

# Detroit Ag, LLC

## Business Overview

Our goal is to disrupt a multibillion-dollar industry that is only capturing 50% of the intrinsic value of its most valuable commodity. We work in the E-waste industry, and the commodity we deal with is circuit boards. Our process is called “urban mining.” To date, we believe we are the only company with a scalable, cost-effective process to recycle circuit boards in the US under EPA regulations, with near-zero environmental impact.

## The Problem

E-waste recyclers currently sell circuit boards to aggregators or directly to refiners, domestically or internationally, for half their intrinsic value due to the lack of an industrial, EPA-compliant alternative. The world generates 62 million tons of e-waste annually, with the US and EU generating 7 million tons and 12 million tons, respectively. Less than 20% of the world's total e-waste is currently being recycled. Although there have been many attempts to capture the full value of the boards, a “green,” fully industrial, profitable, and scalable process has not been developed; thus, the boards end up going to smelters outside. Current methods lose value through in-house processing, shipping, and middlemen at each touchpoint in the journey to the smelters.

## Our Solution

We have developed a fully scalable solution capable of processing tens of thousands of pounds per day. This process is a closed-loop environment, producing no solid waste, no water discharge, and no air pollution. Utilizing our process, we can reduce the initial gross weight of circuit boards by up to 90%. Every step of this process either reclaims or reuses all major materials from both the mining and the industrial processes. The remaining 10% contains valuable precious and rare earth metals.

## Company Traction

The current company has been building this process for over 10 years. Cost reductions and efficiencies have enabled scaling and industrialization of the process.

## Marketplace

There are approximately 640 million pounds of circuit boards recycled every year in the US and EU, representing billions of dollars worth of Gold, Silver, and Palladium. As a quick reference, an EPA report shows that recycling 1 million cell phones can recover more than 20,000 lbs of copper, 20 lbs of palladium, 550 lbs of silver, and 50 lbs of gold.

## Go-To-Market Plan

We are raising capital to accomplish two primary objectives. First, acquire the existing equipment, knowledge, and patents from the current owners. Second, implement the following strategy to capture 1% of the US circuit board market and reach revenues in excess of \$40,000,000 within 3 years.

Phase 1: yr1: Engineer and build plant 1 for efficiency and scale.

Phase 2: yr2: Plant 1 is operational, planning for production increase by 2x

Phase 3: yr3: Plant 1 operations have doubled to a total of 32,000 lbs/day. Refinery online, EBITDA approximately 40%

Phase 4: yr4: Debt repayment and plan established for acquiring the outstanding equity

Phase 5: yr5: Operations established with scale and work towards increasing EBITDA

## Product Strategy

Each machine processes 1000 pounds of circuit boards using a hydrometallurgical process to remove all surface metals and electrical components. This separates the valuable metals from the fiberglass, allowing for easy recovery of the precious metals. All of our end “products” are sold at commodity market prices. The price to acquire circuit boards is based primarily on the market price of gold. Given that the most valuable commodity we are selling is gold, our revenues are then based on the market price of gold. We aim to build Plant 1 capable of processing 16000 lbs/day and then scale to 32,000 lbs/day. This first plant will set us on a path to scale to a refiner in year 3, a second and third plant in years 4 and 5, respectively.

## Competition

The system and processes in place today pose the greatest competition for us going forward. However, these processes are inefficient, cost the e-waste industry billions of lost revenue, and harm the environment. Our system is designed to address these problems by capitalizing on the weaknesses in the current process. There are thousands of small “mom and pop” recyclers in the US, with approximately 20 major companies. This segmentation is causing the industry to focus on creating efficiencies within the current system rather than on long-term systemic solutions. Given that we can enable greater control, profits, and an eco-friendly process, we believe the marketplace will respond positively.