

Modeling Africa's Energy Transition

Date and Time: Tuesday, November 8, 15h30-16h30

Location: Zero-Carbon Future (P124)

Dress: Business

Contact Information

Prudence Dato, pdato@catf.us, +1(202) 660-2490

Agenda

15:00 am Speakers arrive for green room

15:30 – 15:42 am Scene-setting: Presentation of the background paper on "Climate Change

and Economic Development in Africa: A Systematic Review of Energy

Transition Research"

Dr. Prudence Dato, Senior Energy Economist, CATF

15:42 – 16:28 am Panel discussion

Dr. Louis Verchot, Principal Scientist and Leader of the Land Restoration Group and the CGIAR Mitigate+ Initiative on Low Emissions Food Systems, the International Center for Tropical Agriculture (CIAT)

Prof. Nadia Maïzi, Member of IPCC and leading author, and Director, Center for Applied Mathematics, MINES ParisTech

Dr. Olumide Abimbola, Founder and Director, Africa Policy Research Institute (APRI)

Mr. Christophe Deguenon, *Director of Environment and Water Resources, WAEMU Commission*

Moderated by:

Dr. Zainab Usman, Director, Africa Program, Carnegie Endowment for International Peace

MODERATOR



Event description

In this event, we will disseminate the findings of our systematic review paper on energy transitions modeling in Africa. We will also discuss the policy implications of our results to draw the community's attention to knowledge generation that aligns climate action with development imperatives in Africa.

African countries face a dual challenge of building broad-based prosperity for their citizens amidst the threat of climate change. While these two issues are increasingly discussed in tandem in policy circles, research has typically considered them separately. We conducted a systematic review to evaluate the state of the knowledge on energy transition modeling and projections in Africa. Our analysis reveals that i) Energy transition modeling is a recent but growing phenomenon in Africa, ii) despite the complexities involved, only a handful of scenarios are often presented, largely focused on the horizons 2030 or 2050, with little to no considerations of social and political considerations that may hinder implementations, iii) projection of energy mixes and the emissions paths are the key objective in general, with only 10% of the papers considering development as a central outcome, iv) technologies such as carbon capture, nuclear, or hydrogen, that stand to play a key role toward a low or zero carbon transition are among the least considered, and v) nearly two-third of the research was produced without an author based on the African continent.

Event participants will explore the following questions.

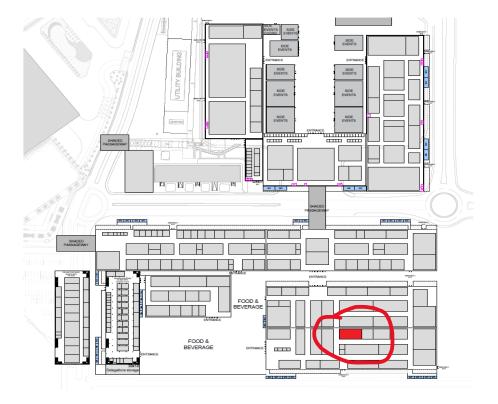
- 1. How should we think about the socio-economic development and climate change urgencies in Africa?
- 2. How can we foster homegrown solutions and debates in the space of climate action and development in Africa?
- 3. How can we further a productive North-South collaboration in the knowledge space?

Directions and Logistics

Please allocate enough time for a lengthy security screening to enter the Blue Zone.

Speakers should plan to arrive in the CATF Zero Carbon Future Pavilion no later than 30 minutes before the event begins. CATF's pavilion is the RED space in the pavilion area.





In the graphic below, the entrance to the Blue Zone is the black arrow at the bottom right, and the pavilion area is the blue double building in the bottom left.





Speaker bios

1. **Dr. Louis Verchot** is a Principal Scientist and Leader of the Land Restoration Group at the International Center for Tropical Agriculture (CIAT) and leads the CGIAR Mitigate+ Initiative on Low Emissions Food Systems.

Louis has worked with the IPCC since 2003 and was a lead author on the landmark 2019 special report on Climate Change and Land. He has also worked on reports related to wetlands and national greenhouse gas inventories. Louis leads an effort to improve transparency and national reporting to the UN Framework Convention on Climate Change. Based in Cali, Colombia, Louis works on forestry and agriculture issues with a climate change focus. He co-leads the SERVIR-Amazonia initiative bringing NASA satellite technology to Amazonian decision makers to help them address deforestation, drought, fire, and economic development. His group also works in the highlands of Kenya and Ethiopia to restore productivity to degraded landscapes and raise the standard of living of rural farmers. Before joining CIAT in 2016, Louis was the Director of Forests and Environment at the Center for International Forestry Research (CIFOR) and has previously lived and worked in Burkina Faso, Senegal, Brazil, Kenya and Indonesia.

2. **Prof. Nadia Maïzi**, is the Director of the Transition Institute 1.5 at MINES Paris- PSL University and a member of IPCC and lead author of IPCC WGIII AR6.

Nadia is Full Professor at MINES ParisTech, a college from Paris Sciences et Lettres research University. She is running the Center for Applied Mathematics, where she leads a team involved in Modeling for Economics, Energy and the Environment, combining short and long terms dynamics. With her team, she develops prospective approaches based on the TIMES long-term energy-planning model at national, European and international levels, and represents France on the IEA consortium, ETSAP, which oversees the model's deployment.

In 2008, she founded the Chair Modeling for Sustainable Development <u>www.modelisation-prospective.org.</u> She also heads the ParisTech delegation to UNFCCC conferences of the parties since 2009.

In September 2015, Nadia Maïzi was appointed member of the expert committee on the energy transition by the French ministry for the Environment Energy, Environment, Energy, and the Sea.

Since April 2022, she is the Director of The Transition Institute 1.5 (TTI.5) https://the-transition-institute.minesparis.psl.eu/en/, 1.5 as an echo of the maximum temperature rise target advocated by the IPCC, is an initiative launched by Mines Paris - PSL with the support of its Foundation. Specifically set up to design the low-carbon transition, the institute's ambition is to provide informed scientific responses to the huge challenge of carbon neutrality.

She founded the Ecole des Mines de Paris's specialized master's degree on Energy Systems Optimization in 1999. Nadia has a PhD from the Ecole des Mines de Paris (1992). She holds the distinguished French honorary titles of Chevalier des Palmes Académiques, Officier de l'Ordre National du Mérite, and Chevalier de la Légion d'Honneur.

3. Dr. Olumide Abimbola, is founder and director of Africa Policy Research Institute (APRI).

Olumide's areas of focus include economic informality, trade policy, regional integration and natural resources management. He has either conducted research or worked in Tunisia, Côte d'Ivoire, Benin, Togo and Nigeria. He has also worked with high-level government officials in several other African countries. Before APRI, Olumide worked at the CONNEX Support Unit, a GIZ-hosted G7 initiative funded by the German government and the European Commission. Before that, he worked on trade and regional integration at the African Development Bank. He has been published on different academic, policy and media platforms. He was recently co-author of a framing paper on climate and racial justice. Olumide also co-authored "Running the Numbers: Use of Financial Models for Extractive Projects in Africa", a study of how African governments manage natural resources through financial modelling. While at the AfDB, he



contributed to the Guidebook on African Commodity and Derivatives Exchange and the Energy Sector Capacity Building Diagnostic & Needs Assessment Study. Olumide did his PhD at the Max Planck Institute for Social Anthropology in Halle/Saale, Germany.

4. Mr. Christophe Deguenon is currently the Director of Environment and Water Resources at the WAEMU Commission.

Christophe is an agro-economist engineer with diversified experience in monitoring development programs and preserving natural resources, with a particular emphasis on resilience, adaptation to climate change, and sustainable development. Since Christophe joined the WAEMU in 2010, he has contributed to many regional projects in the intersection of development and environment areas and, more specifically, on the issues of resilient agriculture, climate change, water resources, and water management. As an agroeconomist, Christophe has worked on issues in agricultural economics and natural resources in the space of research and development. He previously worked for the International Institute of Tropical Agriculture (IITA), where he was involved in applied research on rural economics, focusing on the interlink between agriculture and the environment. He has contributed to data collection and analysis on the agricultural value chains and consideration of environmental externalities linked to using certain agricultural technologies. Christophe holds a Master's degree in Integrated Water Resources Management from Institut International de l'Eau et de l'Environnement (2IE) in Burkina Faso.

Planned Themes for Discussion

- 1. How should we think about the socio-economic development and climate change urgencies in Africa?
- 2. How can we foster homegrown solutions and debates in the space of climate actions and development in Africa?
- 3. How can we further a productive North-South collaboration in the knowledge space?