

## 2023 Africa Prize for Engineering Innovation finalists announced

Selected from a shortlist of 15 African innovators, four finalists for the Africa Prize for Engineering Innovation 2023 have been announced.

The winner will be announced in Accra, Ghana, on 6 July, and will be awarded £25,000, with the other three finalists receiving £10,000 each. This year's finalists are from Nigeria, South Africa, Tanzania and Uganda.



2023 Africa Prize for Engineering Innovation finalists

## 2023 finalists

Chukwuemeka Eze, a Nigerian electrical engineer, developed the Revive Kit, a modular e-mobility service used to convert gas-powered three-wheeled motorbikes to run on rechargeable lithium-ion batteries.

Edmund Wessels, a South African biomedical engineer, has developed FlexiGyn, a battery-powered portable handheld device enabling gynaecologists to diagnose and treat a woman's uterus without anaesthetic or expensive equipment, increasing women's access to reproductive healthcare, particularly in remote areas.

Gibson Kawago, a Tanzanian electrical engineer, developed the Waga Pawa Pack, a rechargeable power source created from recycled laptop lithium-ion batteries, providing a reliable and affordable electricity source.

Anatoli Kirigwajjo, a Ugandan software engineer, developed Yunga, a local digital security network that connects neighbours to each other and police within a 20km radius via a physical device, smartphone app or SMS service, providing security at a low cost.

The finalists were chosen by the Royal Academy of Engineering, which founded the Africa Prize in 2014, after receiving support over eight months to help them accelerate their businesses.



Finalists in the 2023 Big 5 Southern Africa Construction Impact Awards announced



## **One-to-Watch Award**

The remaining 11 candidates from the 2023 Africa Prize shortlist are now eligible for the One-to-Watch Award worth £5,000, for which they will compete for the public's vote at the Africa Prize final. The 11 One-to-Watch Award candidates are:

- Affordable AMD Solution, Boitumelo Nkatlo, South Africa A technology to treat acid mine drainage (AMD) using
  industrial waste to recycle contaminated water for human consumption.
- Aquaset, Obed Zar, Ghana A smart water management system that monitors water levels in boreholes and water tanks, regulating the rate at which water is pumped and preventing pump breakdowns and water waste.
- Arobot, Cristovão Cacombe, Angola A robotics learning tool for children that must be assembled and programmed to perform specific tasks.
- Digital Aquaponics, Flavien Kouatcha Simo, Cameroon A portable fish farm that uses fish waste as a fertiliser to produce organic vegetables, enabling small-scale farmers to increase production.
- MedBox, Emmanuel Ofori Devi, Ghana A healthcare monitoring system that records a patient's vital signs and transmits them to doctors who then provide remote medical advice.
- Multi-Purpose Earth Brick Machine, Fikru Gebre Dikumbab, Ethiopia A manually-operated portable machine to make interlocking compressed earth bricks using 90-95% soil and 5-10% cement.
- ProbiGal, Dr Deon Neveling, South Africa A host-specific multi-strain probiotic designed to promote gut health and prevent bacterial infections in chickens, reducing the need for antibiotics.
- Smart Green Stove, Margaret Yainkain Mansaray, Sierra Leone An efficient non-electric cooking device designed to reduce greenhouse gas emissions and health risks, slashing energy use by 70%.
- Smart Water Tech, Allen Chafa, Zimbabwe A real-time water quality monitoring and control system to address water-borne diseases.
- ThinkBikes CoolMax, Tolulope Olukokun, Nigeria An electric cargo bike with a battery powered fridge to help Nigeria's smallholder farmers get fresh food crops to market.
- Waste-to-Wealth Enhancer, Cletus Ekpoh, Nigeria A four-part recycling system to help informal waste collectors.

The 2024 Africa Prize for Engineering Innovation is now open for entries. The deadline for entries is 25 July 2023 (4pm BST). For more information, click <u>here</u>.