Mofor is a Senior Environmental Affairs Officer in charge of energy, infrastructure and climate change at the African Climate Policy Centre of the United Nations Economic Commission for Africa, based in Addis Ababa, Ethiopia. He joined the Commission from the International Renewable Energy Agency (IRENA) where he worked as a renewable energy innovation and technology analyst. Before joining IRENA, Linus was an industrial development expert with the Energy and Climate Change Branch of the United Nations Industrial Development Organization (UNIDO) in Vienna. Prior to working with UNIDO, he was a senior lecturer and consultant at the Centre for Engineering Research and Environmental Applications at the University of Glamorgan (now the University of South Wales) in UK.



Francesco Gardumi joined KTH division of Energy Systems Analysis (dESA) as a Post-Doc researcher in February 2016. His research focuses on the development and application of energy systems models for long-term energy planning and integrated water-energy planning. He is currently the community manager of OSeMOSYS – Open Source Energy Modelling System. He also works in the scientific coordination of Horizon 2020 modelling project REEEM (LCE21), dealing with the role of technologies in EU energy transition pathways to 2050. In 2009 he got his Bachelor's degree and in 2012 the Master's degree, both in Energy Engineering

at Politecnico di Milano. During his studies, he carried out the Erasmus Programme at Instituto Superior Tecnico, Lisboa, and the research for the Master's thesis at TU Delft, the Netherlands. He got the PhD in Energy and Nuclear Science and Technology at Politecnico di Milano in February 2016, with a research about the integration of short-term flexibility constraints into long-term energy system models. During his PhD he also taught as a tutor in Engineering and Cooperation for Development Master Course and as an assistant in Heat and Mass Transfer Bachelor Course.