Electrovolta Energy Solutions

Innovating for a sustainable future







Executive Summary

Electrovolta is an innovative smart electrical safety solution that proactively prevents electric shocks and optimizes energy use. Using advanced sensors and frequency regulation technology, it detects human contact with live wires and instantly cuts the current before harm occurs. Additionally, the device reduces energy consumption by 25% to 38% (based on initial lab tests; subject to field validation) by delivering optimized power at 3000 Hz instead of the standard 60 Hz.

Our target market includes residential homes, commercial buildings, factories, and renewable energy systems (solar and wind). The founding team, led by B. Mouwad, brings over a decade of expertise in electronics, embedded systems, and safety protocols.

We are seeking \$1.8 million to support mass production, R&D, marketing, and expansion. This investment will position Electrovolta as a leading player in the global electrical safety industry.

General Company Description

Business Domain

Electrovolta operates in the electrical safety and energy optimization sector. The company develops, manufactures, and markets smart electrical protection devices that prevent electric shocks and reduce energy waste.

Goals & Objectives

Goal: Establish Electrovolta as a leading brand in electrical safety technology across the MENA region.

Objectives: Launch Electrovolta Nano and Mega series in Q3 2026.

Sell 50,000 units in Year 1.

Partner with 10+ renewable energy and construction companies within 15 months.

Industry Description

The electrical safety industry is rapidly evolving due to increased awareness of fire hazards, energy costs, and safety standards. With rising adoption of renewable energy, there is a demand for efficient, safe electricity solutions. Electrovolta is positioned to lead this shift by offering a revolutionary product with smart, preventative technology.

Company Strengths

Proprietary technology that prevents shocks before they occur. Strong R&D foundation with 10+ years of development.

Easy installation, maintenance-free, and affordable.

Team with expertise in electronics, programming, and system design.





Products and Services

Product Description

- Competitive Advantage
- Pricing Structure
- Business Model Canvas

Product Description

Electrovolta is a smart electrical safety device that:

Detects human contact in real-time using electronic sensors.

Cuts current instantly (1/3000th of a second) to prevent shock.

Works with AC/DC current and is compatible with solar/wind energy.

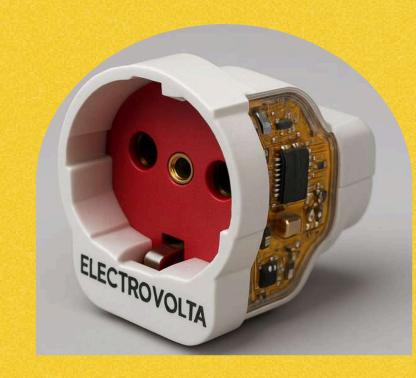
Comes in two versions: Nano (residential use) and Mega (industrial/lightning protection).



Competitive Advantage

Prevents shock proactively, unlike traditional circuit breakers. Works underwater and in extreme environments.

Affordable, easy to install, and requires no technician — delivering 25% to 38% energy savings based on initial testing.



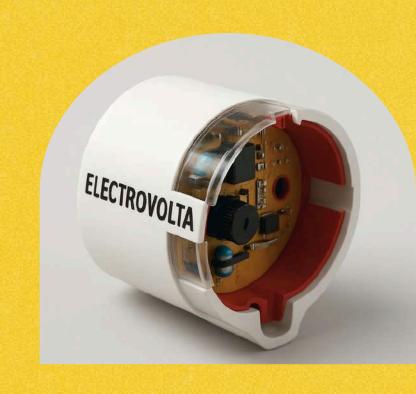
Pricing Structure

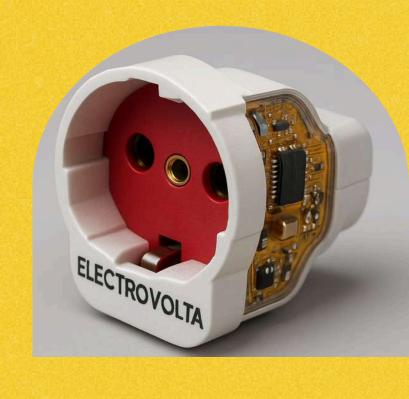
Electrovolta Nano: ~\$19 USD per unit. (Residential use) Electrovolta Mega: ~\$72 USD per unit. (Industrial and lightning protection)

Bulk pricing and distributor discounts available.



Key Partners: Solar energy companies, wind energy firms, electrical component suppliers. **Key Activities:** R&D, Manufacturing, Marketing, Distribution. **Value Proposition:** Shock prevention, energy savings, low-cost safety. **Customer Relationships:** Direct sales, after-sales support, warranty. **Customer Segments:** Homeowners, factories, schools, solar farms. **Key Resources:** Engineering team, patent-pending technology, supply chain. **Channels:** Website, electrical stores, B2B sales, construction companies. **Cost Structure:** Manufacturing, salaries, R&D, marketing. **Revenue Streams:** Direct unit sales, B2B contracts, installation services.



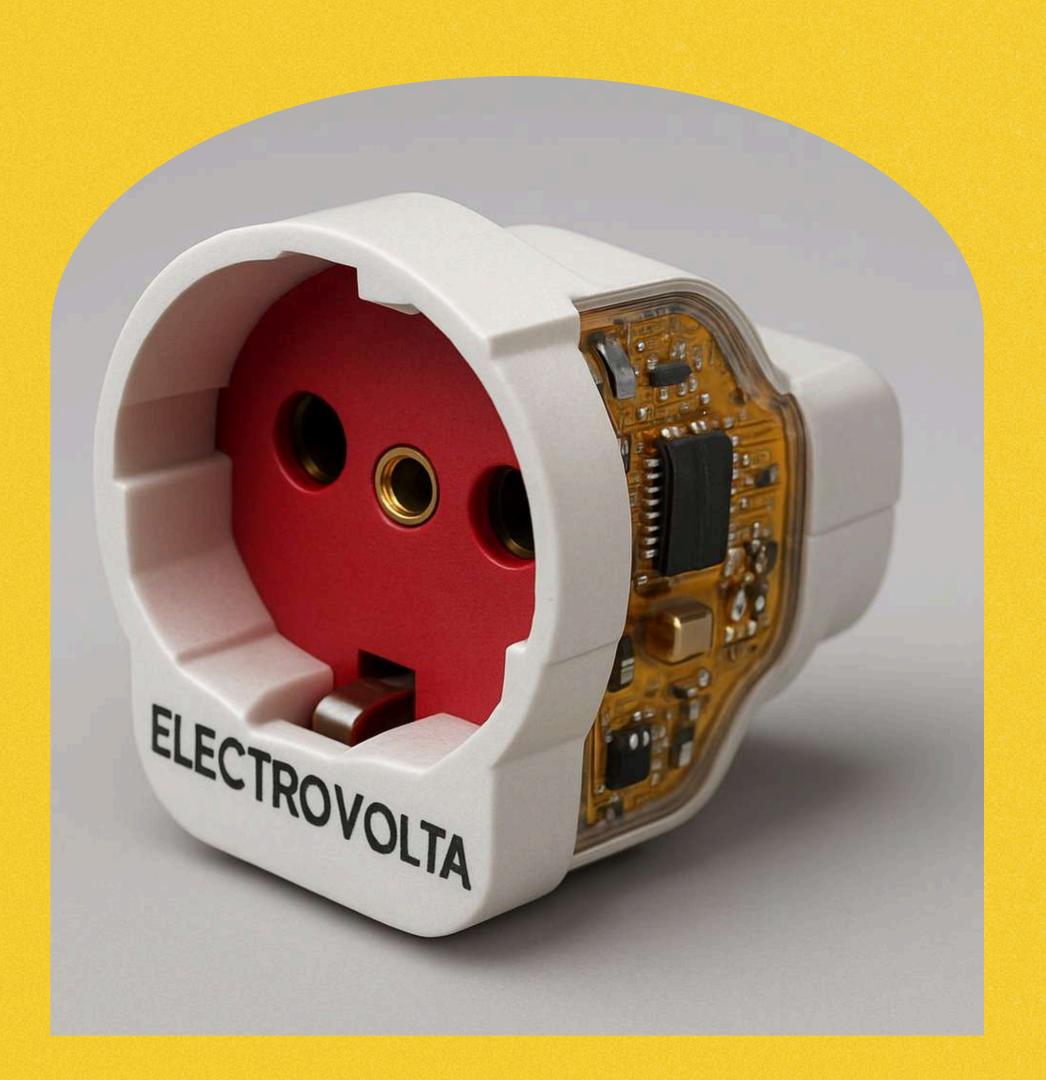


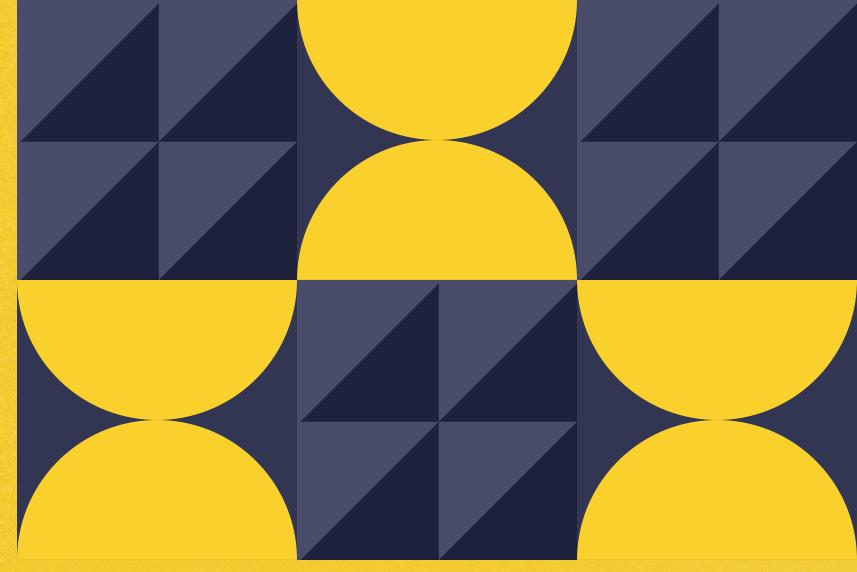




Project Milestones

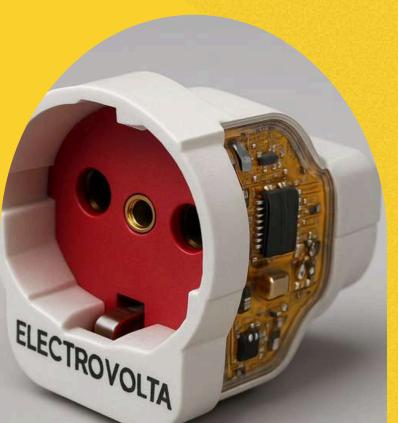
Milestone Description	Deadline of Accomplishment		
Final prototype completed	Mar. 2024		
Extended product development & optimization	Apr. 2024 – Dec. 2025		
Certification & compliance approvals	Jan. 2025 – Apr. 2026		
Pilot testing in selected sites	Q2 2026		
Market launch (Nano & Mega)	Q3 2026		
Mass production ramp-up	Q4 2026		
First large shipment to distributors	Q4 2026		
Nationwide distribution	Q1 2027		
Regional MENA expansion	Q3 2027		
Advanced product version with mobile integration	2028		





Marketing Plan





Market Research

According to the National Fire Organization and local authorities, electricity-related accidents cause annual losses exceeding \$1.4 billion USD. This highlights a significant unmet demand for proactive electrical safety solutions.

Market Size & Demand

The target market in Egypt exceeds 5 million households and 50,000+ commercial and industrial sites. In Year 1, we aim to capture 2% of this market, representing approximately 100,000 potential customers and a market opportunity of \$3.1M USD.

Growth Potential

High – the product is scalable across MENA markets, with initial regional expansion planned after successful domestic launch. Future versions featuring mobile integration and smart monitoring will further boost market share and customer retention.

Entry Barriers

High initial mass production costs, need for consumer education on adopting new technology, and regulatory approvals for electrical safety compliance.

Target Customers

Safety-focused homeowners (ages 30–60), factory owners, renewable energy companies, and real estate developers.



Competitors

al: Traditional circuit breakers
Local: Surge protection devices
Key players: Venus, El Sewedy
Electric

Competitive Analysis Table

Feature	Electrovolta	Competitor A	Competitor B	Importance to Customer
Shock Prevention	Strength	Weakness	Weakness	(Critical)
Works Underwater	Strength	Weakness	Weakness	2
Price	Affordable	High	High	1
Energy Saving	25-38%	None	None	2

MANAGEMENT TEAM

Team Members

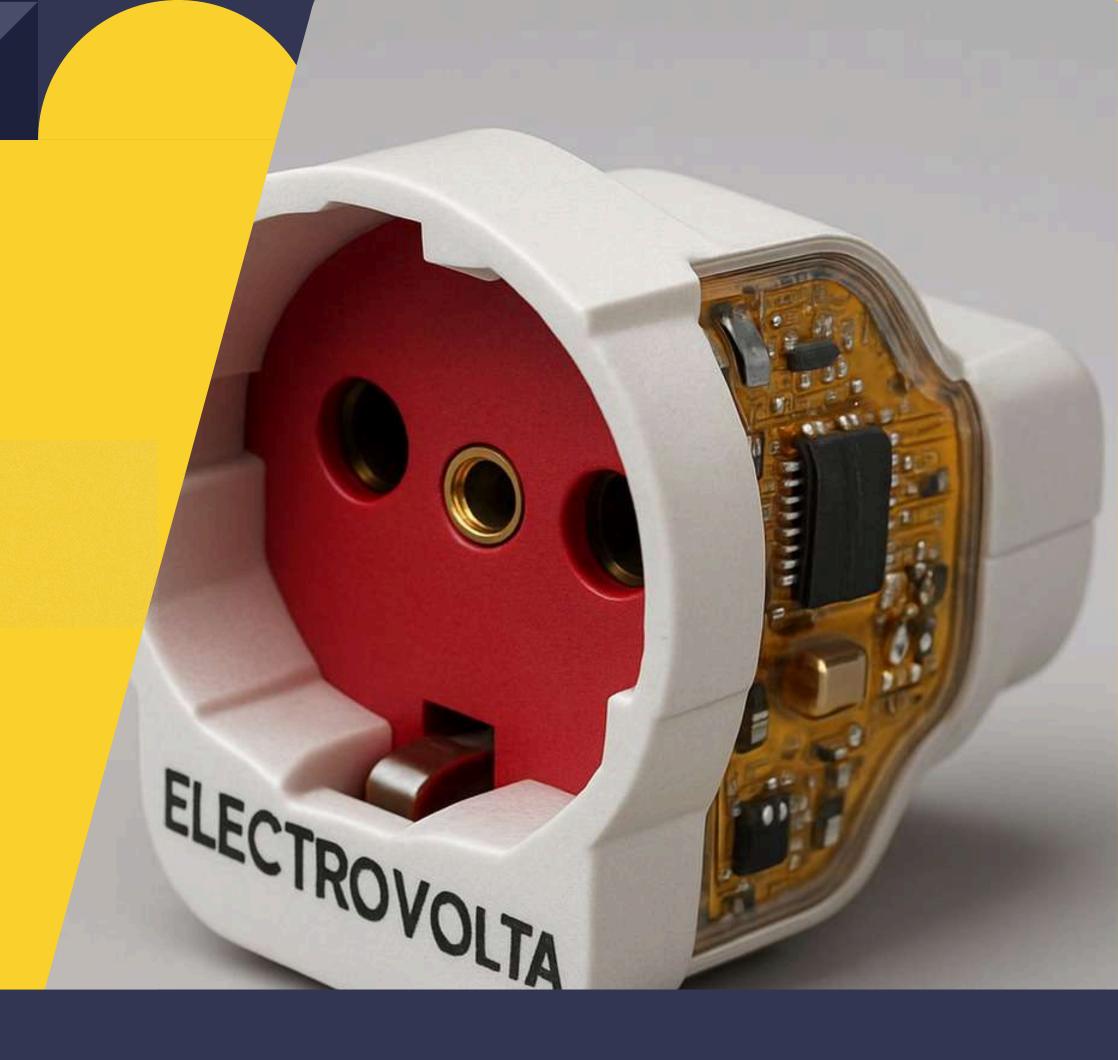
- Bilal Mouwad Founder & CTO: Electrovolta inventor, expert in electronics & embedded systems.
- Ahmed S. Operations Manager: 10+ years in manufacturing & production.
- Fatma N. Marketing Specialist: Promotes tech products & builds market presence.
- Negm Eldin Business Development & Sales: 5+ years in market growth & client relations.

Team Gaps & Needed Departments

- CFO / Financial Advisor Investor relations & financial strategy.
- Legal & Compliance Certifications & contracts.
- Technical Support Installations & after-sales service.
- Supply Chain Component sourcing & logistics.
- R&D Team New versions & mobile integration.



Financials





Funding Requirements

Required: \$1,800,000Use of Funds:

Marketing & Sales: \$500,000 – 27.8%

• Working capital & contingency: \$400,000 - 22.2%

Production equipment: \$350,000 – 19.4%

• R&D & Product Development: \$300,000 – 16.7%

• Certification & Compliance: \$250,000 - 13.9%

Risks

- Delays in production
- Regulatory certification hurdles
- Market resistance to new tech
- Mitigation: Pre-certification, MVP testing, educational campaigns

Financial Plan

- First-month output: 3,130 units (Nano & Mega)
- First-month sales: ~\$85,800 (@ 50 EGP/USD)
- Break-even point: Month 7
- Year 1 projected revenue: \$120,000 \$160,000

Key Assumptions

- Cost of goods remains stable (±5%)
- Monthly demand growth: 10–15% after market launch
- Strategic partnerships established by Q3 2026
- ROI expected within 24 months.

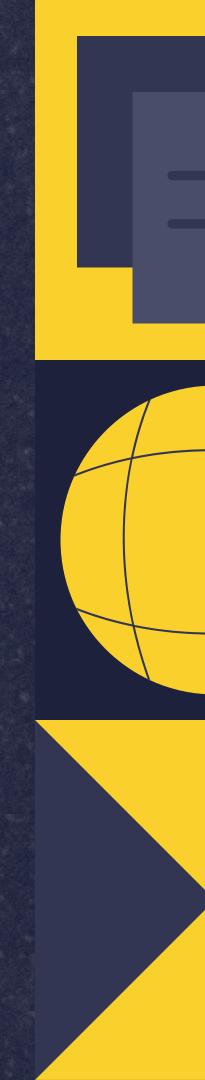
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Thank you for your attention!



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