ADS ECO – High-Value Materials

Maximizing Resource Recovery and Economic Value

High-Value Materials represents one of the most important value creation components within the ADS ECO Eco-Industrial Complex. Through advanced sorting, recycling, and resource recovery technologies, valuable materials are extracted from waste streams and transformed into premium secondary raw materials for industrial markets.

Vision

- Transform waste into high-value industrial resources.
- Create sustainable revenue streams through material recovery.

Strategic Objectives

- Maximize material recovery rates
- Increase resource efficiency
- Reduce dependence on virgin raw materials
- Support circular manufacturing
- Generate long-term economic value

Key High-Value Material Streams

- Ferrous Metals (Steel, Iron)
- Non-Ferrous Metals (Aluminum, Copper, Brass)
- Engineering Plastics
- PET & HDPE Polymers
- Glass Cullet
- Electronic Waste Components
- Textiles and Industrial Fibers
- Wood and Biomass Resources

Recovery Process

- Waste Collection & Reception
- AI Identification & Classification
- Advanced Material Separation
- Purification & Processing
- Quality Assurance
- Industrial Market Distribution

Advanced Technologies

- Artificial Intelligence
- Machine Vision Systems
- Robotic Sorting
- Optical Sensors
- Digital Twin Technology
- IoT Monitoring Systems

Industrial Applications

- Manufacturing
- Construction Materials
- Packaging Industry
- Automotive Components
- Consumer Products
- Renewable Energy Equipment

Strategic Benefits

- Higher Revenue Generation
- Reduced Landfill Disposal
- Lower Carbon Footprint
- Increased Resource Security
- Industrial Competitiveness

- ESG Performance Improvement

Key Performance Indicators (KPIs)

- Material Recovery Rate: 90%+
- Material Purity: 95%+
- Multiple Revenue Streams
- High Market Value Products
- Significant CO2 Reduction
- Strong Circular Economy Impact

ADS ECO High-Value Materials Vision

Recover More. Waste Less. Create Sustainable Value.