Improving livelihoods and reducing emissions.
Ampersand Energy Platform

Ampersand E-Moto

Ampersand Battery

Data Ecosystem

Energy Network
Going Electric Is Easy: Juma

**Awareness**
- Juma hears about us through **word of mouth** or trusted finance advocates

**Purchase**
- Juma buys an Ampersand, or partner finance.
- Designed and built in East Africa.
- He doesn’t need to buy the battery. He can get a motorbike with more power that’s easier to ride, at a similar price

**AmperOps**
- Battery level and efficiency display
- He can plan a stop at an Ampersand swap station
- Ampersand can monitor battery performance

**Energy**
- Juma is saving money from day 1
- ‘Refuel’ in 2 min, **less than petrol**
- Juma pays according to how much power he uses
Ampersand Energy Solution

Africa’s motorbike electrification held back by four barriers... until now:

- O.T.S. batteries
- Upfront Cost
- Charging Time
- Range Anxiety

- Ampersand Battery
- Battery as a Service
- Battery Swap
- Charge Network
The Battery Swap

1. **Low cost, low friction entry** - Product + financing cost as energy cost
2. **Ensures battery health and reliability** - extending life and lowering costs for customers
3. **Centralizing demand on grid** for cheaper, safer charging
4. **Better experience, preferred by customers** - removes range anxiety, risk, and downtime
We Know What Matters

6 years and millions of clean kilometers with customers at the heart of our product design.

**Before Ampersand**

**Take Home Annual**

$1,595

**Ampersand drivers like Juma earn 35% more take-home pay through cost savings - swaps, maintenance.**

**Access to the previously inaccessible:**

- Replaced his home’s dirt floor with cement floor
- Pays school fees for his 3 children
- Set up small livestock farm to supplement family’s diet and income

**Using Ampersand**

$2,131

$500+ increase
Traction To Date

First-mover
1st electric motorcycle company in Africa, >3 years of paying customers

Growth in bikes & batteries deployed
950 e-motos
1400 smart batteries on our network

Swaps continue to rise
80K monthly swaps
4.5M km/month
-6 tons carbon / day

Active smart station network
21 stations in RW & KE

Customer acquisition
12,000+ waitlist
$0 on advertising

Significant cost savings
$14k savings put back in drivers' pockets each week
AmperOps Intelligence

1. Extends battery life through smart charging.
3. Support asset financing and asset security.
Open Energy Platform

1. Network intelligence and asset management systems.
2. Market leading battery, including operations and maintenance.
3. Drivetrain integration.
4. Stations open to be hosted or operated by partners.
Tanzania’s boda boda are ready for electrification

High density - 2 million 2W/3W on the road, mostly commercial, and accelerating

Purchasing 4.5M liters of fuel per day. Boda spend >40% of revenue on fuel

High fuel price per liter relative to cost of electric power

High vehicle turnover (3-5 years)

quickest, and easiest path to EV adoption
EV investors need clarity and confidence

1. **Clear** declaration and registrations for EVs
2. **Clear** path to EAC assembly duties remissions
3. **Confidence** that the GoT has a policy framework for EV
   1. Industry specific benefits
   2. Lithium battery import and assembly
4. **Confidence** in power availability through direct connections to priority or medium voltage lines
Thank you!

www.Ampersand.Solar