

## DAY 2 – March 1st

### IMPLEMENTING CONCESSIONS: GENERAL GUIDELINES AND CHALLENGES

#### 2:00 to 2:05 pm: Introduction and schedule of the day

- **David Vilar (Infrastructure Program Lead for Ghana and Senior Energy Specialist, World Bank)**



Spanish mechanical and materials engineer, has been working as Energy Specialist at the World Bank since 2013 in the Africa region, working in rural electrification and access to electricity initially and in the last years in power sector reforms and utility turnaround. Currently is Program Leader for Infrastructure in Ghana, Sierra Leone and Liberia and Senior Energy Specialist based in Accra. Prior to the WB experience, David was technical advisor to the ECOWAS Center for Renewable Energy and Energy Efficiency (ECREEE) for three years, advising ECOWAS and utilities on RE investments, regulation, policies and Governments knowledge/data sharing as well as capacity building capacity building. From 2005 to 2010, David worked with Engineer Without Borders in Peru, Ecuador, Bolivia and Mozambique leading implementation of electrification and access to basic services projects in rural areas.

#### 2:05 to 2:45: Implementing concession: general success/failure factors from past experiences

#### 2:05 to 2:15: Questions and preliminary answers

- **Pedro Sanchez, Lead Energy Specialist, World Bank**



Pedro Sanchez is a Lead Energy Specialist at the World Bank Energy and Extractives practice in the West African region. He is an energy sector expert with three decades of experience in power sector reforms and private sector participation in Latin America, South Asia, and Africa. From 2008-2011 he served as Minister of Energy and Mines in his home country Peru. From During the nineties, he had a central role in the power sector reforms in Peru. Between 1992 and 1993, he led the drafting of the regulatory framework and the unbundling and the power utilities; and between, 1994-1997, as chairman of board and the privatization committees of Electrolima and Electroperu, he managed the privatization of the subsidiaries of such companies. In 1997, he implemented the Mantaro-Socabaya line, the first transmission project with private sector participation in Latin America. He is an electrical engineer from the San Antonio de Abad University and holds a Master's in Business Administration from ESAN University and a Master of Policy and Practice from George Washington University in Washington, DC.

2:15 to 3:00 pm: **PANEL 3 – General lessons learned from the diverse individual experiences**

**Moderator: Robert Stoner (MITEI and Global Commission to End Energy Poverty)**



Robert Stoner is the deputy director for science and technology at the MIT Energy Initiative (MITEI), founding director of the MIT Tata Center for Technology and Design, and faculty co-director of the MITEI Low-Carbon Energy Center for Electric Power Systems. He is currently a member of the MIT Energy Council, the Science and Technology Committee of the U.S. National Renewable Energy Laboratory (NREL), the Aspen Institute's US-India Track-II Dialogue, and the Rockefeller Foundation-funded Global Commission to End Energy Poverty on which he serves as secretary. Stoner is the inventor of numerous computational and

ultrafast optical measurement techniques, and has led successful technology firms in the semiconductor, IT, and optics industries. From 2007 through 2009, he lived and worked in Africa and India while serving in a variety of senior roles within the Clinton Foundation, including as the CEO of the Clinton Development Initiative, and director of the Clinton Climate Initiative for Africa. His present research at MIT focuses on energy storage technology and policy, and the design and optimization of energy systems and business models in the developing world. He earned his Bachelor's degree in engineering physics from Queen's University and PhD from Brown University in condensed matter physics.

- **Julio Eisman (Fundación ICAI, for Peru and Mexico)**

Julio is an Electromechanical Engineer from Comillas University and graduated from the General Management Program of IESE (Navarra University). He is currently a board member of the ICAI Engineers Foundation, a member of the Council of the ICAI Engineers Association and vice president of the Engineering and Sustainable Development Committee of the Spanish Institute of Engineering. During this year 2022 he performs the functions of Secretary of the Table for Universal Access to Energy (MAUE) of which he is a founding member. Previously, he has been General Director of Engineering at Iberdrola, Managing Director of the Acciona Micro energy Foundation and member of the Board of Directors of Energy without Borders. He has worked on projects related to universal access to energy in Ibero America (Guatemala, Peru, Brazil, Colombia, Panama, Mexico) and Africa (DR Congo, Benin, Monrovia, Ethiopia and Uganda). He has designed, developed, and implemented an electricity delivery model with stand-alone solar home systems, called "Luz en Casa" (Light at Home), to power isolated and remote homes where the networks are not expected to reach. Worldwide, there are more than 60.000 users of the Luz en Casa model.

- **Geoffrey Okoboi (Director of Economic Regulation, ERA Uganda)**

- **Pepin Tchouate (TETRA TECH)**

Dr. Tchouate-Heteu is a senior energy consultant and scientist with 29 years of experience in sustainable power generation and supply, and renewable energy technologies across Africa, Europe, South America and Asia. He has extensive experience and knowledge in the following areas: design and implementation of power generation and electrification projects, including rural electrification; energy project financing, including public-private partnerships; renewable energy policy and regulatory aspects; climate change mitigation options and policies; distributed and combined heat-power-cooling generation; energy efficiency; and Clean Development

Mechanism. Over the course of his career, Dr. Tchouate-Heteu has worked with a range of power sector stakeholders and institutions, including the European Union, World Bank, USAID, UNIDO, UNDP, African Development Bank, the Belgian government, Institut de la Francophonie pour le Développement Durable, and Agence Française de Développement. He is the author of two books, several papers, and numerous technical reports related to sustainable energy, environment and climate change mitigation. Since May 2016, Dr. Tchouate-Heteu works with Tetra tech, serving as the Regional Energy Policy & Regulatory Lead Advisor on USAID-funded Power Africa projects. In this role, he drafted, reviewed, or revised more than 50 energy policy and regulations in 20+ African countries and supported Governments up to the adoption of 30 policy and regulations, contributing hereby to create a conducive environment for private sector engagement in the energy sector and to achieve the accelerated deployment of rural electrification.

Dr. Tchouate-Heteu earned his master's degree in electrical engineering from the Rheinisch Westfälische Technische Hochschule Aachen (RWTH Aachen University) in Germany, and he earned his doctorate in applied sciences from the Catholic University of Louvain in Belgium. He is fluent in English, French and German.

- **Shri U.N. Behera (Chairman, Odisha Electricity Regulatory Commission)**

3:00 to 3:15 pm: **BREAK**

3:15 to 5:00 pm: **MULTI - PANEL 4 – Lessons for specific implementation issues**

**3:15 to 3:50 pm. TOPIC #1: Planning and long-term perspective** (*least-cost electrification planning, coordination between electrification modes, coordination with other economic sectors, clean transition objectives*)

**Moderator: Javier Cuervo (IADB)**



Inter-American Development Bank (March 1999 to date – multilateral entity): Lead Specialist of the Energy Division and currently head of the energy access group. Experience working in charge of IDB projects in the areas of energy, climate change and natural resources. Projects in Suriname, Honduras, El Salvador, Bolivia, Colombia, Ecuador, Peru, Chile, Guatemala, Mexico, Haiti, Guyana, Barbados, Jamaica, Bahamas and regional projects. A selection of projects includes development of mini-grids in isolated systems, network extension in rural areas, energy policy reforms, generation projects (hydroelectric and non-conventional energy sources), transmission system projects, national climate change systems; analysis of business models for mini-grid management. Javier holds Master Degrees in economics from the University of Maryland (U.S.A) and the University of Los Andes (Colombia). He is an electrical engineer from the University of Los Andes.

- **Xavier Segura (Energy Ministry, Ecuador)**

Xavier Segura is a power electrical engineer, graduated from the National Polytechnic School of Quito-Ecuador. He has 15 years of experience in the electricity sector, he has worked in what is now the Agency for Regulation and Control of Energy and Non-Renewable Natural Resources in the area of distribution systems planning, as well as in the area of Electricity Demand Studies and Rural Electrification.

He currently works at the Ministry of Energy and Non-Renewable Natural Resources of Ecuador, where he has held the positions of Undersecretary of Distribution and Commercialization of Electric Energy, Director of Distribution, Director of Expansion and Technical and Operational Management of Energy Distribution, Director of Business Management and Commercialization of Electric Energy and Chairman of the Board of Directors of Empresa Eléctrica Riobamba. In these positions he has been responsible for the development of the distribution chapter of the Electricity Master Plan and the rural and marginal urban electrification programs FERUM, under the strategy for universal access to energy through the use of conventional networks and isolated photovoltaic systems, as well as in the Improvement Plan of the Distribution Systems PMD and the Program for Modernization and Renewal of the Ecuadorian Electricity System whose financing has been through multilaterals such as IDB, CAF and AFD.

He has participated in the design of policies and strategies for the sustainability of projects related to universal energy access.

- **Lucie Revert (Engie Energy Access)**



Lucie is a French qualified lawyer with extensive international exposure in M&A, project finance and international disputes.

She previously worked for private practices in France and Morocco and developed her expertise in assisting various renewable projects developers in Europe and Africa.

She is now working with Engie Energy Access as legal counsel, with a specific focus on mini-grids activities.

- **Pedro Antmann (World Bank)**



Pedro is an Uruguayan mechanical engineer that graduated in 1979. He has an extensive career spanning 40 years in 5 key organizations: 13 years (2008-2021) as Senior and Lead Energy Specialist at the World Bank in Washington, D.C., USA, working in the areas of power sector institutional restructuring, regulation, tariff reform, management and operations of service utilities, electrification planning and implementation. Member of project teams in projects in more than 60 countries in all regions where the Bank undertakes operations. 8 years (2000-2008) as partner and Senior Consultant in Mercados Energy Markets International, a consultancy company specialized in institutional restructuring, regulation and management of the energy

sector. Conducted projects in more than 40 countries in Latin America, Africa, Europe and Central Asia, Middle East, South Asia and East Asia Pacific in the fields of design and implementation of new regulatory frameworks, tariff setting for network industries, management of utilities (including incorporation of IT applications), rural electrification, benchmarking studies for electricity companies. 3 years (1998-2000) in the French water and

sanitation company Suez Lyonnaise des Eaux as International Manager, in charge of operations in the affiliate company serving 3 million customers in Buenos Aires, Argentina. 3 years (1995-1997) in the Ministry of Industry, Energy and Mines, initially as Director of the National Board of Energy and later as deputy Minister of Industry, Energy and Mines, in charge of energy. Prepared a bill that became law in June 1997 defining a new regulatory framework for the electricity sector and conducted the process for incorporation of natural gas from Argentina (regulatory framework, issuance of concessions to private agents). 16 years (1979-1995) in the Uruguayan state-owned vertically integrated electricity company (UTE), in the areas of thermal power generation (operation of existing plants and planning and commissioning of new ones), transmission, national control center, international power exchanges, distribution and retail. Left the company in 1995 being the General Manager.

- **Martin Buchenschutz (Nodalis)**

Martin Buchenschutz is an engineer and economist (Ecole Centrale Paris / Université Panthéon Sorbonne) and President of Nodalis, an independent consulting firm specializing in Public Private Partnerships in developing countries, mainly in Africa. He has acquired an extensive experience in infrastructure development projects and in the strengthening of public services in the power and water sectors for more than 20 years. He is regularly involved in power sector reform strategies and in programs and action plans to improve the performance of water and power utilities. He leads transaction advisory missions, with a strong focus on rural concessions in power sector and on large-scale renewable energy projects (mainly solar PV / BESS / hydropower).

**3:50 to 4:25 pm. TOPIC #2: Business models and regulation** (*concession design, enforcement, and renewal; concessions in integrated/unbundled power sectors; attracting investment in generation, transmission, and distribution*)

**Moderator: Bernard Tenenbaum (World Bank consultant)**

Dr. Bernard Tenenbaum is an independent energy and regulatory consultant. He has served as a lead advisor to the World Bank on power sector reform and regulation projects in Brazil, China, India, Mozambique, Tanzania and Nigeria. He is a co-author (with Chris Greacen, Tilak Siyambalapitya and James Knuckles) of the World Bank book: *From The Bottom Up: How Small Power Producers and Mini-Grids Can Deliver Electrification and Renewable Energy in Africa*. Since its publication in February 2014, the book has been downloaded more than 36,000 times from the World Bank's website. Before joining the World Bank in 2000, he served as the Associate Director of the Office of Economic Policy at the U.S. Federal Energy Regulatory Commission. He is an author or co-author of *Regulation: What the Prime Minister Needs To Know; Regulation by Contract: A New Way to Privatize Electricity Distribution?; Governance and Regulation of Power Pools and System Operators: An International Comparison; Electrification and Regulation: Principles and a Model Law; and A Handbook for Evaluating Infrastructure Regulatory Systems*. He was a member of the editorial board of the International Journal of Regulation and Governance (2008-13). He is a Phi Beta Kappa graduate of Colgate University and served as a Peace Corps volunteer in Chile where he organized consumer and marketing cooperatives. He received his Ph. D. in economics from the University of California, Berkeley.



- **Tessa Lee (Bboxx)**

Tessa Lee is the Global Head of Policy and Government Engagement at Bboxx and leads the next generation utility's partnerships with governments and donors across 11 markets. Her team is focused on oversight of Bboxx's pioneering government-partnership projects including 'smart' subsidy programs like CIZO Cheque in Togo and Fonds Mwinda in the DRC. Tessa also leads outreach to policymakers and strategic partners around the enabling environment needed for scale up of Bboxx's operations. Her Policy team also contributes to business development and expansion efforts across the company. Before joining Bboxx, in early 2020, Tessa was a Power Africa-funded embedded Advisor to the Ministers and Governments of Sierra Leone and Liberia while heading up the Tony Blair Institute (TBI)'s work on off-grid energy access. Tessa holds degrees from the London School of Economics and Brown University and is originally from Johannesburg, South Africa.

- **Chris Flavin (Gridworks)**



Chris Flavin is Head of Business Development at Gridworks Development Partners. Gridworks is funded by CDC Group, the UK Government's development finance institution and focusses on developing and investing in African Transmission, Distribution and Off-Grid electricity projects. Chris has extensive international project development and M&A experience which spans Africa, Asia and Europe. He leads the investment team at Gridworks and represents Gridworks on the development committee of Moyi Power and on the Board of de-centralised energy company Sustainable Power Solutions. Prior to joining Gridworks, Chris worked for CDC Group following an early career as a private practice lawyer. Chris is a regular commentator on African Infrastructure and recently co-authored a Power Africa funded book on Understanding Power Transmission Financing.

- **Callixte Kambanda (AfDB)**



Callixte Kambanda is currently working with the African Development Bank as Manager for Energy Policy, Regulation and Statistics Division. He has extensive experience working in the African energy sector, particularly with African countries, Regional Economic Communities and Specialized institutions. He joined the Bank in January 2008, working with the Infrastructure Consortium for Africa (ICA), a G8 initiative housed by the African Development Bank. Before joining the Bank, Kambanda worked as Executive Secretary of the Eastern Africa Power Pool (EAPP) and with the Power Utility in his country Rwanda. His current work the African Development Bank includes leading the team that works primarily to enhance enabling environment for investments in African energy sector, including strengthening of Policy Dialogue, scaling up availability and harmonization of data as well as supporting African countries to enhance the power sector regulation. Mr. Kambanda graduated from the University of Applied Sciences of Kaiserslautern, Germany, with a Master's degree in Electrical Engineering and he is also holder of a Masters' degree of Business Administration in Project Management from the Maastricht School of Management (MSM) of the Netherlands.

- **Gareth Walsh (Tony Blair Institute)**

Gareth Lead's Energy and Climate work for the Tony Blair Institute which employs around 200 embedded advisors supporting 18 countries across Africa. Gareth has a background in energy economics, policy development, Government coordination and power system modelling. He has spent over 10 years with the Institute providing politically centred advisory support to Governments (Ministries of energy, finance and presidencies), National Utilities and the private sector in Rwanda, Sierra Leone, Togo, Mozambique, Burundi and Ethiopia as well as the East and West Africa Power Pool on issues such as integrated planning, sector reform, energy access, power purchase agreement negotiations, and cross border trade. Before joining TBI, Gareth was a senior manager in Electricity Transmission regulation for the UK Regulator and acted as a consultant to utilities across the world on power trade and Utility reform.

- **Géraldine Bruggeman Pallière (IED)**

An engineer by training, G. Bruggeman Pallière has been working for 15 years in the field of energy access. Based in Koutiala, Mali, between 2007 and 2011 for the NGO GERES, she set up and managed a pilot project to set up a Jatropha-based agrofuel industry in the Sikasso region, and to support a rural electrification company, Yeelen Kura. In mid-2011, she took over the management of GERES activities in West Africa. She is based in Bamako, then in Cotonou.

In early 2015, she joined IED in Burkina Faso to manage the Decentralized Rural Electrification of Ziro and Gourma Provinces (ERD ZIGO) project, which aims to electrify 45 localities and build 2 solar power plants for grid injection. Since 2018, she has been supervising from the headquarters in France several feasibility and pre-feasibility studies on off-grid solar electrification of isolated villages (in Côte d'Ivoire, Niger). She also works on the delegation of public service to private operators: first through the ERD ZIGO project and then, since 2020, through support to the regulator and the concession authority of Benin in the process of signing and monitoring the implementation of concession agreements of 8 private developers (OCEF, MCA Benin II).

**4:25 to 5:00 pm. TOPIC #3: Financial viability** (*financing a concession; public-private collaboration in the power sector; long-term viability of concessions*)

- **Moderator: Ani Balabanyan (World Bank)**

Ani Balabanyan is Practice Manager of Energy & Extractives Global Knowledge & Expertise Unit in the Infrastructure Vice Presidency of the World Bank. She leads the Energy and Extractives Global Practice's program of global analytical work and oversees provision of global technical expertise in support of Bank operational engagements across all regions.

Ms. Balabanyan has more than twenty years of experience in energy and infrastructure finance and economics. She has joined the Bank in 2003 and has worked in regional, corporate, and global practice units of the World Bank. Ms. Balabanyan holds an MBA with concentration in Finance and bachelor's degree in economics. She is a chartered financial analyst (CFA) and a certified accountant (FCCA).

- **Batchi Baldeh (AfDB)**

Mr. Batchi Baldeh has over 34 years of professional experience across the power value chain and financing capital structure. He is currently the Director – Power Systems Development, at the African Development Bank (AfDB), which he joined in May, 2017.

Prior to joining AfDB, Mr. Baldeh was the Director – Power Business, Investments Division, at the Africa Finance Corporation (AFC). He has also been a consultant to the World Bank, European Union / BizClim and Government of Lesotho; and was the pioneer Managing Director of Gambia’s National Water and Electricity Company, from 1995 – 1999.

Batchi is a Non-executive Director of the AFC and Development Bank of Nigeria. He also served as the Chairman of the Board of Directors of Cabeolica S.A. and Cenpower Operations and Services Limited; and an Alternate Director and Technical Committee member of the Benin Electricity Distribution Company. Mr. Baldeh holds an MBA from Boston University (USA) and BSc - Honours in Electrical & Electronic Engineering from Newcastle-upon-Tyne University (UK). He is a member of the Institute of Engineering & Technology (UK) and a Fellow of the Institute of Directors, Southern Africa.

- **Blessing Nshaho (CFO, Umeme)**



Blessing Nshaho is the Chief Corporate and Regulatory Officer of Umeme Limited, the largest electricity distribution company in Uganda with a 20-year concession under a PPP arrangement to expand the network, operate and maintain it. He leads the Legal, Regulatory, Strategy, Risk, Compliance, and Integrity Functions. His career spans over 20 years during which he was formerly the Chief Executive Officer and Director, Strategy and Risk Solutions with Asset Business Solutions, a consultancy firm in Uganda

where he delivered asset management and performance improvement advisory and technology solutions to both public and private sector clients. Prior to that, he was the Executive Director, Advisory Services and Business Development with Ernst & Young (EY) East Africa - a role in which he provided advisory services to both the public and private sectors in the areas of strategy development, risk management, performance improvement, technology enablement and corporate transactions. He served as Associate Director, EY Global in London for three years, during which he was responsible for technology enablement across the assurance and advisory service lines globally across 140 countries, serving over 86,000 practitioners at that time.

He was the Co-Executive Producer of Inspire Africa Season One; the first ever reality TV entrepreneurial challenge across East Africa. He is a Fellow of the Association of Chartered Certified Accountants UK, a member of the Institute of Asset Management UK, is a certified Computer Programmer and holds a Bachelor of Science in Statistics and Psychology from Makerere University.

- **Jessica Stephens (CEO, AMDA)**

Jessica drives AMDA’s agenda to advocate and coordinate with industry, policy-makers, government authorities, and other stakeholders to ensure optimal development of the minigrid sector and its pivotal role in ensuring access to affordable, reliable, sustainable, and modern energy for all Africans. Jessica is a recognized leader in the minigrid space with particular expertise on policy & regulation and the intersection between Public and Private institutions within decentralized energy. Jessica also led the research and publication of the first Benchmarking Study for African Minigrids (BAM) and Co-developed the Universal Electrification Fund (UEF). Jessica Stephens is an



Entrepreneur who has founded several businesses in East Africa. She currently chairs the Green Minigrid Partnership, sits on the UEF Technical Advisory Committee, and is a commissioner for the Energy Poverty.

- **Christian de Gromard (Senior Advisor, AFD)**



Christian de Gromard is currently Energy Practice Leader at *Agence Française de Développement (AFD)*, with more than forty years of energy projects in developing economies. Graduate from the *Institut National Polytechnique de Grenoble (1974)*, C. de Gromard took an early interest in renewable energies (RE). After two years of teaching in Cameroon and four years of industrial experience in high voltage electrical equipment, he worked in 1979-1980 at the Indian Institute of Science (Bangalore) on mini-hydel projects and rural electrification. He joined the *Agence Française de Maîtrise de l'Énergie* when created in 1981 as project manager for Africa, before in 1986 creating IED, a consulting firm specialized on decentralized electrification and RE. After joining AFD in 1993, he was in charge of Energy-Climate projects at the French Global Environment Facility (FFEM). In 2002, he joined AFD Infrastructure Department as energy and water project manager. He has instructed numerous loans or subsidies to finance RE, energy efficiency and electrification projects in various geographies - Maghreb, Sub-Saharan Africa, China, India, Indonesia, Antilla, Pacific Islands... Designated Energy Practice Leader in 2009, he contributes to the establishment of AFD's energy strategies, based on three priorities: development of low-carbon energy supply, demand side management combining efficiency, sufficiency and energy intelligence, deployment of "100% accessible" electrification. In recent years, he has worked more specifically on accelerating energy transitions in southern countries, energy mix "100% RE" and electrification concessions (on grid and off grid).