## **EISENHOWER FELLOWS**



## AFRICA PROGRAM FOR REGIONAL LEADERS FIGHTING CLIMATE CHANGE



**Kadijah Amoah** | GHANA CEO · Aker Energy Ghana Ltd.

A lawyer with a post-graduate degree in strategy and innovation from the University of Oxford, Amoah is the first Ghanaian woman to lead an oil-and-gas company. Its main asset is a massive seabed oil field, 2000 meters deep, covering 2,100 square kilometers. Her company, a subsidiary of a 180-year-old Norwegian enterprise, also is invested in the first internationally accredited pipe-fitting and welding training center in Ghana, creating jobs for local citizens in an industry that ordinarily employs expatriates. Prior to joining Aker, Amoah worked on business development in the office of the vice president of Ghana, where she developed a paperless, digital strategy that reduced the turnaround time for the clearance of goods in Ghana's ports from three weeks to three days. On fellowship she wants to create a Renewable Energy Fund, financed by major institutions, to support Ghanaian solar, wind-energy, biomass and waste-to-energy companies in their start-up and intermediate phases of development.



Jorge Appiah | GHANA CEO and Co-founder · Solar Taxi

Getting around Africa at a time of historically high demand for personal transportation, courier and cargo services can be a laboriously slow and costly chore. Exhaust-spewing gasoline and diesel-powered vehicles take a heavy toll on the environment. To accelerate West Africa's transition to eco-friendly, affordable transport, Appiah, an electrical engineer with a background in renewable energy, founded SolarTaxi, a company that assembles and distributes electric-powered bikes, tricycles and cars, with a focus on building "an integrated ecosystem of mobility services," including digital ride-hailing and E-commerce platforms. On fellowship, he wants to expand the concept, with the goal of creating 13,000 direct and indirect green jobs in Ghana and training more than 6,000 youth to assemble a projected 2,900 electric vehicles of all types by 2025.



**Sangu Delle** | GHANA CEO and Co-founder · CarePoint

After a sterling academic career at Harvard College, Harvard Business School, Harvard Law School and the University of Oxford, Delle worked for a venture capital firm and founded two others before creating CarePoint (formerly Africa Health Holdings) in 2017. The company manages 40 healthcare facilities and serves 250,000 patients annually in Ghana, Kenya and Nigeria. Its goal is to grow to 300 facilities, all driven by solar power, serving three million patients by 2026. Delle founded Golden Palm Investments Corporation with \$100 of his own money and served as CEO from 2006 to 2017. Today the company has more than \$50 million USD in assets under management. A clean water and sanitation project he started as a college freshman went on to attract thousands of donors and provide safe facilities for 200,000 rural poor in 160 villages in Ghana. Between 2030 and 2050, climate change is forecasted to contribute 250,000 deaths a year from malnutrition, malaria, diarrhea and heat stress. On fellowship Delle wants to answer the question: How can CarePoint incorporate climate action in its everyday delivery of care and set a standard for other health-care companies to follow?



**Baafour Otu-Boateng** | GHANA Investment Director · Investisseurs & Partenaires

A specialist in clean energy resources, Otu-Boateng is responsible for his company's investments in English-speaking West Africa. A graduate of the University of Oxford and Williams College, he formerly worked as an analyst with UBS Investment Bank in New York. He is on the board of Rensource Holdings, an African solar-power technology company, which recently transformed the poultry sector in West Africa by teaming with Empower Energy to install a 700-kilowatt solar plant at Nigeria's largest egg producing company. The plant is designed to generate one gigawatt hour of clean energy annually and eliminate the discharge of 25,000 tons of CO2 over the unit's lifetime. As vice chair of World Vision Ghana, a Christian relief organization, Otu-Boateng oversees strategy and fundraising for climate-smart agriculture, clean water and sanitation improvements across Ghana's rural communities. On fellowship he wants to create a nonprofit collective of commercial banks to spark new investments in bold climate-action initiatives. The alliance he envisions will present a cohesive platform to attract financing that will benefit thousands of small- and medium-sized enterprises across the continent. As Africa begins taking advantage of a continental free-trade agreement that came into effect on Jan. 1, 2021, Otu-Boateng wants to ensure that the resulting economic growth is channeled to make a positive impact on the environment.



**Maame Stephens** | GHANA Executive Director · Kaysens Group

It's a little-known fact, says Stephens, that the global industry that manufactures clothing is among the world's top two polluters. Apparel makers discharge 10 percent of the world's greenhouse gases. And while 750 million people without access to water go thirsty worldwide, nearly three percent of the planet's freshwater is used to produce cotton. Her fellowship project, House of Brands, is designed to bring together dozens of designers under one roof to educate Ghanaians about the fashion industry's negative impact on the environment and how to combat it. This includes teaching designers to use sustainable textiles and encouraging boutiques to offer quizzes on sustainable practices and offering discounts for correct answers. Her initiative would ask customers to drop off old clothes to be restyled and recycled, make shopping bags out of old cloth and keep a buzz about the innovations alive on social media. Kaysens Group, where Stephens began working in 2009, is a 500-employee, family-owned business that includes hospitality, real estate, transport and telecommunications subsidiaries. Stephens oversees its telecom unit, and serves as CEO of its vacation division, which operates in 10 West African countries. Previously, she worked in the United States for Proctor & Gamble and GE Commercial Finance.



**Irene Amoke** | KENYA Executive Director · Kenya Wildlife Trust

An Oxford-trained expert in ecology, biodiversity, sustainable development and wildlife conservation, Amoke has written widely on environmental issues affecting the Maasai Mara ecosystem. Leading a team of 12 at Kenya Wildlife Trust, she works closely with conservation partners to protect vulnerable predator populations and to educate and empower local communities about environmental stewardship. She describes her organization's values as "driven by science; focused on people." In 2018, she convened a meeting that led to the creation of the One Mara Research Hub, a multidisciplinary platform for more than 100 researchers to share ideas about conservation management, policy and economic development in the Mara. Her fellowship project has its origin in a paper she wrote with Danish colleagues in 2018, titled "Are goats the new elephants in the room? Changing landuse strategies in Greater Mara, Kenya." Traditionally, men in the Mara raise cows; women and their children raise goats, which reproduce quickly and accelerate landscape degradation. Amoke wants to research the economic and environmental impacts of new approaches to the management of small livestock.



**Linda Ogallo** | KENYA Climate Change Adaptation Expert · IGAD Climate Prediction and Application Centre

Ogallo is an authority on drought, desertification and sustainable development in the greater Horn of Africa, having published more than 15 policy papers and peer-reviewed journal articles over the last 15 years, Her organization was created by the African Union in 1986 as a regional economic community to provide early-warning climate information and strategies to cope with crop yields and other uncertainties associated with climate variability. She earned her master's and bachelor's degrees in chemistry at North Carolina State University and completed her doctoral studies at the University of Nairobi. In 2002, IGAD created a Conflict Early Warning and Response mechanism to alert its seven member countries to water-rights disputes, forced population displacements and other situations that could presage violent conflicts. Her goal on fellowship is the creation of a Climate Security Database to be used as a "toolkit" for policy makers. Using maps and science-based evidence, it would highlight the interplay between climate variability, peace and security. As a secondary objective she wants to create a nexus between Kenya's national weather service and its agricultural extension service, disseminating climate, crop and livestock advice on a radio channel accessible via mobile phones.



Nickson Otieno | KENYA CEO · Niko Green Limited

Otieno is a prominent architect who played a leading role in developing Kenya's green-building code standards. He founded his company in 2017 as a "think-do tank" to provide green technologies, research, capacity development and advice on climate change and sustainability to organizations, businesses and governments. His clients include the government of Kenya, the World Health Organization and four different United Nations agencies. To demonstrate the applicability of green building principles, he created Endelevu, which means "sustainable" in Swahili, a digital marketplace where people can connect to buy, sell or donate leftover, recycled and natural building materials. The reclaimed construction waste is used to build schools in Kenya, where primary and secondary schools face a large shortage of classrooms and sanitation facilities. On fellowship he wants to scale up Endelevu, mainstreaming the use of recycled materials, bags of earth and bales of straw to set new standards for the way that builders and policymakers think about resources.



Olufunso Somorin | KENYA Principal Regional Officer · African Development Bank

Describing himself as an "unapologetic believer" in Africa's potential to manage natural resources and infrastructure development, Somorin is responsible for mainstreaming climate-change and green-growth initiatives in the African Development Bank's investments in 13 countries in East Africa. He played a key role in shepherding \$109 million in commitments from the European Union, Italy, the United Kingdom and the Islamic Development Bank to support the rebuilding of infrastructure in Somalia after decades of armed conflict and political, economic and social crises in the country. Since 2009 he has authored and co-authored 24 journal articles on climate change and development. Previously he worked in forestry research and nature conservation. On fellowship he wants to develop a better means to mobilize financing for adaptation projects. The strategic objective of his National Adaptation Finance Framework is increasing loans, grants, equities and guarantees from public and private sources, using Kenya as a case study.



**Delmwa Deshi-Kura** | NIGERIA CEO · DelMedia Productions and Velocity Media Group

With a background in journalism and media production, Deshi-Kura designs and produces TV and film content in English and Hausa for African social-impact projects. She created and hosted "Generationnext," a news and public affairs program that started as a state-level show and within three months was broadcast across all of Nigeria. Previously she worked at the 24-hour music channel MTVBase and at M-NET Africa, Africa's premier pay-TV platform. Before her current assignment, Deshi-Kura served as executive producer and creative regional head for Discovery Communications' Global Partnerships - An Impact Arm of Discovery. On fellowship, she wants to develop Velocity Studios, an eco-friendly studio city in Nigeria's north-central region "to drive authentic African storytelling" and narratives about climate action as well as other aligning social impact issues. Her vision is to produce social-impact films, dramatic series, documentaries, and animated short-form series that will lead to the creation of an estimated 1,500 creative jobs and more than 20,000 indirect jobs in the long term. Deshi-Kura anticipates that much of Velocity's content will be streamed on smartphones, taking advantage of the falling cost of data and the proliferation of low-cost Android devices in Africa and across the World.



**Charles Ojei** | NIGERIA Founder and CEO · HYBR Group

With offices in Nigeria and South Africa, Ojei's company works with entrepreneurs, governments, multinational corporations, academics, development agencies and investors to improve access to food, education, healthcare, energy and financing opportunities for millions of Africans. Prior to creating HYBR, Ojei held positions with Samsung Electronics, General Electric, DuPont and Proctor & Gamble. On fellowship, he wants to eliminate plastic waste in Africa and create one million jobs for youth through a robust network of community-based Modular Compression Centers (MCCs) to collect, compress and recycle plastic waste. Citing recent data, he notes that Nigeria generated 100,000 metric tons of plastic bottles made of polyethylene terephthalate (commonly known as PET) but that less than three percent of that was recycled. His goal is to reduce the cost of recycling such plastic by making the sorting facilities more plentiful and moving them closer to where the waste is generated. Each MCC costs under \$5,000 USD to set up and can break even in under two years. Each one employs one machine operator, two collection representatives, two sorters and one supervisor. The centers distribute waste collection bags to homes and businesses, then collectors pedal the waste to the MCCs on specially designed tricycles. From there, compressed cubes of the waste are sold to large industrial recyclers. His company designed and built a micro compressor that can crush up to 10 metric tons of PET per month. He hopes to roll out 10,000 MCCs across Nigeria by 2025 and then expand to other sub-Saharan countries.



Ndidi Okonkwo Nwuneli | NIGERIA Co-founder · Sahel Consulting Agriculture & Nutrition

Drawing on more than 25 years of international development experience, Nwuneli works to transform the African agriculture and nutrition landscapes. After graduating from Harvard Business School, she began her career as a management consultant with McKinsey & Company, working in Chicago, New York and Johannesburg. She returned to Nigeria in 2000 to serve as the pioneer Executive Director of the FATE Foundation and created LEAP Africa in 2002, a leadership development organization that has trained more than 50,000 youth, teachers and social entrepreneurs. In 2019 New African Magazine named her one of the continent's 100 Most Influential Africans. In 2020, amid the ravages of the COVID-19 pandemic that exposed the fragility of Africa's food ecosystem, she founded Nourishing Africa, a digital community that serves more than 2,000 agribusinesses in 36 African countries. On her fellowship, she wants to build new partnerships and develop a comprehensive plan to scale up Nourishing Africa and her latest venture, Changing Narratives Africa, which is focused on showcasing Africa's contributions to the global food ecosystem.



Eddie Balaba Mugarura | RWANDA Director, Strategies & Partnerships · FLS, Ltd.

Global freight transport is a major contributor to the carbon emissions that adversely affect East Africa, where hundreds of transporters frequent the major ports of Mombasa, Kenya, and Dar-es-Salaam, Tanzania, to deliver goods across ten countries. Because the industry lacks coordination concerning routes and carrying capacity, many trucks return empty from rural areas, worsening the environmental impacts and diminishing profitability. On fellowship, Mugarura wants to leverage his contacts to partner with Rwanda's two major freight forwarding associations to develop a sustainability framework for the industry. Specifically, he wants to create a "real-time digital platform" for scheduling deliveries and a database of available trucks. Through training workshops, truck owners and import/export business leaders would be sensitized to environmental concerns, such as how to reduce redundancy and use more fuel-efficient vehicles. An avid cricketer and president of his nation's cricket association, he also wants to explore the commercial side of sports in the United States.



Morris Kayifare | RWANDA Country Lead · United Nations Environment Programme

Kayitare leads the Rwanda Cooling Initiative (R-COOL), a joint venture of the United Nations Environment Program and the Rwanda Environmental Management Authority aimed at helping developing and emerging markets transition to energy-efficient and climate-friendly lighting, appliances and equipment. He led the drafting of Rwanda's National Cooling Strategy for the creation of environmentally sustainable cold chains to preserve agricultural, fishery and dairy products as well as temperature-sensitive vaccines. From 2015 to 2017, Kayitare was one of the directors of the national electric utility overseeing rural electrification, where he designed an awareness campaign about rooftop solar installations, helping increase the rate of off-grid electrification from one to 14 percent. On fellowship he wants to develop a program to scale up the availability of environmentally friendly refrigerants and efficient cooling equipment to reduce post-harvest food losses. If successful, the pilot program, which he calls One Stop Shop, would be extended to the rest of East Africa.



**Teddy Mugabo** | RWANDA CEO · Rwanda Green Fund-FONERWA

Starting as a district capacity-building facilitator in 2013, Mugabo rose through the ranks of her organization to be appointed its top administrator in 2020. In that role she oversees donor relations, the design of new climate-financing mechanisms and a staff of 36. The Rwanda Green Fund was created by the Rwandan government to mobilize climate-action financing with seed money from the government of the United Kingdom. The Green Fund has raised \$200 million USD to support 44 public and private projects, but will need hundreds of millions of dollars more if Rwanda is to meet its ambitious goal of reducing its carbon emissions by 38 percent by the year 2030. On fellowship, Mugabo wants to support Rwanda's transition to a green-growth economy by creating a Green Investment Facility that attracts public, private and philanthropic capital investment. Currently, many banks are unwilling to extend loans to green organizations because of the potential for losses. Mugabo hopes the entity she creates will show banks the benefits of investing in green products. The Green Investment Facility plans to work closely with Rwanda's Ministries of Environment, Agriculture and Infrastructure.



**Liliane Uwanziga Mupende** | RWANDA GCF NAP Project Lead · Global Green Growth Institute

A former city planner and personal assistant to the mayor of Kigali, Mupende joined the Global Green Growth Institute in 2018 as a consultant and two years later was appointed to lead a team of nine experts on urbanization and water resources management, with a focus on flood and landslide risks. The Global Green Growth Institute is a treaty-based, international organization headquartered in South Korea and dedicated to transforming economies by fostering resilience and sustainability. Mupende is on the boards of Rwanda's Transport Development Authority and the country's Institute of Architects. She also is responsible for her company's initiatives on private-sector engagement, gender equality and social inclusion. On fellowship she wants to deepen her involvement with Kigali's Master Plan for development by establishing an Adaptation Professionals Platform to focus on research, design and nature-based solutions for low-income areas susceptible to floods, food shortages and water pollution, while promoting peer learning and informal exchanges of knowledge.



**Emery Rubagenga** | RWANDA Founder and CEO · Ishango Investments Ltd.

After co-founding ROKA, a mining company that specializes in non-ferrous minerals used to manufacture metal alloys, Rubagenga created Ishango, whose Water Solutions division emphasizes the importance of water rights in economic development, self-sufficiency and cooperation between countries. He has served as the local Rwandan representative of PUM-Netherlands, a private-sector organization that connects entrepreneurs in developing countries and emerging markets with senior experts in the Netherlands for mentoring and coaching. Prior to creating ROKA, Rubagenga was the representative for Microsoft Corporation in Rwanda, an emerging technology hub in the region. On fellowship, Rubagenga plans to develop a pan-African fund that finances green initiatives that promote wildlife conservation and creates sustainable jobs.



Mandisa Mathobela | SOUTH AFRICA Country Partnerships Manger · UNICEF South Africa

As the country partnerships manager for UNICEF South Africa, Mathobela directs leadership on corporate and private-sector partnerships and engages with other UNICEF National Committees to explore regional opportunities for collaboration. Previously Mathobela oversaw shareholder engagement at Old Mutual Limited, a 176-year-old financial services firm based in Cape Town with 13 million customers and \$70 billion in assets under management, including \$9 billion in low-carbon, resource-efficient investments, part of her area of responsibility, and South Africa's largest wind-farm project. On fellowship Mathobela wants to partner with UBank South Africa and work with local youth to launch the African Youth Initiative for Climate Action Entrepreneurship (AYICAE), a job-creation and consciousness-raising program to train unemployed youth and young people ages 18 to 35 for work in the growing green-energy space, including the solar, hydro and recycling industries.



**Feziwe Mtshali** | SOUTH AFRICA Director • FM Global Holdings

A strategy expert with a background in banking and finance, Mtshali develops business approaches for clients in a variety of fields, including "augmented reality," the immersive software that merges audio and visual digital content and the real-world environment via smartphones and other handheld devices. Acting on her growing interest in global warming, in early 2021 she founded One Part Green, a non-governmental organization that promotes awareness of climate change and advocates for greater involvement by households, townships and other communities in climate-change resilience, sustainable practices and adaptation programs. On fellowship she wants to develop a plan for manufacturing "green hydrogen," which deconstructs the hydrogen and oxygen in desalinated water, contributing to the decarbonization of South Africa.



Edore Onomakpome | SOUTH AFRICA

Regional Manager, South Asia Infrastructure Portfolio · International Finance Corporation

With a focus on emerging markets, the International Finance Corporation is the world's largest private-sector financing institution, with an increasing emphasis on "climate-smart" initiatives. Currently regional manager of the IFC's South Asia Infrastructure Portfolio, Onomakpome previously managed the IFC's \$3.6 billion portfolio of municipal, power, transport, energy and telecom projects across 16 countries of sub-Saharan Africa. Spurred by the disparities in education and healthcare opportunities made dramatically apparent by the COVID-19 pandemic, Onomakpome wants to use her fellowship to create a multi-service platform that increases equitable access to health care and primary and lower-secondary education. "The pandemic has driven us to innovate, evolve and disrupt through technology [including] the creation of remote workspaces, education hubs, etc.," she says, "all while leveraging electricity and reliable internet connectivity." Her project will identify a pilot community in Nigeria, recruit other experts and work with local stakeholders in health care and education, increasing the use of telemedicine. To provide internet connectivity and electricity in remote areas, she hopes to deploy such technologies as a project pioneered in Ethiopia, which uses a six-kilowatt "wind-micro grid" to power 300 households, 20 businesses and a health clinic.



**Siyabulela Sokomani** | SOUTH AFRICA Founder, Managing Director · Nguni Nursery

Born in a humble township outside of Cape Town, Sokomani was drawn to horticulture in middle school by a teacher who engaged students in tree-planting projects. From that seed sprouted his career using indigenous plants and trees to combat the ravages of climate change. In 2017, he opened Nguni Nursery, which has since supplied more than 500,000 trees to clients restoring degraded land. In 2015 he co-founded the nonprofit Township Farmers, collaborating with local residents to establish small-scale gardening plots for the production of nutritious food. In 2019, as part of a public-awareness campaign, he organized 20 friends to take part in the Cape Town Marathon. Each ran the race with a sapling strapped to his back. Using census data and satellite images, he found that 96 percent of South African cities remain under a form of what he calls "green apartheid." White citizens tend to live in areas with more trees and easier access to public parks; predominantly Black, Indian and mixed-race residents do not. On fellowship he wants to address that inequality by employing community members to grow trees and make them available to the public for the greening of community hubs, including schools, sports fields and places of worship. Water for the nursery comes from a borehole powered by a solar pump.



**Gladness Deografias** | TANZANIA Head, Global Markets · NMB Bank Plc.

A financing expert, Deogratias oversees her bank's involvement in foreign exchange, bond trading and capital markets. She describes herself as a "change maker." After finding herself the only woman at some executive meetings, she created Women Arise Network, a mentoring forum designed to foster gender equality, promote diversity and expand leadership opportunities for women in banking. Her focus is finding ways for the financing of climate-change initiatives in Sub-Saharan Africa to create leverage for funders to encourage positive social change. On fellowship she wants to explore creative ways businesses can be rewarded or penalized for the decisions they make. One example, she says, is a farmer whose agricultural production leads to deforestation. If he addresses that problem, he could be eligible for cheaper financing. If he fails to address it, he could be sanctioned by being blacklisted or offered financing at a less advantageous rate. She envisions the project would begin with a public awareness campaign and a series of workshops for stakeholders.



**Evodius Rutta** | TANZANIA Founder · MAVUNOLAB agricultural innovation hub

Post-harvest food loss due to spoilage, improper storage and adverse environmental conditions is a critical problem in Tanzania, especially for small-scale farmers. As an agricultural innovation hub, MAVUNOLAB, founded by Rutta in 2019, works with young graduate engineers and agribusiness start-ups to develop low-cost post-harvest technologies to stem those losses suffered by poor farmers. According to Tanzania's Ministry of Agriculture, approximately 25 percent of the country's harvest of maize and rice is lost before it reaches the market and nearly 50 percent of fresh fruits and vegetables spoil shortly after harvesting. Anticipating severe crop losses and food-safety concerns brought on by rampant climate change, Rutta wants to use his fellowship to meet with solar-tech experts in the U.S. and explore how to expand African farmers' access to solar-powered cold storage facilities to extend the shelf life of fresh produce. Using private capital and equity-sharing partnerships with solar-tech companies, he plans to begin with a few pilot storage units and then scale up.



## Kudakwashe Manyanga | ZIMBABWE

CEO · Grow a Tree Foundation

In 2017, while on a trip with his family through rural Zimbabwe, Manyanga met a farmer who earned \$2,000 USD a year selling the harvest of just five, 30-year-old mango trees. And so it dawned on him: "Fruit trees can make a huge difference for marginalized communities in the fight against climate change." The farmer allowed Manyanga to collect the seeds from the fruit rotting on the ground. Back at Manyanga's farm, he raised 5,000 mango seedlings, which became the inventory for the Grow a Tree Foundation. The nonprofit supports planting programs at schools and rural communities to reduce deforestation, increase biodiversity and offer industry an opportunity to offset its carbon footprint. To date his organization has planted more than 12,000 trees in Zimbabwe. His goal is to plant at least five million fruit trees in African communities by 2035. On fellowship he wants to create an integrated network of ten climate-smart villages, one in each of Zimbabwe's provinces. Each model village would include plots for tomatoes, carrots, cabbages and onions; a larger plot for export-quality fruit; a solar-powered borehole for drip irrigation and drinking water; and infrastructure for managing livestock.



**Keith Phiri** | ZIMBABWE Senior Lecturer · Lupane State University

A prolific writer on climate change and adaptation strategies, Phiri participated in the drafting of Zimbabwe's climate-action policy, which took effect in 2016. A trainer, researcher and consultant, he has been active in developing his university's post-graduate curriculum on climate change and sustainable livelihoods. Phiri's PhD thesis focused on the efficacy of "small grains and small livestock production." On fellowship he wants to develop a network of biogas installations to serve the small farms in the Lupane district. Lupane has forests rich in teak, mahogany and other species, and large tracts dedicated to safari and hunting concessions. The project seeks to install community-shared biogas plants, and accompanying water wells, to provide energy for cooking, heating and lighting in rural agricultural lands. Farmers would be responsible for feeding the plants with animal waste and water and collecting the resulting gas in flexible containers for use in households. Phiri anticipates that the project would lead to a reduction in the chronic illnesses caused by the smoke from cooking with firewood.