

ReVolt

Li-ion Battery Recycling

The logo for ReVolt features a stylized lightning bolt icon integrated into the letter 'R', followed by the word 'REVOLT' in a bold, uppercase, sans-serif font.

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Team

Anisha Singh (Co-Founder & Chief Chemical Engineer)

Overseeing chemical processes, leading R&D for efficient methods, and ensuring regulatory compliance. She is a 4th-year B.E. Chemical Engineering + M.Sc. Chemistry student at BITS Pilani Goa with practical experience from projects and internships.

Equity: 50%

Why Anisha is Best Suited: Anisha's dual degree and hands-on experience make her ideal for leading ReVolt's technological advancements and sustainability efforts.

Rahul Verma (Co-Founder & Chief Operations Officer)

Managing daily operations, coordinating logistics and resources, and developing partnerships. He is a 4th-year B.E. Civil Engineering + M.Sc. Physics student at BITS Pilani with project management skills from leadership roles.

Equity: 50%

Why Rahul is Best Suited: Rahul's engineering background and management skills are crucial for efficient operations and strategic growth at ReVolt.

The Critical Challenge Our Innovation Solves

The Problem:

Improper disposal of lithium-ion batteries causes pollution and wastes valuable materials like lithium and cobalt.

Why Customers Need Our Solution:

Stricter regulations and corporate responsibility drive the need for sustainable practices, while recycling reduces raw material costs.

Current Solutions and Limitations:

Many dispose of or store old batteries improperly; existing recycling methods are inefficient, costly, and harmful.

How ReVolt is Better:

ReVolt offers cost efficient, eco-friendly recycling with higher material recovery and convenient services for manufacturers and consumers.



Product Overview

Unique Technology

ReVolt's advanced recycling methods significantly increase material recovery.

Environmental Impact

Our eco-friendly process minimizes environmental harm and meets regulations.

Customer Convenience

We offer a seamless, user-friendly recycling service for manufacturers and consumers.

Competitive Edge

ReVolt provides a more effective and sustainable solution than traditional methods.

Business Model

Revenue Streams

Service Fees: Manufacturers and consumers pay for recycling services based on the volume of batteries processed.

Material Sales: Selling recovered materials (lithium, cobalt) to battery manufacturers and other industries.

Pricing

Recycling Fees: ₹2,000 (approx) per ton of batteries processed.

Material Sales: Market rate for recovered materials, generating additional revenue.

Target Customers

Manufacturers: Battery producers and electronics companies.

Consumers: Individuals and businesses needing responsible battery disposal.

Size of the Market Opportunity

Over 2 million electric vehicles by 2025, each with an average battery weight of 250 kg.

Estimated 500,000 tons of lithium-ion batteries for recycling annually by 2025.

Revenue Potential:

• Service Fees:

Consumer electronics batteries: 200,000 tons x INR 50,000/ton = INR 1,000 crores.

Electric vehicle batteries: 300,000 tons x INR 70,000/ton = INR 2,100 crores.

• Recovered Materials:

Lithium compounds: 100,000 tons x INR 5,00,000/ton = INR 5,000 crores.

Cobalt compounds: 50,000 tons x INR 8,00,000/ton = INR 4,000 crores.

Other materials: 350,000 tons x INR 1,00,000/ton = INR 3,500 crores.

Total Market Potential in India: INR 15,600 crores annually. (approx)

Current Traction

Unique Technology

ReVolt plans to use a 40 kW fully automatic Lithium Ion Battery Recycling Plant with a capacity of 5 tons per hour.

Competitive Edge

Our innovative recycling methods are more efficient and eco-friendly than traditional techniques.

Market Validation

We have researched the required recycling machine, created conceptual designs and costings, conducted market research, and pitched to potential investors, receiving strong interest.

Lithium (LI) Ion Battery Waste Recycling Plant



Competitive Landscape

Current and Future Competitors

1. **Umicore:** Global leader in materials technology and battery recycling with advanced technology and extensive experience.
2. **Attero Recycling:** Indian e-waste recycling specialist with a strong local presence and government partnerships.
3. **Tata Chemicals:** New entrant in battery recycling, leveraging strong financial backing and brand reputation from Tata Group.

ReVolt's Competitive Advantage

1. **Cost-Effective Operations:** Lower labor and electricity costs in Uttar Pradesh with efficient processes using advanced technology.
2. **Strategic Location:** Central location with access to major industrial hubs and expansion plans for Maharashtra, Gujarat, and Telangana.
3. **Sustainability Focus:** High environmental standards and a closed-loop system for battery materials to ensure sustainability.

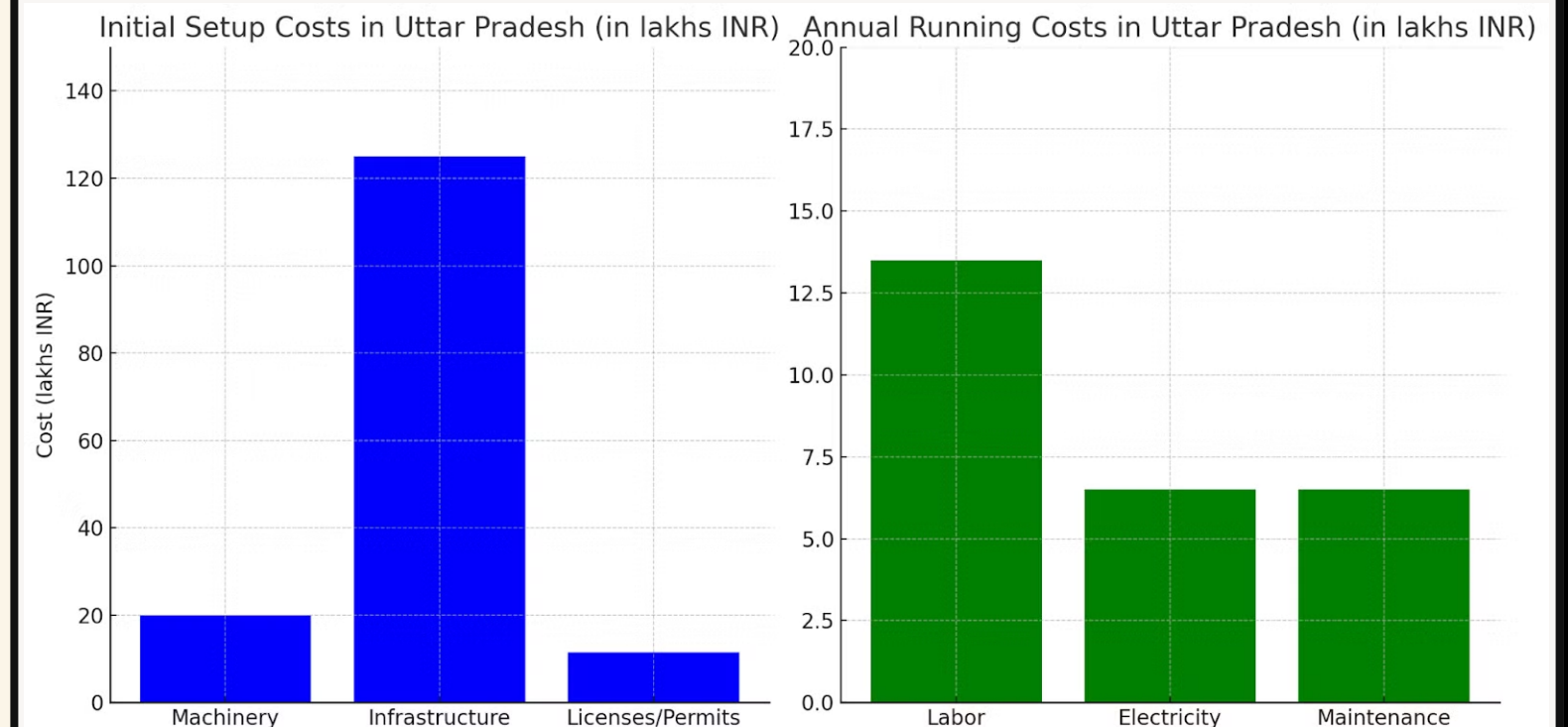
Financials Current and Projections

Initial Setup Costs in Uttar Pradesh(CAPEX)

- **Machinery Cost:** INR 20 lakhs per machine
- **Infrastructure:** INR 1-1.5 crore for land, building, utilities, and installation
- **Licenses and Permits:** INR 8-15 lakhs

Running Costs(OPEX)

- **Labour:** INR 12-15 lakhs per year due to lower wage standards compared to Maharashtra
- **Electricity:** INR 5-8 lakhs annually
- **Maintenance and Consumables:** INR 5-8 lakhs per year



Financials Current and Projections

Revenue Projections

Year 1:

Revenue from recycling services: INR 1 crore

Revenue from material sales: INR 2 crore

Year 2:

Revenue from recycling services: INR 2 crore

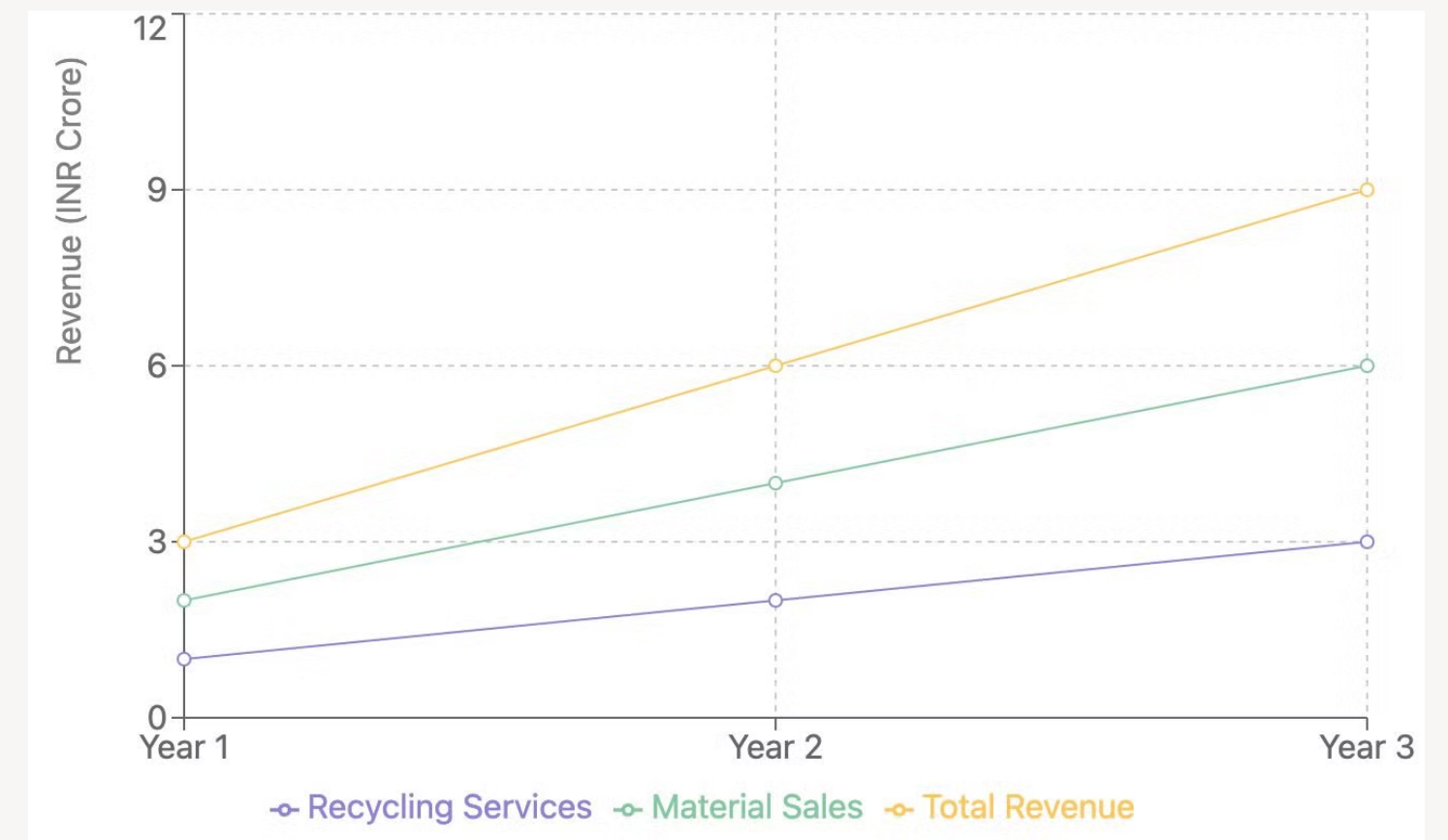
Revenue from material sales: INR 4 crore

Year 3:

Revenue from recycling services: INR 3 crore

Revenue from material sales: INR 6 crore

(Breakeven after 2-3 years)



Funding Needs, Use of Funds & Proposed Valuation

Amount Required: INR 2 crore for initial setup and operational costs.

| Category | Cost (INR) | Description |
|-----------------------------|----------------------|--|
| Machinery Cost | 20 lakhs per machine | Purchase of 40 kW Lithium Li Ion Battery Recycling Plant |
| Infrastructure | 1-1.5 crore | Land, building, utilities, and installation |
| Licenses and Permits | 8-15 lakhs | Required regulatory and operational permits |
| Labour | 12-15 lakhs per year | Employee wages and salaries |
| Electricity | 5-8 lakhs annually | Power consumption costs |
| Maintenance and Consumables | 5-8 lakhs per year | Upkeep and operational supplies |

Current Equity Structure, Fundraising History and Investors

| Founders/Investors | Equity Holding (%) |
|--------------------|--------------------|
| Anisha Singh | 47.5% |
| Rahul Verma | 47.5% |
| New Investors | 5.0% |

Fundraising History: No previous investments.

Exit Options

1. Potential Buyers:

- **Battery Manufacturers:** Companies like Exide Industries and Amara Raja Batteries.
- **EV Companies:** Manufacturers such as Tata Motors and Mahindra Electric.
- **Environmental Services:** Firms like Ramky Enviro Engineers.

2. Initial Public Offering (IPO):

- As ReVolt grows, an IPO could provide a lucrative exit strategy.

3. Comparable Exits

- **Umicore:** Acquired multiple recycling companies to expand operations.
- **Northvolt:** Secured large investments and strategic partnerships.
- **Redwood Materials:** Raised significant funds, founded by Tesla's former CTO.



Thank You

