

# Battery Recycling and Circular Economy Training Course

Professional Development Training Course Outline

|          |                  |               |                         |
|----------|------------------|---------------|-------------------------|
| Category | Renewable Energy | Duration      | 5 Days                  |
| Base Fee | \$1,500 USD      | Delivery Mode | Online / On-site Hybrid |

## Course Introduction

Battery Recycling and Circular Economy Training Course is designed to equip professionals with cutting-edge knowledge and practical skills to address the rapidly growing global challenge of battery waste management. With the surge in electric vehicles (EVs), renewable energy storage systems, and lithium-ion battery usage, the need for sustainable recycling solutions has never been more critical. This course explores innovative approaches such as urban mining, resource recovery, green technology, and sustainable supply chains, enabling participants to understand how to transform waste into valuable resources while reducing environmental impact.

Through a comprehensive and industry-aligned curriculum, learners will gain insights into circular economy models, ESG (Environmental, Social, Governance) strategies, regulatory compliance, and advanced recycling technologies. The program integrates real-world case studies, hands-on learning, and strategic frameworks to empower participants to implement scalable and profitable recycling systems. By the end of the course, participants will be equipped to drive sustainable innovation, carbon footprint reduction, and zero-waste initiatives within their organizations and communities.

## Programme Curriculum

### Battery Recycling and Circular Economy Training Course

#### Introduction

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### **Course Duration**

5 days

### **Course Objectives**

1. Understand circular economy principles in battery lifecycle management
2. Analyze lithium-ion battery recycling technologies and innovations
3. Evaluate sustainable supply chain strategies for energy storage systems
4. Identify e-waste management solutions and regulatory frameworks
5. Apply ESG compliance and sustainability reporting practices
6. Develop green business models for recycling enterprises
7. Explore urban mining and resource recovery techniques
8. Assess carbon footprint reduction strategies in battery production
9. Implement zero-waste and closed-loop systems
10. Understand battery second-life applications and reuse models
11. Evaluate global market trends in EV battery recycling
12. Design scalable recycling infrastructure and logistics systems
13. Integrate digital technologies (AI, IoT, blockchain) in recycling processes

### **Target Audience**

1. Environmental and sustainability professionals
2. Renewable energy and EV industry stakeholders
3. Waste management and recycling entrepreneurs
4. Government regulators and policymakers
5. Engineers and technical specialists
6. ESG and compliance officers
7. Investors and green finance professionals
8. Academics and researchers in sustainability

### **Course Modules**

#### **Module 1: Introduction to Battery Recycling & Circular Economy**

- Fundamentals of circular economy
- Battery lifecycle overview
- Global sustainability challenges
- Policy landscape and trends
- Case Study: EU Circular Economy Action Plan

#### **Module 2: Types of Batteries and Materials**

- Lithium-ion battery composition
- Lead-acid and emerging battery types
- Critical raw materials (cobalt, lithium, nickel)
- Environmental risks
- Case Study: Tesla battery material sourcing

### **Module 3: Battery Waste Management Systems**

- Collection and segregation methods
- Safe storage and transportation
- Hazardous waste protocols
- Reverse logistics
- Case Study: India's e-waste rules implementation

### **Module 4: Recycling Technologies**

- Mechanical recycling
- Pyrometallurgical processes
- Hydrometallurgical methods
- Direct recycling innovations
- Case Study: Redwood Materials recycling model

### **Module 5: Urban Mining & Resource Recovery**

- Concept of urban mining
- Material recovery efficiency
- Economic value extraction
- Recycling yield optimization
- Case Study: Umicore resource recovery

### **Module 6: Battery Second Life Applications**

- Reuse in energy storage systems
- Repurposing EV batteries
- Performance assessment
- Safety considerations
- Case Study: Nissan Leaf battery reuse

### **Module 7: Environmental Impact & Sustainability**

- Carbon footprint analysis
- Life cycle assessment (LCA)
- Pollution reduction strategies
- Climate impact mitigation
- Case Study: Lifecycle emissions in EV batteries

### **Module 8: ESG and Regulatory Compliance**

- ESG frameworks and reporting
- Global regulations (EU, US, Asia)
- Compliance strategies
- Risk management

- Case Study: Corporate ESG reporting practices

## Training Methodology

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

### Register as a group from 3 participants for a Discount

Send us an email: [info@fineskilltrainingcenter.org](mailto:info@fineskilltrainingcenter.org) or call +254769199797

### Certification

*Upon successful completion of this training, participants will be issued with a globally- recognized certificate.*

### Tailor-Made Course

*We also offer tailor-made courses based on your needs.*

### Key Notes

- a. The participant must be conversant with English.
- b. Upon completion of training the participant will be issued with an Authorized Training Certificate
- c. Course duration is flexible and the contents can be modified to fit any number of days.
- d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.
- e. One-year post-training support Consultation and Coaching provided after the course.
- f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

## Upcoming Scheduled Sessions

| Start Date  | End Date    | Location | Price   |
|-------------|-------------|----------|---------|
| 21 Sep 2026 | 25 Sep 2026 | Online   | \$1,000 |
| 21 Sep 2026 | 25 Sep 2026 | Physical | \$1,500 |
| 21 Sep 2026 | 25 Sep 2026 | Physical | \$0     |

| Start Date  | End Date    | Location | Price |
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Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: [info@fineskilltrainingcenter.com](mailto:info@fineskilltrainingcenter.com) | Website: [www.fineskilltrainingcenter.com](http://www.fineskilltrainingcenter.com)