EnergyPave

Turning Roads into Renewable Power Sources

Piezoelectric Roads: Harnessing Energy from Motion

Step into the Future – Power Every Footstep"

The Minds Behind EnergyPave

Morgan Soi
Chief Executive Officer

Sam Kibet
Co-founder

Joshua Nyamwange
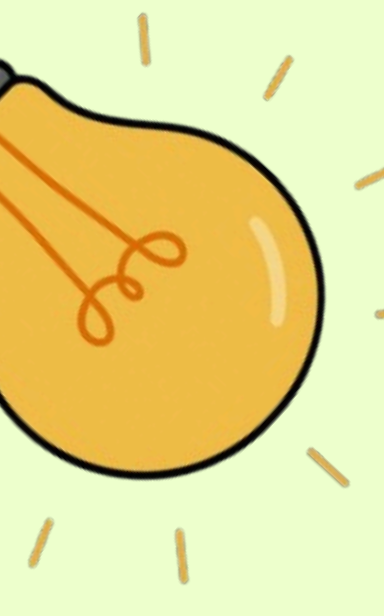Chief Financial Officer

Bildad Manegabe
Chief Advisor

Samuel Otieno
Tech and Product Manager

The Problems facing Kenya

The Energy Access & Sustainability Problem

Energy is needed for everyday life

And currently we face a mirage of problems in providing it

- Over 25% of Kenyans lack reliable electricity
- Urban centers waste the energy of daily traffic
- High infrastructure costs limit green energy expansion
- Reliance on non-renewables persists even in public infrastructure

The Need for Renewable Energy

By Providing a solution with relation to SDG 7

- **Growing Demand**: Increasing population leads to higher energy consumption.

- **Environmental Concerns**: Climate change drives the need to reduce fossil fuel reliance.

- **Sustainable Solutions**: Innovative technologies like piezoelectric roads can harness energy from existing infrastructure.

Introducing EnergyPave

Did you Know that……   One of the most used pieces of infrastructure are….

Roads!

What if we use that to our benefit!

Roads and walkways embedded with piezoelectric tech …which….
Convert pressure from foot/vehicle traffic into electricity …in turn
Powers streetlights, signals, small grids, and more
Modular and cost-effective for both rural and urban areas

The Technology behind EnergyPave

When vehicles drive over the road, the pressure and vibrations they create compress the embedded piezoelectric materials.

This mechanical stress generates electrical charges that can be harvested and stored and will later be used.

Piezoelectric Layers Beneath Pavement

Foot/vehicle

pressure

Piezoelectric layers

vibration

electricity →

stored/used
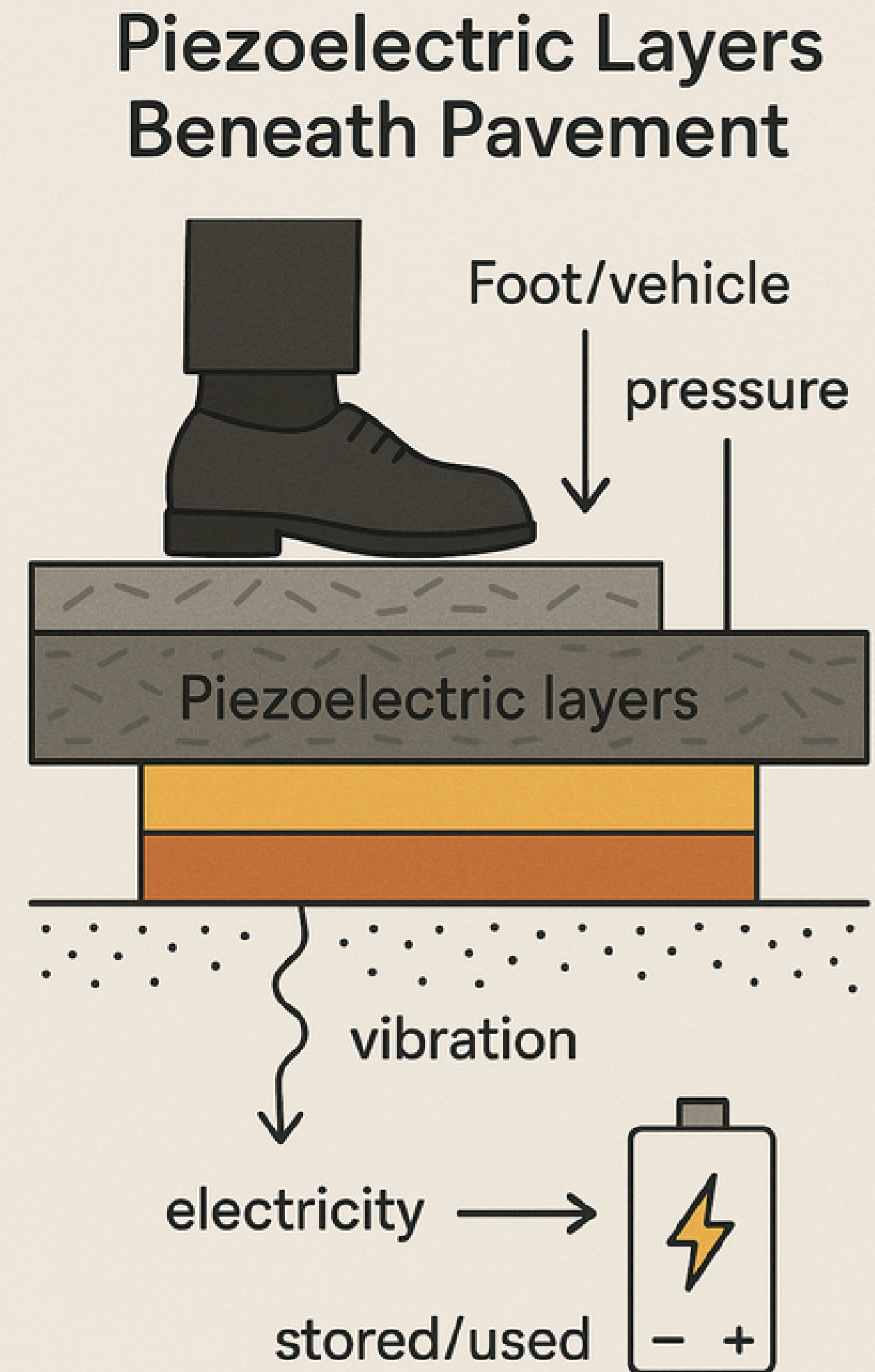
Our current competitors

M-KOPA
- Focus: Pay-as-you-go solar for homes
- Competes in: Off-grid energy solutions, though not piezoelectric

SolarNow / SunCulture
- Focus: Solar for agriculture and rural areas
- Indirect competition in renewable tech adoption

Kenya Power (KPLC)
- Incumbent utility provider; any alternative energy startup is a disruptor

This will ….
also break the monotony

A Billion-Kenyan Shilling Market

This is an untapped market, especially in Kenya

Even shown by the lack of competitors
focusing on piezoelectric tech

Here's the rundown:

Urban road network size
Target customers: counties, malls, schools, private developers
Expansion beyond Kenya into other Sub-Saharan African cities
Growing demand for ESG-compliant infrastructure

How EnergyPave Makes Money

B2G Contracts with local governments

Installation & maintenance for institutions

Energy-as-a-Service (monthly power supply fees)

Licensing to construction partners

Why EnergyPave Stands Out

Focus on long term benefits for African markets

Users will be able to track power consumption on their devices

First-mover advantage in local market

No need for grid overhaul – installs under existing roads

From Idea to Impact

Concept validated by local interest/early partnerships

Research & design phase → Pilot → Scale-up

Milestones: Q3 2025 – Pilot Install | Q1 2026 – Commercial Launch

Funding Request

Join us in powering Africa's future, step by step.

150,000,000 KSH

Breakdown

Category	Estimated Cost (KSh)	% of Total	Details
🔬 R&D and Prototyping	15,000,000	10%	Lab setup, prototyping piezo modules, testing
🏗️ Infrastructure & Civil Works	45,000,000	30%	Road construction, sensor installation, waterp
⚙️ Equipment & Materials	30,000,000	20%	Piezo elements (bulk order), converters, energ
🖥️ Tech & Software Dev	10,000,000	6.70%	IoT systems, monitoring dashboards, mobile a
👩‍🔬 Personnel & Labour	18,000,000	12%	Engineers, technicians, support staff for 1–2 ye
📄 Licenses & Regulatory	5,000,000	3.30%	NEMA, KEBS, energy sector approvals, county
📢 Marketing, PR & Branding	4,000,000	2.70%	Brand identity, awareness campaigns, commu
🚚 Logistics & Transport	6,000,000	4%	Moving equipment, installation crew, and mate
🧾 Admin & Operations	5,000,000	3.30%	Office rent, bills, insurance, internet, supplies.
📈 Monitoring & Evaluation	2,000,000	1.30%	Performance tracking, energy output metrics.
💼 Contingency (10%)	10,000,000	6.70%	To manage inflation, unforeseen expenses, del