

Stakeholder Workshop - 12 July 2017, Paris - France

Identifying Technology Innovation Needs and Opportunities Under Mission Innovation Challenge n°2: Off-grid Access to Electricity

Speakers Biographies

WELCOME AND OPENING REMARKS

LAURENT MICHEL (MISSION INNOVATION)



Engineer, graduated from Polytechnic, Laurent Michel has held various positions in Regional Directorate for Industry, Research and Environment (DRIRE) or at School of Mines from 1991 to 2006. Director of the DRIRE Midi-Pyrénées from 2003 to 2006, he was then appointed Director of the Prevention of Pollution and Risks, and Delegate for major risks, within the Ministry of Ecology and Sustainable Development, before taking the head of the Directorate General for Risk Prevention in 2008. Laurent Michel is the Director General of Energy and Climate change since December 2012.

FABRICE BOISSIER (ADEME)

Fabrice Boissier graduated from the « Ecole Nationale Supérieure des Mines de Paris ». He started his career at the Regional Department of Industry, Research and Environment (Languedoc- Roussillon Region) as deputy director and head of the regional department of the industrial environment, in charge of supervising classified facilities for environmental protection and the mining police. From 2006 to 2010, he served as director of geothermal energy department at the French national geological survey (BRGM) and was in charge of supporting the development of the sector and R&D projects. From 2010 to 2014, he was director of risk management at ANDRA (French national radioactive waste management agency). Fabrice Boissier was appointed Deputy Director General of ADEME, French Agency for Environment and Energy Management, on the 1st December 2014.



DAVE TURK (IEA)



Dave Turk is Acting Director for the Directorate of Sustainability, Technology and Outlooks at the International Energy Agency (IEA), where he coordinates the teams focused on sustainability and partnerships. He formerly served as Deputy Assistant Secretary for International Climate and Technology at the U.S. Department of Energy, where he coordinated the Department's international clean energy efforts. He also previously served as Deputy Special Envoy for Climate Change at the U.S. Department of State, Special Assistant to the President and Senior Director for Congressional Affairs at the U.S. National Security Council, and in various capacities in the U.S. Congress.

SESSION 1

FRANÇOIS MOISAN (ADEME)



François Moisan was born the 11th November 1949 at Paris. He is a graduate on Electrical Engineer from Ecole Supérieure d'Electricité de Paris (1972) and Doctor in Economic Science (Université de Grenoble, 1983). He began his career at the National Scientific Research Center (CNRS) in 1978 to set up the research program on solar energy. He was Director of prospective at the French Agency on Environment and energy (ADEME) in 1992 and named scientific Director in 2004. He is presently executive Director of Strategy, Research and International Affairs and Scientific Director of ADEME. He is in charge of managing the "Investment for the Future" public fund operated by ADEME dedicated to support innovation in low carbon technologies promoted by companies. François Moisan is involved in energy efficiency policies for more than 30 years and participated to several national and international committees on energy efficiency policies.

LAURA COZZI (IEA)

Laura Cozzi co-leads the World Energy Outlook the IEA flagship publication. She is in charge of energy demand, efficiency, power generation, renewables and environmental analysis. She also oversees the quantitative analysis and modelling underpinning the publication. She has been leading several editions of the Outlook, and has been co-author of seventeen editions of the report. Prior to joining the IEA in 1999, Ms. Cozzi worked for the Italian oil company ENI S.p.A. She has a Master Degree in Environmental Engineering (from Polytechnic Milan) and a Master's Degree in Energy and Environmental Economics (from Eni Corporate University).



EMANUELE TAIBI (IRENA)



Emanuele Taibi joined IRENA in September 2013. He is based with the IRENA Innovation and Technology Center in Bonn, Germany. He is responsible for assisting Member Countries in devising strategies for the transformation of the power sector. In his previous role he assisted islands countries in the transition to renewable energy, focusing on energy planning. Prior to joining IRENA, he was an Energy Specialist with the Secretariat of the Pacific Community (SPC) in the Federated States of Micronesia and a bioenergy officer with UNIDO in Vienna. He has 15 years of experience in the energy sector and has been an international civil servant for the last 10 years, after his first years working for large international energy corporations and research institutions. He has a M.Sc. in Management Engineering (laude) and is a chartered industrial engineer from Italy.

VINEET SAINI (INDIA)

Mr. Vineet Saini is working as Scientist in Department of Science and Technology for the Government of India. His prime responsibility is to channelize the Clean Energy Research Initiative Programme. He holds a Master's degree in Energy & Environmental Management (IIT Delhi), MBA in Technology Management and also a Certified Energy Auditor of Bureau of Energy Efficiency, India. His professional experience of 21 years encompasses diverse assignments in Energy and Water sector projects.



EL HADJI DIOP (UNDP)



El Hadji DIOP is the Facilitator of The Inclusive Business Ecosystem Platform for Solar Energy by the UNDP in Senegal. As the general secretary of COPERES (Conseil Patronal des Énergies Renouvelables in Senegal) he is very active in the private sector of renewable energy in Senegal and West Africa. He graduated in 1991 in Telecoms Engineering in Fachhochschule in Munich, Germany and received his MBA 2001 on International Marketing in European School of Business in Reutlingen, Germany. After completing his Engineering degree with a Solar study in 1993 in IHK (Industrie und Handelskammer) in Munich, Germany, he started to develop solar applications for the industry sector. In 2010, he built the first energy positive house in Senegal, that injects the energy excess into the grid and in 2016 the first Solar boot in Senegal. He is member of several national and international organisations like DGS (Deutsche Gesellschaft für Solarenergie) or ISES (International Solar Energy Society).

SESSION 2.1

PAOLO FRANKL (IEA)

Paolo Frankl is Head of the Renewable Energy Division at the International Energy Agency (IEA), which he joined in 2007. Dr. Frankl leads the IEA's work on renewable energy, providing policy advice in the areas of technology, markets and systems integration. He is a member of several international advisory committees, including the EU PVSEC International Scientific Advisory Board and the Helmholtz Association of German Research Centres. A physicist by training, Dr. Frankl holds a Ph.D in energy and environmental technologies from the University of Rome. He was also Marie Curie post-doc research fellow at INSEAD in Fontainebleau, France. Dr. Frankl has over twenty years of experience working on renewable energy systems and markets, life cycle assessment and eco-labeling. Prior to joining the IEA, he worked as Senior Researcher for the Italian Research Institute, Ambiente Italia, and was Scientific Head of the Italian environmental research and consulting firm, Ecobilancio. From 2000 to 2002 he served as Advisor to the Director-General of the Italian Ministry for the Environment. Dr. Frankl also spent many years in Assistant Professor positions in environmental technologies at the University of Rome, University of Florence, and l'Ecole des Mines de Paris.



ASTRIA FATAKI & ABEL KIDANE (ENERGY GENERATION)



Astria Fataki is a young and passionate entrepreneur. French with Congolese origin, she grew up with those two cultures, making her an open-minded person. Incensed by development inequalities she participated in the creation of the association Lighting a Billion Lives, dedicated to rural electrification in Africa. This experience allowed Astria Fataki to witness the weaknesses of such a model. In January 2016, she decided for her association to move towards a model based on “made in Africa” technological innovation and youth entrepreneurship, thus becoming "Energy Generation". The initiative is now represented by a network of ambassadors through 24 countries in Africa.

Abel Kidane is a 19 years old Ethiopian inventor. In 2016, he was nominated to join the first pilot-promotion of Energy Generation. Selected for its hand-crank power bank project, its prototype was successfully awarded one year later at the Africa Energy Generation Award. His product allows users to power their everyday electronic devices through USB ports. With its unbeatable price, it is designed to be accessible to large parts of the population. By implementing an all-made-in-Africa production channel, realization costs have indeed been diminished drastically. The product will become available on the Ethiopian Market by the end of 2017.

PHILIPPE MALBRANCHE (INES)

Philippe Malbranche got an engineering degree at “Ecole Centrale de Paris”. He started working in 1980 in the South Pacific on rural electrification projects with renewable energies. He joined successively the French Department of Energy as advisor on renewable energy policy, Photowatt, the French PV manufacturer, and CEA-GENEC, a research laboratory with 25 people focused on PV and storage systems, which he managed until 2004. Then, he participated to the setting up of INES, the French Solar Energy Research Institute, which hosts 400 researchers involved in all the solar value chain, and where his position now is General Director.



FABIO BELLONI (EUROPEAN COMMISSION)

Fabio Belloni is Principal Administrator at the European Commission, Directorate-General for Research & Innovation, where he is in charge of the research programme and policy for the photovoltaic sector. He is also the Commission's contact person for Mission Innovation Challenge #2. He is a physicist, and in his previous appointments at the Commission's Joint Research Centre and several research institutions in Italy, he has worked as a scientist in the fields of nuclear materials, plasma physics and applied physics. He has authored about 100 scientific and policy publications.

THOMAS ANDRÉ (SCHNEIDER ELECTRIC)



Thomas André leads the strategy of the Access to Energy program at Schneider Electric. He started his career as an electronic hardware engineer and project manager in a French SME. After studying sustainability, Thomas joins Schneider Electric in early 2010 to work on its inclusive business program. He covered coordination and then business development positions in parallel of conducting a PhD thesis, questioning the interactions between Base of the Pyramid, CSR and corporate strategies. Thomas holds an Engineering degree from ESME Sudria, a MSc in Sustainability from HEC Paris, and a PhD in Economics from Ecole Polytechnique.

STEFAN NOWAK (IEA PVPS TCP)

Stefan Nowak is an experimental physicist by training. His academic research activities covered thermonuclear fusion, plasma and surface physics as well as thin films. His biography is characterised by a continuous evolution from research to technology management involving aspects of advanced research in different areas of energy, materials and processing. He has a broad technological expertise which also covers activities in technology management, communication and policy. He presently works as an energy expert specialised in the field of photovoltaics and renewable energies where he occupies a number of official functions.



IGNACIO CRUZ (IEA WIND ENERGY TCP)



Ignacio joined the CIEMAT (MEIC), the main Public Research Centre specialized in energy and the environment in Spain in July 1991 after completing an MSc in Electrical Engineering in 1991. Since 2005, as Head of Wind Energy Unit at CIEMAT, Ignacio coordinated a team of researchers developing activity on wind turbines conceptual design and testing, systems integration, energy storage and development of models for simulating and forecasting the wind over land and sea. He has also run the working group on wind applications research in the Spanish Scientific Technology Network for the Wind Power Sector. Ignacio has collaborated with the IEC since 2006. He is member of the IEA Wind ExCo since 2005. He is the OA of the IEA Wind Task 27 since 2008. He is member of the EWI and the EERA Wind Joint Program since 2008, He is member of the SET Plan SC since 2010. He is member of the Board of the Catalonia Institute for Energy Research IREC. Finally he has reviewed and published more than 20 scientific articles and has participated expert meetings, congresses, panels of evaluation of projects and courses.

CHRISTIAN DE GROMARD (AFD)

Christian de Gromard is an electrical engineer who turned early on in his career to renewable energy and energy management in developing countries. After gaining his first industry experience focusing on electrical equipment, he worked from 1980 to 1981 at the Indian Institute of Science (Bangalore) on mini hydropower plants and decentralized electrification projects. In 1982, he joined the French Environment & Energy Management Agency (now ADEME) as Head of the Africa Division. After launching the concept of pre-electrification, he created in 1987 an engineering office specializing in rural electrification and renewable energy in developing countries. He joined the AFD in 1993 where he was in charge of the Climate Unit at the French Facility for Global Environment (FFEM), then Head of Energy Projects in different regions (Maghreb, Sub-Saharan Africa, Brazil, China, India, Thailand, French overseas departments...). Principal Energy Advisor since 2009, Christian de Gromard coordinates the development of AFD's energy strategy.



SESSION 2.2

LISA DIGNARD-BAILEY (NATURAL RESOURCES CANADA)



Dr. Lisa Dignard-Bailey serves as the point of contact for the Canadian government as part of the Mission Innovation Challenge #2 on Off-grid Access to Electricity. She is a research program director on the Integration of Renewable and Distributed Energy Resources at the CanmetEnergy research center within the innovation Energy Technology Sector of the department of Natural Resources Canada. Lisa supports the development of solar energy standard and recommended guidelines through her work as chair of the Canadian Integrated Committee on Photovoltaic Standards and the International Electrotechnical Commission Technical Committee 82. She is actively promoting the lessons learned from Smart Grid R&D and demonstration investments as a member of the executive committee of the IEA International Smart Grid Action Network (ISGAN) and serves as the point of contact for the Canadian government for the Mission Innovation challenge #1 on Smart Grid. She obtained her doctoral degree from the University of Western Ontario in Chemistry and completed her post-doctoral studies at École Polytechnique de Montréal in Engineering Physics.

ROBERT STONER (MIT)

Robert Stoner is the Deputy Director for Science and Technology of the MIT Energy Initiative, and Founding Director of the MIT Tata Center for Technology and Design. He is currently member of the MIT Energy Council, and the Science and Technology Committee of the Alliance for Sustainable Energy which oversees the National Renewable Energy Laboratory. His current research interests include energy technology and policy for developing countries, and design for resource constrained settings. Dr. Stoner has worked extensively in academia and industry throughout his career. He is the inventor of numerous optical measurement and computational techniques, and has built and managed successful technology startups 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. He earned his Bachelor's degree in engineering physics from Queen's University, and his Ph.D. from Brown University in condensed matter physics, serving as a member of the engineering faculty there from 1995 through 2002.



CATHY ZOI (ODYSSEY)



Cathy Zoi is co-founder and President of ODYSSEY. She is also an adjunct professor and Precourt Institute Scholar at Stanford. Previously, Cathy was Assistant Secretary of Energy in the Obama Administration. She was the founding CEO of SunEdison Frontier Power, the Alliance for Climate Protection, and the Sustainable Energy Development Authority. Cathy has been an investor (Silver Lake and Bayard Capital) and a company director, and is currently on the boards of Sunco and Ice Energy. She was Chief of Staff for Environmental Policy in the Clinton White House and pioneered the Energy Star program at the US EPA. Cathy has a B.S. in Geology from Duke University and a M.S. in Engineering from Dartmouth.

AARON LEOPOLD (PRACTICAL ACTION)

Aaron Leopold wears a number of different hats in the energy access and energy for development spaces. He serves as Practical Action's Global Energy Representative, and is the co-lead author of their annual Poor People's Energy Outlook report. Through this role and as the Deputy Director of the Power for All partnership and campaign, Aaron work with donors, financiers and the private sector to develop new ways of working and implement best practices within the energy access space. He also serves on the Private Sector Advisory Group of the Green Climate Fund (GCF), and the Board of Directors of the Alliance for Rural Electrification (ARE), the global industry association for minigrids developers and operators. He furthermore sits on steering and advisory committees related to climate and energy finance at the Climate Investment Funds of the World Bank, the International Renewable Energy Agency (IRENA), and a coalition of non-profits working on energy for development. Prior to coming to Practical Action, Aaron was Director of Environment & Sustainable Development at the Global Governance Institute, a Brussels-based think tank, and team leader at the International Institute for Sustainable Development. Aaron has a Master's degree in Global Political Economy from the University of Kassel, Germany.



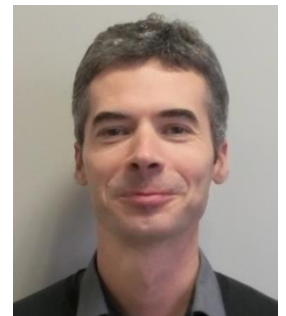
THOMAS DUVEAU (MOBISOL)



Thomas Duveau joined Mobisol as Head of Business Development in June 2013. With his team, he is responsible for market entry strategies and strategic partnerships. Thomas worked as an officer for renewable energies for WWF Germany from 2008 to 2013. Prior to that, he served as Vice President at Global Capital Finance (Investment with a focus on renewable energies) 2005 to 2008. From 1997 to 2004 he worked in the Corporate Strategy Department of REUTERS in Germany, UK and USA. Thomas graduated in Economics, Econometrics and environmental management.

MARC GRATTON (ÉLECTRICIENS SANS FRONTIÈRE)

After more than ten years in the French Power Company EDF, working mainly on power distribution, market and regulation issues, Marc Gratton joined Electriciens sans frontières in 2010 to address risk management issues. He was appointed Executive Director in 2012. Since then he has been in charge of coordinating the Headquarter's team and takes part in the NGO's strategy and operational issues.



JOHN RIDLEY (M-KOPA)



Jon Ridley is Director of M-KOPA Labs – the business unit responsible for research and development of M-KOPA's future products and services. With a customer base of over 500,000 customers of the company's Pay-As-You-Go energy products using mobile money. Jon and his team are exploring ways to provide customers with: more power; more productive uses of power; smart content to their connected TV's; how to reach more rural customers; and how to provide valued agricultural and educational products leveraging customer's extensive credit histories with M-KOPA. With a long career in international development Jon previously managed a number of Innovation Challenge Funds that supported early stage product developments such as in mobile money, and other innovations using mobile and digital technology.

HOLMES HUMMEL (CLEAN ENERGY WORKS)

Clean Energy Works was founded by Dr. Holmes Hummel to accelerate investments in the clean energy economy with inclusive financing. As the champion for the Pay As You Save (PAYS) system, Dr. Hummel led Clean Energy Works to win the FiRe Award for high-impact innovation at the Bloomberg New Energy Finance "Future of Energy Summit." Dr. Hummel also serves on the board of Cornerstone Capitalas well as Cleantech Open. Previously, Dr. Hummel served as the Senior Policy Advisor in the Department of Energy's Office of Policy & International Affairs from 2009-2013. In addition to prior work with energy innovators in the Silicon Valley, Dr. Hummel earned a doctorate degree from Stanford University for interdisciplinary research on energy technology scenarios that achieve 100% clean energy for all.



SESSION 3

FRANK VAN DER VLEUTEN (THE NETHERLANDS)

Frank van der Vleuten works as senior policy advisor for renewable energy in the Ministry of Foreign Affairs of the Netherlands, and acts as co-chair of the Scaling-up Renewable Energy Program of the Climate Investment Funds. Before joining the Ministry, Frank coordinated an international NGO network on access to energy, supported the Asian Development Bank as team leader for the Energy for All secretariat, and was managing director of a thin film solar manufacturer serving the commercial solar market in a.o. Africa.

MARK RADKA (UNEP)

Mark started his career as a U.S. Peace Corp Volunteer in Thailand in 1982, where for 3½ years he designed and oversaw construction of rural infrastructure projects while working with the Local Administration Department of the Thai Government's Ministry of Interior. This led to a position as an Associate Programme Officer at UNEP's Regional Office for Asia and the Pacific (ROAP) where he worked on industrial environmental management projects, including with the UNEP Industry and Environment Office, DTIE's predecessor. Mark then left UNEP and worked in Washington, D.C. as a consultant to the U.S. Environmental Protection Agency and the World Bank, where he managed technology cooperation projects in developing countries, mostly related to the phase-out of Ozone Depleting Substances and climate change. Lured back to ROAP in 1994 he oversaw an expansion of UNEP's industry-related programmes in Asia before moving to Paris in 1998 to help establish the energy programme in UNEP IE. Mark's responsibilities are the day-to-day management and general coordination of UNEP's energy and climate change mitigation efforts. He keeps watch over staffing and programme budgets, maintains relations with donors and supporting institutions, and oversees communication of UNEP's energy and climate change mitigation 'messages', including within the UN system.

**JOHN KEANE (GOGLA)**

John has extensive front line experience within the off grid sector, which began 17 years ago when he became acutely aware of the pressing need to address energy needs after living as a volunteer in rural Tanzania. John has led solar operations across Africa, playing an instrumental role in establishing the charity SolarAid and scaling up the social enterprise SunnyMoney as its Managing Director. John shared much of his experience working at the forefront of the sector in his well-received book 'Pico-Solar Electric Systems: The Earthscan Expert Guide to the Technology and Emerging Market'

MARCO ARESTI (RES4AFRICA)

Marco Aresti is Program Manager at RES4Africa focused on access to energy and off-grid solutions. He leads the Micro-Grid Academy project in partnership with KPLC that aims to create a unique environment for capacity building on renewable minigrids. The project is part of a training program with a regional approach to East-Africa. Previously, Marco worked 8 years in Enel Green Power on the development of large-scale wind projects, including on EGP's expansion in Latin-America. With a strong interest for innovation, Marco started his career in the Fiat Research Centre where he experimented for over 5 years on the application of Fuel Cells on electric vehicles.



KAT HARRISON (ACUMEN)



Kat Harrison is Acumen's Associate Director of Impact & Lean Data and leads Acumen's energy impact work, including developing the Energy Lean Data project and working on new ways to learn about customer impact. Kat has been Chair of the GOGLA Impact Working Group since its formation in 2013 and led the development of the harmonised impact metrics for the off-grid energy sector. Kat created the SolarAid Research & Impact division and grew the department to be a resource for the off-grid energy sector, housing some of the most comprehensive data on energy access in rural Africa, now rehomed at Acumen.

KRISTINA SKIERKA (POWER FOR ALL)

As the CEO of the Power for All campaign, Kristina has helped create a movement dedicated to achieving universal energy access by 2025. With expertise in both energy and public awareness campaigns, Kristina has led a number of well-known environmental leadership initiatives in the energy sector for both private companies (Applied Materials' "Bright Futures", Sun Microsystems' "Eco Responsibility," d.light's "Future of Energy") and public organizations (the State of California's Energy Efficiency Strategic Plan, as well as the award-winning Flex Your Power campaign). Kristina was named Energy Foundation's Senior Fellow in 2009 and finalist for the 2015 Clean Energy Ministerial's C3E award.

