Voices of MECS

Fabio Parigi

Ph.D., Founder and CEO of Clean Cooking Technologies



Interview by Mani Thompson

Voices of MECS



IIAF





Image 1: At COP28, from left to right, Fabio Parigi, Aisha Mamah, Kenneth Nana Amoateng, Zipporah K. Amankwah. Copyright of Clean Cooking Technologies.









MECS: Please introduce yourself and your company.

FP: Thank you very much, it's my pleasure to be here today. My name is Fabio Parigi, and I am the founder and CEO of Clean Cooking Technologies. We are an innovative startup company from Milan, Italy. Our mission is to help fighting climate change and transforming lives of people with revolutionary clean cooking technologies. We are an impact startup that leverages on carbon credits and a greenwashing-proof technology to give access to clean cooking to the global south.

MECS: Could you explain what your background is and what you did before you set up your clean cooking company?

FP: I am an engineer by training. I have a Ph.D. in Electrical Engineering from the University of Nebraska-Lincoln, USA and M.Sc. in Mechanical Engineering from Politecnico di Milano, Italy. I have been passionate about clean energy solutions since my childhood. I worked as a researcher in renewable energy and energy storage field during my doctoral studies. After moving back to Europe, I managed energy transmission projects for the biggest European multinational energy company for the Latin America, North Africa and Middle East regions.



Image 2: Fabio Parigi, Founder and CEO of Clean Cooking Technologies, at COP28, UAE, 2023. Photo courtesy of COP28 Multimedia.

More than 10 years ago with a group of friends and researchers, I came to know the challenges of clean cooking. We started searching for possible affordable clean cooking solutions in the global south. So, we invented the Mewar Angithi Insert, as we call it, which was the most affordable

solution to improve the efficiency of the three stone fire stoves or mud stoves at the time. We installed several thousands of those stoves in India, Ghana and Kenya. We also opened a production line in a vocational school in an orphanage in rural Kenya. In the meantime, I collaborated as a clean cooking expert, with the EU's Technical Assistance Facility West & Central Africa and as Renewable Energy expert for UNHCR until 2021 where I decided to dedicate my life to clean cooking, and hence I have founded Clean Cooking Technologies with two cofounders.

MECS: Tell us more about your induction stoves, do you manufacture them directly?

FP: We design and develop both the stoves and the traceability software. We currently do manufacture, however, this step of the process can be outsourced to local appliance manufacturers. Our stoves are comprised of two main parts; one part is the induction and its electronics used to cook, and the other is the *intelligence* part which is a smart, efficient, and transparent technology that measures the position, time and energy used. We want our stoves to be of high quality so they can perform well for longer and generate high-quality and high-integrity carbon credits. We provide only CE stoves, in conformity with the European health, safety, and environmental protection standards.



Image 3: Clekoo Induction Stove with Clekoo pan. Photo by Salomé Sarango, Clean Cooking Technologies.









MECS: What impacts are you making through IoT enabled induction stoves?

FP: We are giving access to long-lasting, traceable, affordable and energy efficient induction stoves, labelled CleKoo, in the global south by co-sharing the carbon credit revenues and giving back the majority of the carbon value to the families and local manufacturers. So basically. what we are doing is that we provide the IoT technology, with a web platform for the data management system to the local manufacturers and provide them training so that they will be able to manufacture the stoves themselves and deploy to local markets. We are helping entrepreneurs to scale their market potentials by making the latest advanced IoT technology available to them through licence partnership, at affordable prices. We are aiming to set up at least one partnership per country where we can license them the IoT technology, which is the 'intelligence' part of the stoves. Our impact is fuelled by uncompromising integrity:

- We don't estimate usage or location data
 we precisely track it.
- We don't settle for 'improved' stoves we deploy the most energy-efficient models available globally.

 We don't just transmit data – we encrypt it on a distributed ledger, ensuring complete transparency and security.

MECS: You mentioned "global south", which countries are you active in?

FP: We have CleKoo stoves in Ghana, Kenya, Cameroon, Nigeria, Nepal and Indonesia. We are about to deliver more stoves in four more African countries.

MECS: Please explain how real time monitoring systems work and how it could help uptake of eCooking?

FP: Through the sensors and independent smart transmission systems which have been embedded in CleKoo induction stoves, we are able to measure, position, transmit and monitor the energy usage of our stoves in real time with the highest degree of accuracy and transparency, through blockchain data protection systems. Thanks to these technologies, we believe, we are able to guarantee the transparency required by the market to keep increasing the trust and the investments into high-quality clean cooking carbon credits.



Image 4: Research team from Douala General Hospital. From left to right: Mary Chiara Tendong, Ngu Winston Asanga, Manemik Tadonlekeu Raissa, Kwenkeu Tondji Melissa. Photograph courtesy of Clean Air (Africa).











Image 5: Clekoo Induction Stoves, and a Tefal pot. Image Courtesy of Clean Air (Africa)

MECS: As a private company, what challenges you've had and what could help you in your clean cooking journey?

FP: It has been an amazing journey so far, but we are facing challenges like any other young startup; we need to gain trust in the market and find the right capital to scale up at the speed needed. There are still people who use harmful biomass to cook their food, there are young girls who are missing out on education because they spend most of their day collecting firewood for cooking. Unfortunately, these young girls are often subject to gender-based violence. These young girls have the right to grow and pursue their dreams.

With clean cooking solutions we can make changes. We need to make the bridge between the south and the north where we join the efforts, because the south needs to move forward on their way of cooking, and the north needs to compensate for their emission.

So, to answer your question about what could help, what you're doing through this conversation and spreading our voice is very helpful. Clean cooking is the right way to go, induction electric cooking is the way forward, so we need stakeholders with the highest level of integrity to share this journey with. As a small startup company, we are seeking opportunities to partner with the bigger players in the eCooking field, because I think everybody needs everybody. Our strength is that as a small company, we are flexible with time and location. We can jump on the plane with a couple of stoves in our backpack to show what we can offer in terms of modern, affordable, and just clean cooking solutions for all.

MECS: Fabio, thank you very much for your time and best of luck with your upcoming electric cooking projects.





