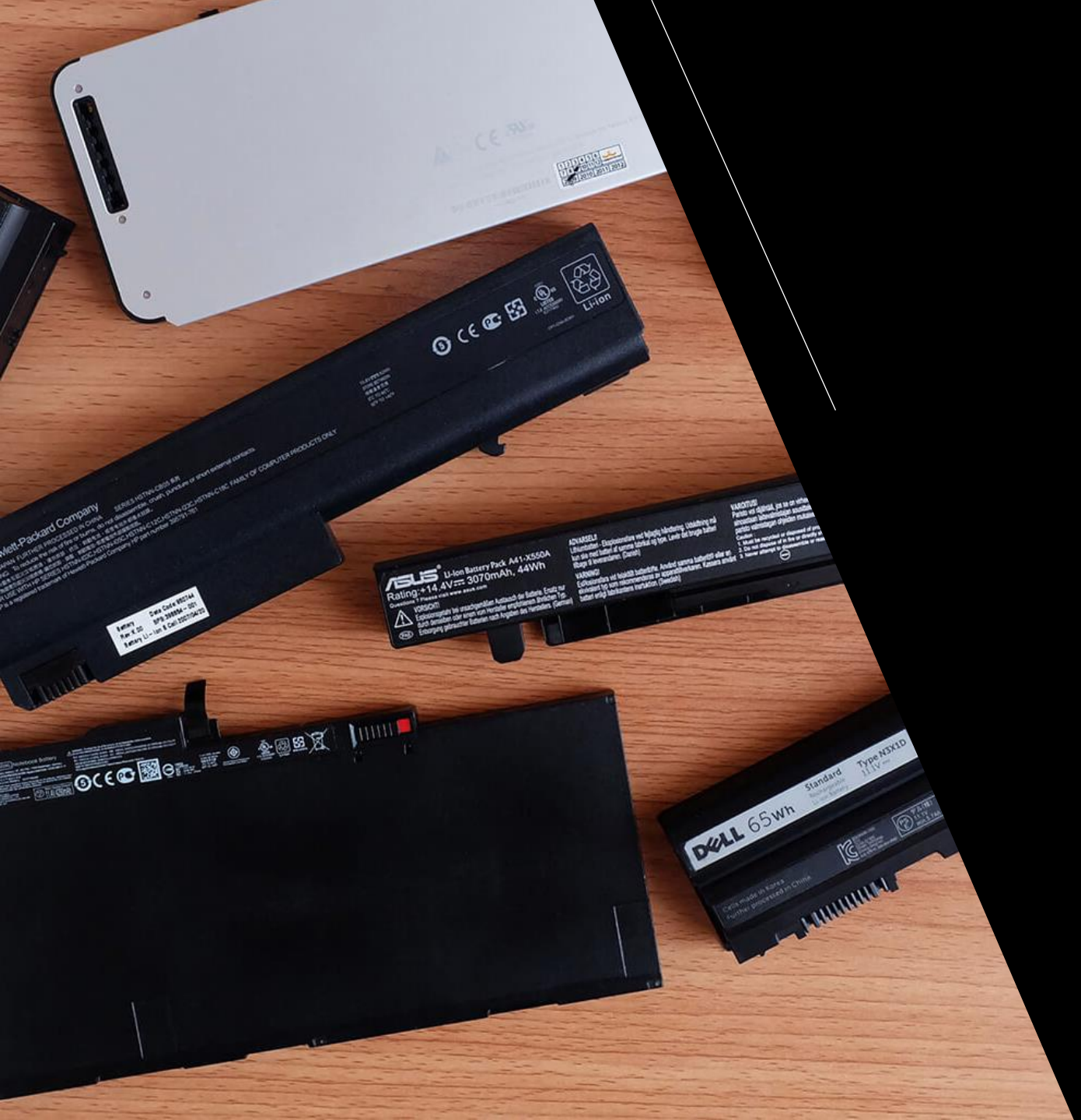

INNOVATIVE MANAGEMENT OF HAZARDOUS LITHIUM BATTERY WASTE: STEEL RECYCLING BIN SOLUTION

ENHANCING SAFETY, EFFICIENCY, AND ENVIRONMENTAL SUSTAINABILITY

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SEPTEMBER 1, 2024

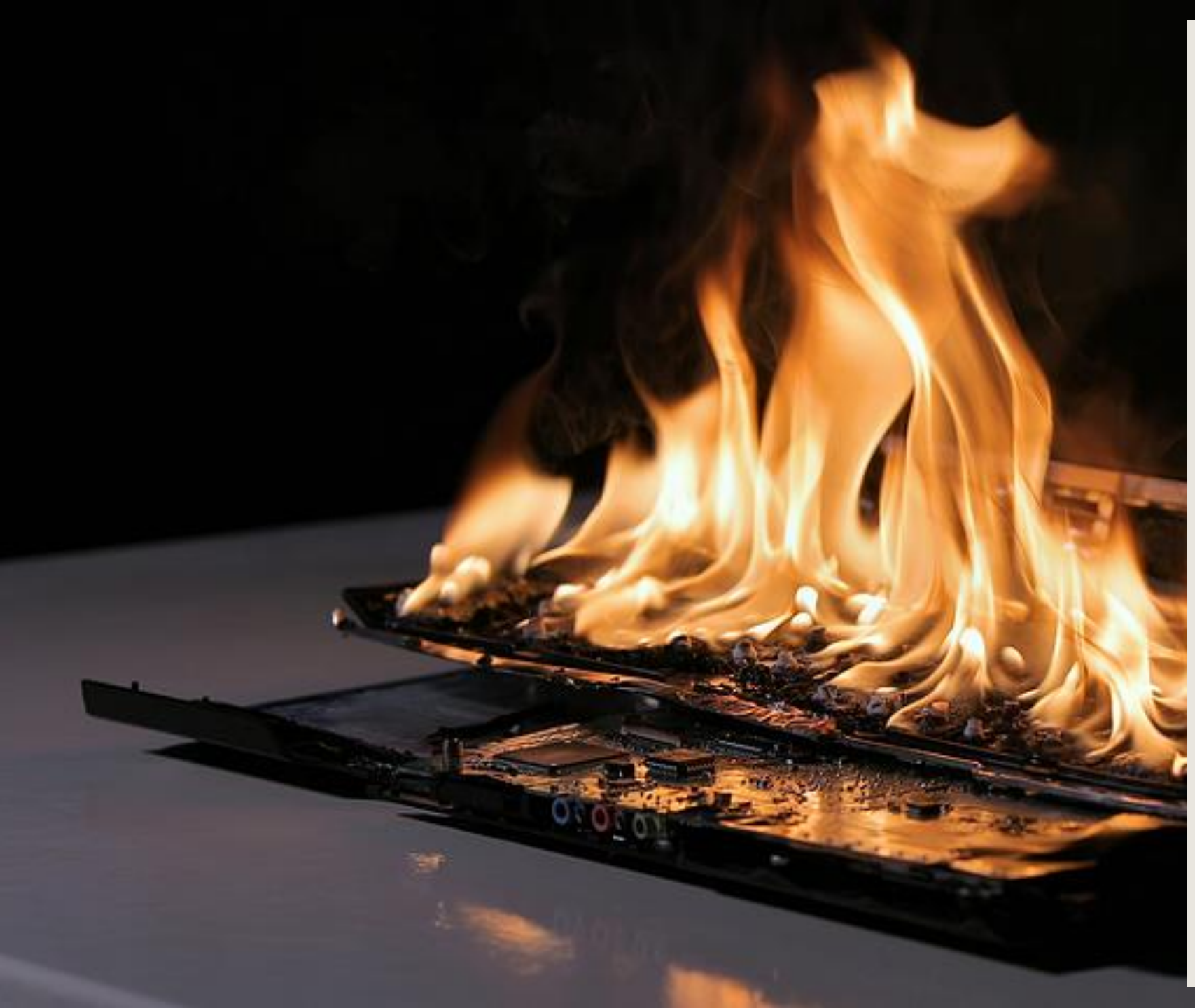
INTRODUCTION

THE ENVIRONMENTAL CHALLENGE

Growing concern over the improper disposal of lithium batteries

Incidents of fires and pollution linked to mishandling

Need for safer and more efficient e-waste management solutions



PROBLEM STATEMENT

“RISKS ASSOCIATED WITH LITHIUM BATTERIES”

LITHIUM BATTERIES POSE SIGNIFICANT RISKS DUE TO THERMAL RUNWAY

INADEQUATE DISPOSAL METHODS LEAD TO ENVIRONMENTAL HAZARDS

HIGH INCIDENCE OF FIRES RELATED TO BATTERY DISPOSAL

DATA POINT: “U.S CONSUMER PRODUCT SAFETY COMMISSION REPORTED OVER 25,000 ISSUES OF FIRES OR OVERHEATING FROM LITHIUM-ION BATTERIES IN FIVE YEARS.”

PROPOSED SOLUTION

“INNOVATIVE STEEL RECYCLING BIN”

STEEL CONSTRUCTION WITH A SECURE LID FOR ELECTRONIC WASTE DISPOSAL

DESIGNED TO CONTAIN POTENTIAL FIRES AND PREVENT HAZARDOUS MATERIAL SPREAD

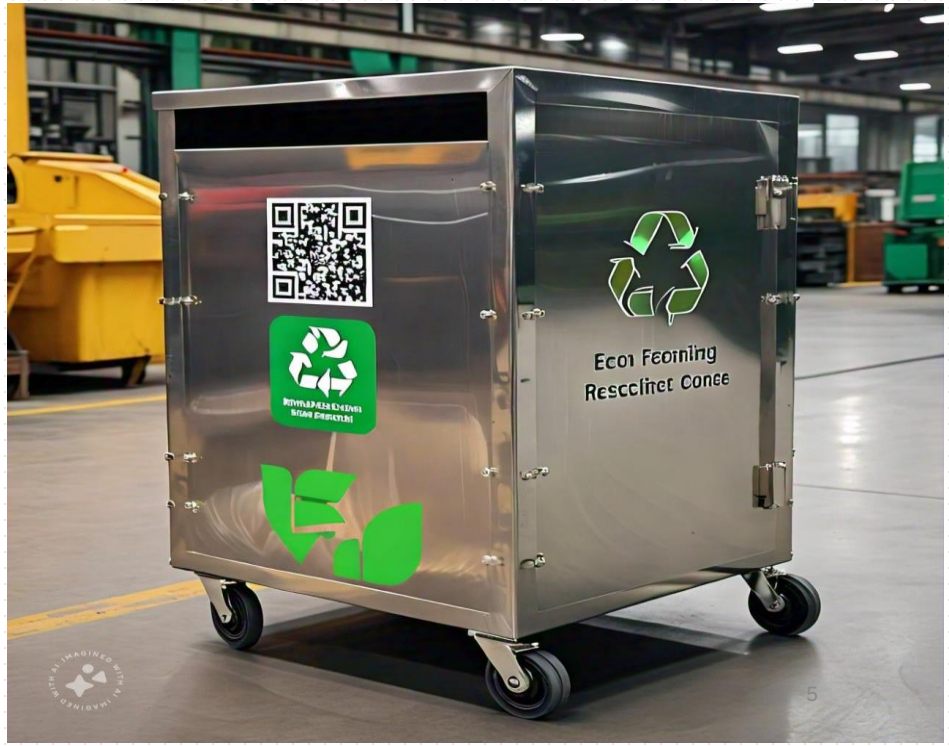
CLEAR LABELING FOR EFFICIENT SORTING AND RECYCLING

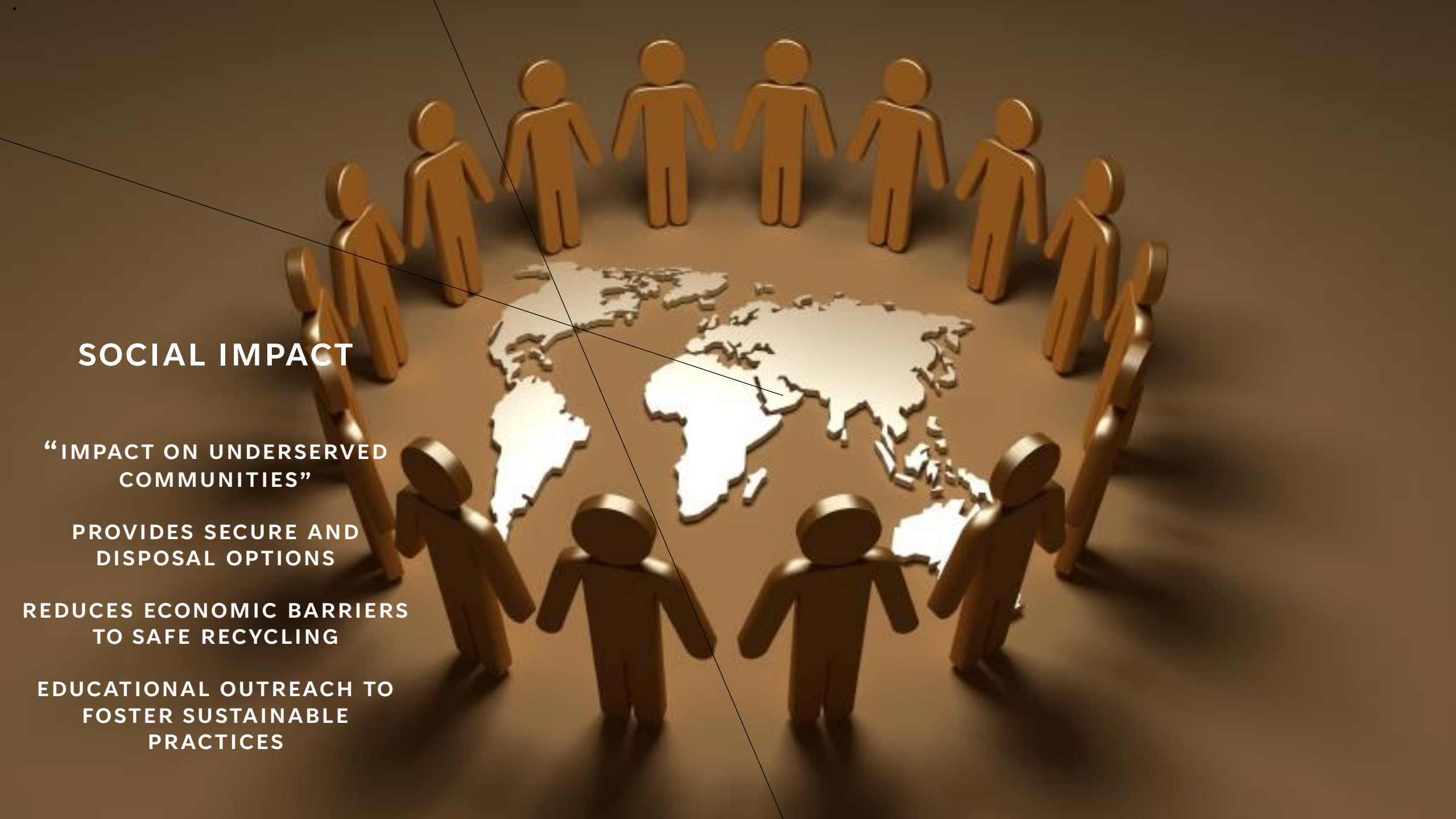
KEY FEATURES & BENEFITS

“FEATURES & BENEFITS”

- STEEL CONSTRUCTION: ENHANCED SAFETY AND FIRE CONTAINMENT
- SECURE LID: PREVENTS SPREAD OF HAZARDOUS MATERIALS
- SMART TECHNOLOGY INTEGRATION: RFID TAGS/QR CODES FOR TRACKING AND SORTING
- PARTNERSHIPS WITH RECYCLING FACILITIES: IMPROVE PROCESSING EFFICIENCY

SMART BIN WITH TECHNOLOGY AND PARTNERSHIPS





SOCIAL IMPACT

"IMPACT ON UNDERSERVED COMMUNITIES"

PROVIDES SECURE AND DISPOSAL OPTIONS

REDUCES ECONOMIC BARRIERS TO SAFE RECYCLING

EDUCATIONAL OUTREACH TO FOSTER SUSTAINABLE PRACTICES

STRATEGIC IMPLEMENTATION

"Implementation Strategy"

Phase 1: Prototype testing and design refinement.

Phase 2: Pilot programs with key partnerships.

Phase 3: Full-scale production and distribution.

Phase 4: Ongoing monitoring and validation.

Visual: Timeline or Flowchart Representing the phases and implementation

“METRICS FOR SUCCESS”

Measuring Success

1. **Recycling Rate Increase**: Target 25% increase in correct sorting.
2. **Material Recovery Rate**: Improve lithium and cobalt recovery by
3. **Operational Success Rate**: Achieve 95% success in bin functionalities.
4. **Partnerships**: Secure at least three key industry partnerships.

Visual: Graph or chart representing the target metrics.

“VALIDATION & FUTURE STEPS”

•Collaboration with national labs for materials analysis and safety testing.
•Continuous refinement based on real-world feedback.
•Expansion of the innovation to global markets.

“CONCLUSION”

- **Our steel recycling bin innovation addresses critical safety and environmental issues.**
- **Strategic implementation will enhance e-waste management.**
- **Ongoing collaboration and validation will ensure long-term success and sustainability.**
- **Call to Action: "Join us in revolutionizing e-waste recycling for a safer and greener future."**

THANK YOU

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