

Power Pools in Africa: Releasing the Potential of Regional Power Trade



May 9th , 10th and 11th, 2023; 2:00pm to 5:00pm CET

PARTICIPANTS PROFILES - POWER POOLS IN AFRICA ON-LINE CONFERENCE

DAY 1

Opening Remarks

Professor Ignacio J. PÉREZ-ARRIAGA



Professor Ignacio J. PÉREZ-ARRIAGA is the Interim Director of the African School of Regulation (ASR) since July 2022.

Prof. Pérez-Arriaga was a Commissioner at the Spanish Electricity Regulatory Commission (1995-2000) and an independent member of the Single Electricity Market Committee of Ireland (2007-2012). He was also a member of the Board of Appeal of the Agency for the Coordination of Energy Regulators (ACER) in the EU (2011-2016). He is Director of Energy Training at the Florence School of Regulation, European University Institute, Florence, Italy. He has worked in the areas of dynamic analysis of power systems; monitoring and diagnosis of power system equipment and systems; intelligent computer design of industrial systems; planning and operation of power generation and networks; regulation and restructuring of the power industry; and sustainability of national and global energy models and access to electricity and regulation of the power sector in developing countries.

He has served as a consultant to government agencies or electric utilities in more than 40 countries. Prof. Pérez-Arriaga is a member of the Spanish National Academy of Engineering and a Life Fellow of the IEEE. He has published more than 200 papers, has been principal investigator in about 100 research projects, and has supervised 40 Ph.D. theses on the above topics. He was a Visiting Professor and Senior Lecturer at MIT (2008-2022), at the Center for Energy and Environmental Policy Research (CEEPR), where he is now a Research Affiliate.

He holds MS and PhD degrees in electrical engineering from MIT and an electrical engineering degree from the University of Comillas in Madrid, Spain.

SESSION 1: Regional organisations and infrastructure planning. Existing approaches and present challenges in regional power trade.

Mohamed Abbas Eltahir ELABBAS



Mohamed A.Eltahir Elabbas is a Ph.D. candidate at the institute for Research in technology, within the Comillas Pontifical University.

Mohamed is doing his Ph.D. on the topic of Afrian Power Pools and Regional Trade under the supervision of Professor Ignacio J. Pérez-Arriaga and Dr. Luis Olmos. He studied Sustainable Energy Technology master's program at TU Delft and did his master thesis on the same topic: Electricity Market Design for African Power Pools. He graduated with Cum Laude and was nominated for the best graduate student in his program. Before joining IIT, Mohamed worked with IRENA and specialized in long-term energy modeling.

Mohamed Abbas Eltahir Elabbas mabbas@comillas.edu

Ibrahim SOUMANA



Soumana is Project Coordinator at the West African Power Pool (WAPP) Secretariat where he is responsible for the mobilization of funding for regional priority projects, the preparation of their pre-investment studies and the mobilization of financing for their implementation among others.

Mr. Soumana holds an Electrical Engineering degree and a Master's degree in Public and Private Project Ownership. He has more than 14 years of experience in the electricity sector, mainly in the planning of electrical networks, project preparation and management.

Dr Mohamedain E. SEIF ELNASR



Dr. Mohamedain E. Seif Elnasr is the Chief Executive Officer of the Regional Association of Energy Regulators of Eastern and Southern Africa (RAERESA) of the Common Market for Eastern and Southern Africa (COMESA).

Dr. Seif Elnasr is an energy policy and regulation expert with over 27 years of experience in management of initiatives and programmes promoting the development of energy in Eastern and Southern Africa. He holds a Ph.D. in Economics (macroeconomics and quantitative economics) and M.Sc. in economics (energy economics).

University (France) .

Alison CHIKOVA



Engineer Alison Chikova is the Chief Engineer responsible for Planning and Operations at the Southern African Power Pool. He is responsible for technical issues including generation and transmission integration studies for the Interconnected SAPP Grid. He is also taking part in the development of the competitive, balancing and ancillary services markets in SAPP. He has been instrumental in developing transmission pricing arrangements in SAPP.

He has worked for the Ministry of Energy as an Energy Research and Development Officer in Zimbabwe addressing new generation projects developments including renewable energy and solar systems. In 1995 he moved to the power utility in Zimbabwe where he was heading the Generation Planning Unit. At ZESA, he was responsible for the planning of the generation projects including negotiating for power import contracts for Zimbabwe.

He holds a Master of Science Degree (1992), in Electrical Engineering from Kharkov Engineering Institute, in Ukraine, having specialised in Electrical Power Networks and Systems. He also holds an Executive Diploma in Business Leadership. He is a Chartered Engineer and a Member of Zimbabwe Institute of Engineers, IEEE (USA) and IET (UK).

Azarak Mogro ATADET



Eng. Atadet Azarak is Secretary General of the Central African Power Pool.

He is an electrical engineer (with more than 30 years of professional experience) graduated from the Ecole des Hautes Etudes Commerciales in Montreal, Canada.

Former Technical Director for Electricity at the Chadian Water and Electricity Company (STEE)

He has a solid knowledge of the electricity sector in his country, having participated in the inventory and audit of the water and electricity distribution networks in the context of the state disengagement.

He held a number of senior positions at his country's national electricity company before being nominated as an Expert of the European Union and technical assistant (2010 – 2020) working with CAPP. In February 2021 he was appointed as a Permanent Secretary of the Central Power Pool.

SESSION 2: Market rules and transmission regulation. Existing approaches and present challenges in regional power trade.

Samson ONDIEK



Samson Ondiek is an Energy Economist with over 18 years in research, policy, and strategy formulation around both grid and off-grid electrification. He has been instrumental in the development of the Kenya National Electrification Strategy, Rural Electrification Master Plan, and various policies such as the “last mile connectivity” that have supported accelerated electricity access in Kenya. Samson is currently the technical advisor to the Managing Director & CEO of Kenya Power and Lighting Company and a member of the Eastern Africa Power Pool Committee. Samson holds a Master's degree in Economic Policy and Analysis, an MBA in Strategic Planning, and is currently a Ph.D. Candidate at the University of Nairobi in Kenya.

Ziria Waako TIBALWA



ENG. Ziria Tibalwa Waako is the Chief Executive Officer (CEO) of the Electricity Regulatory Authority (ERA), a position she assumed on 23rd March 2017. She holds a MSc. and BSc. Electrical Engineering, both from Makerere University, and a Master of Business Administration in Leadership from Walden University, USA. Eng. Ziria is a Registered Engineer with the Uganda Institute of Professional Engineers and the National Engineers Registration Board; as well as a Member of the Institute of Electrical and Electronics Engineers (IEEE) of New York, United States of America. She was awarded the Excellent Performance Engineers award by the National Engineers Registration Board at its 50th Anniversary celebrations in 2019.

Previously, Ziria held the position of the Director Technical Regulation at the Electricity Regulatory Authority, charged with the Technical performance of Uganda's Electricity Supply Industry, a role she assumed on 20th December 2012. Before joining ERA, Eng. Ziria worked with Uganda Electricity Board (UEB) for 9 years and later with Uganda Electricity Transmission Company Limited (UETCL) for 12 years where she acquired a wealth of knowledge and experience. She rose through the ranks serving in the positions of Operational Planning Engineer, Senior Planning Engineer and Principal Planning Engineer.

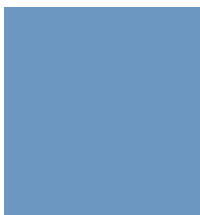
Wilson MASANGO



Wilson Masango is an electrical engineer who holds an MBA from the University of Cape Town Graduate School of Business. He is currently employed by the Southern African Power Pool (SAPP) as Chief Engineer Markets and heads market operations. He is responsible for providing the enabling environment for maximum electricity market trading through optimal planning, management, and directing the SAPP trading arrangements including design, development, and operations of the market among the SAPP membership and future market coupling with other power pools.

He has over fifteen years of experience in the power sector covering electricity distribution, system operations and control, and electricity trading. Before joining the SAPP, he worked for the Eswatini Electricity Company from 2007 rising through the ranks to lead system operations and control in 2015. He has been involved in various committees responsible for among others tariff determination and PPA negotiations. He is a former SAPP Operations Sub-Committee (OSC) Chairperson.

Sié KAM



Electrical Engineer, Head Customer and Market Division, West African Power Pool (WAPP)

Mr. Kam has over twenty-two years of experience in the power sector. He holds a bachelor's degree in physics and chemistry from University of Ouagadougou – Burkina Faso, and Electrical Master degree from “Institut Supérieur Privé de Technologie - Burkina Faso”.

He has been working for the National Electricity Company of Bukina Faso (SONABEL) since 2000 and has held successive positions at the National Control Center (NCC) as System Operator, Statistician, Incident Analyst, Regional Control Center Operations Manager (Ouagadougou/Burkina Faso) and National Control Center Operations Manager.

Mr. Kam joined WAPP in 2014 as System Operator Engineer and he is participating fully in the implementation of the Information and Coordination Center (ICC), which is the Regional System and Market Operator. He is worked as Market Officer on the operationalization of ECOWAS Regional Electricity Market.

He has been appointed he has been appointed as Head Customer and Market Division in March 2023.

He is a native French speaker and has English working knowledge.

Juan Manuel RODRÍGUEZ-GARCÍA



Mr. Juan Ma. Rodríguez (Spain, 1964), since 1990 is with Red Eléctrica de España (REE, the Spanish TSO) where he is currently Manager of Verification and Inspection Department.

His graduated in Electrical Engineering (1988) at Comillas University (Madrid) and he presents himself as an enthusiast of the power system; enthusiasm developed thanks to REE: the feasibility studies for the Spain-Morocco interconnection; the extension of the synchronism through the Maghreb and Mashreq (2005 and 2010 tests); the feasibility interconnection of the Independent Power Systems (Russia and neighbours) with Continental Europe, and member of two investigating committees of power system disturbances in Europe (2003 and 2006).

His has a vast experience in planning and operation of power systems, reactive power and voltage control, stability and the secure integration of renewable sources into the power system. Also, he participated in several international projects and was the Technical Director of the Institution Building for the National Electric Power Company (NEPCO) in Jordan, a Twinning Project supported by the European Commission (2013-2015).

He took part in the team which designed the European Network of TSOs for Electricity, today ENTSO-E. Currently, JuanMa is the Chairperson of the Technical Committee “Regulation” of Med-TSO (the Association of the Mediterranean Transmission System Operators (TSOs) for electricity).

DAY 2

SESSION 3: Regional organisations and infrastructure planning. Best international practice and proposals for improvement.

Carol OFAFA



Carol Ofafa is a researcher at the African School of Regulation initiative currently situated at the Robert Schuman Research Centre, EUI. Carol was among 60 young African Energy leaders on the Open Power Africa Fellowship program of training on the Regulations for Universal access to energy by the Florence School of regulation.

Previously Carol served for 9 years as an Electrical Engineer at the Kenya Electricity Transmission Company (KETRACO) where she was awarded the Head of State Commendation by H.E President Uhuru Kenyatta in December 2020.

She holds a M.Sc. Electronic and Electrical Engineering and Management from the University of Glasgow and a Bachelor's degree in Science Electrical and Electronic Engineering from the University of Nairobi.

Batchi BALDEH



Batchi Baldeh is currently the Director – Power Systems Development, at the African Development Bank (AfDB), under the Vice Presidency for Power, Energy, Climate and Green Growth, which he joined in May 2017. He has over 36 years of professional experience across the power value chain, project development cycle and financing capital structure.

Batchi holds an MBA from Boston University (USA) and BSc - Honours in Electrical & Electronic Engineering from Newcastle-upon-Tyne University (UK). He is a Fellow of the Institute of Directors, Southern Africa.

Ifey IKEONU



Ifey Ikeonu is an Energy Policy, Markets, and Regulation Consultant. She has worked as an advisor on electricity sector reform, access, markets, and regulation across many African countries including Ghana, Eswatini, Gambia, Ethiopia, Rwanda, Zambia, Sierra Leone, Eritrea, Togo and Djibouti. She has also supported various regional power pools and regulators in the development of regulatory and operational instruments, including the West African Power Pool and the East African Power Pool.

Ifey was pivotal in the development of the regulatory framework for the regional electricity market of the Economic Community of West African States (ECOWAS) and also played an active role in the power sector reform programme in Nigeria where she worked with various committees on the Legal and Regulatory aspects of the reform.

She holds a Master's degree in Law as well as an MBA in Sustainable Development.

Leonardo MEEUS



Leonardo Meeus is a professor at the European University Institute. He is the Director of the Florence School of Regulation and the Loyola de Palacio Chair on European Energy Regulation and Policy in the Robert Schuman Centre.

Leonardo is also part-time professor at the KU Leuven in the engineering department. He also teaches public affairs at Vlerick Business School where he used to be a partner.

Leonardo is an editor for the IEEE Transactions on Energy Markets, Policy and Regulation. He published the open access book "The Evolution of Electricity Markets in Europe", and blogs about research with impact

Andrea RENZULLI



Andrea Renzulli joined RES4Africa Foundation at the beginning of 2020 to coordinate and oversee R4A work on electricity policy and regulatory issues. Previously to RES4Africa, Andrea has worked in several institutions both in the private and non-profit sectors, mainly in the consulting and advisory businesses, with a strong focus on renewable energies market development in Africa, policy and market analysis, electricity market design and public affairs. He has about 10 years of experience in providing support to private and public institutions about reforming electricity market governance to advance clean energy investments and achieve SDG-7 goals. Today, Andrea is the Head of the Policies and Regulations Department within RES4Africa Foundation.

SESSION 4: Regional power market design and transmission regulation. Best international practice and proposals for improvement.

Robert LISINGE



Robert Tama Lisinge is the Chief of the Energy, Infrastructure and Services Section of the Private Sector Development and Finance Division of the United Nations Economic Commission for Africa (ECA), based in Addis Ababa, Ethiopia. The Division focuses on crowding-in private sector investment in African countries, particularly in the area of infrastructure. Robert is currently the Officer in Charge of the Division. He holds a BSc degree in Civil Engineering and an MSc degree in Transportation Engineering. He also holds an MPhil and a degree of Doctor of Business Administration from the Maastricht School of Management in the Netherlands. Prior to his current position, he was the Chief of the Operational Quality Section of the Strategic Planning and Operational Quality Division of ECA. He has over 20 years of experience in undertaking research and advising African countries and organisations on infrastructure policy as well as transport and trade facilitation issues. He delivers courses on infrastructure development at the African Institute for Economic Development and Planning in Dakar, Senegal. He has also delivered courses in transport planning to Master's degree students at the National Advanced School of Public Works in Yaounde, Cameroon.

Marcelo TARDIO



MSc in Electrical Engineering from Universidad Mayor de San Simon, Bolivia and Universidad Federal de Santa Catarina, Brazil and Master's degree in Economics from Universitat de Barcelona, Spain, Mr. Tardio has 30 years of experience in the energy sector.

He worked for 5 years as Commercial and Technical Coordinator for a Distribution Company, 7 years for the Regulatory Authority of Electricity and also being Wholesale Electrical Market Director. He also served as Alternate President of the System and Market Operator of the Electrical Sector. In 2007 Mr. Tardio switched over to consultancy gaining experience in more than 50 countries with some notable companies and institutions worldwide. Since 2010, he has been working as a full-time CESI Senior Project Manager, leading the most challenging consulting projects awarded to CESI in foreign markets, with particular focus to IFI (World Bank, EBRD, EIB and AfDB primarily) projects characterized by complex environments. He was involved in all the main projects performed by CESI concerning the design and implementation of Electricity Markets, Smart Grids and Smart Metering strategy. As Regulatory and Market Expert he worked on designing and reforming the electricity market of Latin-American, African and Balkan countries. He has also been involved in many projects related to the review and elaboration of Grid Codes and operational rules as well as in a number of projects focusing on integration of renewables in power grids from the system perspective (taking into account the security, reliability, operational integrity, and efficiency of the power system) and from a more operational point of view (taking into consideration the impact of renewables on transmission and distribution networks). He has a wide experience in technical, economic, and regulatory issues of the Energy Sector and has excellent leadership and outstanding project management capabilities.

Charly GATETE



Dr Charly Gatete is an energy economist with more than 15 years of experience in the energy sector in West Africa. Since 2021, he has been an economist expert at ERERA where he provides economics analysis and contributes to developing economic regulations within the regional electricity market (REM) development. Before joining ERERA, He was a regional programme officer in charge of energy at an International NGO, researcher, and lecturer at the University of Thomas SANKARA (BURKINA FASO). He is the author and co-author of more than 10 scientific publications related to energy.

James WAHOGO



Secretary General of Eastern Africa Power Pool. James was recently appointed as the new Secretary General of EAPP. He is well-poised to lead EAPP towards achieving its goals of facilitating a reliable, safe, and efficient operation of the interconnected electrical system and the development as well as operation of a competitive electricity market in the Eastern Africa region. He has over 30 years of experience in the power sector and started his career as a graduate trainee engineer at Kenya Power and Lighting Company (KPLC), he rose through the ranks to head Corporate Planning and Strategy at Kenya Electricity Generating Company (KenGen), thereafter worked for General Electric (GE), and later as an independent energy consultant. His experience cuts across various aspects including utility management, power system planning, project development from conceptualization, feasibility studies, designs, through construction

supervision and commissioning, to power purchase agreements as well as tariffs formulation. For the last three years he has overseen the two World Bank Technical Assistance projects at EAPP. The two projects cover institutional strengthening, capacity building, operationalization of the market, strengthening of the Independent Regulator Board (IRB), and a facility to undertake feasibility studies for transmission interconnectors among member countries. James holds a BSc (Hons) in Electrical Engineering and an MBA in Strategic Management from the University of Nairobi.

Cathy OXBY



Cathy Oxby is a Commercial Officer at Africa GreenCo. She has more than 20 years of professional experience in the infrastructure and renewable energy sectors, both as a principal and an adviser, having trained as a project finance lawyer at Allen & Overy LLP before transitioning to a commercial role at an infrastructure fund and then consulting for various clients including the World Bank before co-founding Africa GreenCo.

GreenCo is headquartered in Zambia and is the first non-asset-owning member of the Southern African Power Pool.

Wilson MASANGO



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Federico PONTONI



Federico Pontoni is a senior energy advisor within the Senior Energy Advisory Program of the Tony Blair Institute (TBI), funded by Power Africa.

Federico is also the director of the research program Technologies for Energy Transition at FEEM, Eni Foundation.

Jonathan HEDGECOCK



Jonathan is a Technical Director in Ricardo Energy & Environment in the UK and has worked in power sector consultancy for the past 35 years. He specialises in the provision of technical advice to power utilities, project sponsors/financiers and regulatory bodies in the UK and internationally on power sector restructuring and electricity market implementation. He is a specialist in network planning, pricing and regulation. He also has specialist skills in the assessment of smart grid projects and their contribution to low carbon developments in the electricity sector. Jonathan has worked in Africa, Latin America, Europe and the Far East on a wide range of electricity restructuring assignments covering technical and regulatory areas. These have included assessing agreements for connection to, and use of, international transmission systems, the supervision of planning, pricing and interconnection studies and the development of technical regulatory standards. He has also worked on a range of commercial arrangements for the provision of ancillary services (voltage and frequency control, black start capability, etc.). He has worked with international clients including the Southern African Power Pool (SAPP), the Eastern Africa Power Pool, the Regional Power Trade Coordination Committee in the Greater Mekong Subregion, the Electricity Regulatory Authority of Vietnam, and the Energy Regulatory Commission in Thailand. He also worked on a major assignment in electricity sector restructuring in Brazil for the World Bank. In the UK he has worked on a number of projects for Ofgem, including heading the consultancy team supporting the assessment of applications for the funding of distribution and transmission projects from the Low Carbon Networks Fund and the Networks Innovation Competition. Jonathan has been the Team Leader for Ricardo's recent work with RAERESA/COMESA on a project to develop a

Framework for Regulatory Oversight for the Regional Energy Market in Eastern Africa, Southern Africa and the Indian Ocean, a major transmission pricing study for SAPP, and a project to develop the SADC Regional Grid Code.

Mirlan ALDAYAROV



Mirlan Aldayarov has been with the World Bank for over twenty years and currently leads the Markets, Connectivity, and Trade (MARCOT) program supporting operations and policy dialogue engagements across all regions globally. Mirlan has extensive operational experience in dealing with market reforms and regional integration and trade issues. He previously led energy dialogue, operations, and regional engagements in the Africa, Europe and Central Asia, and South Asia regions. Mirlan has an MBA from the University of Massachusetts Amherst and an M.A. from the Kyrgyz State University.

DAY 3

SESSION 6: What works, what can be improved and how?

Daniella NGARAMBE



Daniella Ngarambe is an energy researcher with a diverse background in academia, policy, and research. She recently joined the European University Institute (EUI) as a Research Associate as part of the African School of Regulation project. Prior to this, Daniella worked as an Outreach and Technical Writer, where she was responsible for communicating complex technical concepts to a wider audience. In the policy arena, she had the opportunity to serve as a policy fellow at GIZ, supporting the Ministry of ICT and Innovation, Rwanda in the development and implementation of innovative and emerging technologies policies. Daniella holds a Masters degree in Electrical and Computer Engineering from Carnegie Mellon University.

Dr. Yohannes HAILU



Dr. Hailu is energy policy expert with the UN Economic Commission for Africa (UNECA), in the Private Sector Development and Finance Division; Energy, Infrastructure and Services Section. In current role, he works with African member States in pursuing continental, regional and country-level solutions to energy challenges, particularly in the areas of energy access, electricity market regulation, private sector investment in Africa's energy infrastructure, and energy planning. His recent works include co-development of a continental electricity market regulatory framework to crowd-in private investment, and country electricity market regulatory reviews

Prior to joining UNECA, Dr. Hailu served as Associate Director of Policy Research and Visiting Assistant Professor at Michigan State University.

Dr. Hailu holds a B.A. Degree in Economics and Finance from the University of Asmara in Eritrea, and M.Sc. and Ph.D. in Natural Resources Economics from West Virginia University.

Stephen DIHWA



Stephan Dihwa is the Executive Director, Southern African Power Pool (SAPP) Coordination Centre. Career achievements includes over 30 years of experience in the power sector. Started with Zimbabwe Electricity Supply Authority (ZESA) in 1988 and rose through the ranks to Business Development Director of the Transmission subsidiary up to 2007. Worked as System Planning Advisor in EdM (Mozambique) in 2007 and as Senior Manager responsible for Planning and then Renewable Energy & System Integration in NamPower (Namibia) from 2008 to 2012. Worked from 2013 to 2016 as a consultant Power Engineer for African Development Bank in Zimbabwe. Was Principal Director in the Ministry of Energy and Power Development of Zimbabwe from 2016 to 2017. Joined SAPP in December 2017.

Holds a M.Sc. in Electrical Power Engineering, University of Manchester Institute of Science and Technology (UMIST), UK; B.Sc. Engineering Honours Electrical Engineering, University of Zimbabwe and Diploma in Management, Institute of Supervision & Management, UK.

Wale SHONIBARE



Director - Energy Financial Solutions, Policy and Regulation, African Development Bank.

Wale Shonibare has over three decades experience spanning Asia, Europe, Middle East and Africa in Investment Banking and Consulting. He joined the African Development Bank (AfDB) in 2017 as the inaugural Director responsible for Energy Financial Solutions, Policy and Regulation. The Financial Solutions team has since established itself as a leading transactions team across Africa, having undertaken several Mandated Lead Arranger roles and facilitated total investment of approximately USD 29 billion in numerous projects ranging from solar PV, concentrated solar, hydro-electric dams, gas-fired power plants, LNG facilities, battery storage solutions and geothermal energy plants. The Policy, Regulation and Statistics team has, under his leadership, launched well-acclaimed flagship initiatives such as the Electricity Regulatory Index to improve the enabling environment for private sector investment in the energy sector.

Wale is currently a Non-Executive Director on the Board of the Africa Guarantee Fund, and an Advisory Board Member of the Nigeria Infrastructure Debt Fund and Inspired Evolution Investment Management respectively. Prior to joining the AfDB, he held various senior management-level positions at Investment Banks and Consulting Organisations in the UK, UAE and Nigeria.

Wale holds a B.Eng (hons) in Civil Engineering from Glasgow University and an MBA from Imperial College, University of London.

Nicholas David ELMS



Nick Elms is a senior energy economist with the World Bank, working across three sub-Saharan African power pools in support of regional power market integration. Nick has been working in the energy sector in Australasia, Europe and Africa for 3 decades where he has advised on economic issues including power system planning, wholesale market design, network charging, incentive regulation and project appraisal. Nick studied electrical engineering and operations research / management science, and immediately prior to joining the World Bank in 2020 was Associate Director with Frontier Economics in Europe.

Morella ELVIRA



Elvira Morella serves as Lead Energy Specialist in the West Africa Energy Unit of the World Bank Group, where she leads the engagement in the regional electricity market, with a lending portfolio of US\$2 billion, including cross-border power infrastructure projects and extensive technical assistance to help build the market institutional and regulatory architecture and support regional approaches to energy access expansion and clean energy transition. Her 18-year experience at the Bank spans three regions (Africa, Latin America and the Middle East), nearly 30 countries and close to 50 operations along the energy value chain. Over the years, Elvira has led some of the more complex Bank's energy sector projects and sensitive power sector reform programs. She has contributed to develop the Bank's thinking around power pools in Africa as well as reforms to improve the financial standing and investment attractiveness of power sectors across the region. Prior to joining the World Bank Group, Elvira worked as Technical Expert at the Development Cooperation Department of the Italian Ministry of Foreign Affairs, covering operations in the Middle East and North Africa. Elvira holds a M.P.A. from the Harvard Kennedy School of Government and a M.A. from Bocconi University, Italy. She is fluent in English, French, Spanish and Italian.

MIKETA ASAMI



Dr. Asami Miketa has an extensive experience supporting member countries in developing long-term energy strategies with renewable energy. She currently serves as Head of Energy Transition Planning and Power Sector Transformation with the Innovation and Technology Center (IITC) at the International Renewable Energy Agency (IRENA) in Bonn, Germany.

Asami has been leading a programme at IRENA since 2012 that supports countries in effectively devising long-term energy strategies with renewable energy. The programme includes the designing and implementing energy planning capacity-building programmes for government officials, developing and disseminating planning data and tools, and facilitating peer-to-peer exchange of experience with the use and development of scenarios among government officials. Recently she has been leading IRENA's engagement with the African Union Development Agency and providing technical assistance to Continental Power sector Masterplan development. Additionally, since last year, she has been leading the power sector transformation team that provides countries with planning and operating the power system with a high share of variable renewable energy.

Prior to her work at IRENA, Asami worked as an energy system analyst at the International Atomic Energy Agency for seven years, where she supported member countries with energy planning capacity building while enhancing IAEA's modelling tools in support of energy planning. She also spent four years as a research scholar with the Energy Programme at International Institute for Applied Systems Analysis (IIASA) in Laxenburg, Austria, producing scientific publications on long-term global energy system development. She also took up a short-term assignment with the World Bank to support the Environmental Economics Department with its project on the economic evaluation of environmental externality. Asami received her PhD in Media and Governance (specialized in Applied Economics), M.A. in Theoretical Economics and Econometrics, B.A. in Economics from Keio University in Japan.

<https://www.linkedin.com/in/asami-miketa-93491a5/>

Crispen ZANA



Crispen Zana is Principal Energy Advisor to the African Union Development Agency (AUDA-NEPAD) on the Africa-EU Energy Partnership (AEEP) based in South Africa since December 2020.

He has over 30 years' experience in energy development programmes working with GIZ as Advisor to various partner institutions for instance the Department of Infrastructure and Energy of the African Union Commission (AUC) in Addis Ababa and now at AUDA-NEPAD;

Crispen is currently focusing on innovative and politically relevant topics for increasing sustainable energy mix in the Continental Power Systems Masterplan (CMP), Renewables Specific Support Studies for the CMP and their financing mechanisms. His passion is in investments in decentralized power systems for reaching the last mile with productive use of energy for job creation and gender equity which is in line with the priority areas of the partnership between the African Union and European Union.

Previously Crispen also worked at GIZ HQ in Bonn managing capacity building project on policy and regulatory framework for clean energy mini-grids for West African Countries (ECOWAS). Prior to that he worked in various development programs in Southern Africa (mainly in Malawi, Mozambique and Zimbabwe) dealing with rural social infrastructure development with emphasis on decentralized and household energy, food storage and agro-processing, water and sanitation in BMZ/GIZ co-financed programs by the EU, UNICEF, UNHCR, WFP, etc.

Crispen has an MBA in Renewables and a Mechanical Engineering degree from Germany. He speaks English, German, Portuguese, Shona and a bit of French.