



ELECTRIC TRUCKS IN RWANDA



“The data collected, analysed and developed into drive cycles for rural Rwanda by Cenex has been invaluable as we develop our electric OX truck, allowing us to evaluate EV system decisions based on real world driving data. This will support and de-risk the efficient delivery of clean, affordable mobility in emerging markets.”
OX



The Challenge

OX, a startup automotive company, are developing a zero-emission purpose-designed electric truck for emerging markets that can carry both payload and people.

Roads in rural Rwanda are rarely paved, often with steep gradients; they are dusty in the dry season and muddy in the rainy season. OX requested Cenex to log duty cycles in these complex conditions so they can design their vehicle accordingly.



The Development

Cenex deployed four Clear Capture devices to log the duty cycles (speed and altitude vs time) and driving styles of several 4x4 vehicles in urban and rural Rwanda. We then analysed the data captured during four months to develop several representative duty cycles for OX.



The Results

Cenex developed several representative duty cycles for a variety of driving conditions: tarmac and off-road, urban and rural, flat and hilly. OX is now using these to inform their vehicle design process.