

**THE  
GRAB**

**[Blue Bee Technologies Sdn. Bhd./ERTH]**  
ERTH: On-Demand Electronic Waste Recycling with Cash  
Rewards (Digital Platform)  
**Executive Summary**

ERTH: E-waste Recycling Through Heroes is a digital platform that provides free on-demand pickup of electronic waste for recycling and pays a portion of the recycling revenue to individual e-waste owners and businesses to incentivize a high recycling rate. The company generates revenue by selling refurbished devices, spare parts and precious metals recovered from the electronic waste.

### **SOCIAL PROBLEM/BUSINESS OPPORTUNITY**

Did you know that around 80% of global e-waste ends up in landfills? Did you know that we throw over \$50 billion of precious metals in our landfill e-waste every year? So why don't we recycle our e-waste properly? It boils down to one word: inconvenience. Consumers rush towards the electronics shop when they wish to own a new device, but no one wants to carry their heavy electronics to the recycling center once they no longer work. EARTH solves this problem through a network of heroes that pickup electronic waste from homes and businesses for free and then shares a portion of the recycling revenue with them.

### **SOLUTION/PRODUCT**

Our solution provides an easy 1,2,3 step process to recycling electronic waste and receiving a portion of the recycling revenue as a cash reward. By having thousands of heroes in our coverage region, we can optimize pickup routes to minimize the amount of fuel consumed for each pickup. Once the e-waste owner books a pickup request, the hero arrives at their preferred time to make the pickup and proceeds to collect other nearby requests or other requests on the way to the nearest EARTH warehouse. 25% of the recycling revenue is then shared with the e-waste owner (which is 2x the reward from public recycling centers), 20% of the recycling revenue is shared with the pickup hero, and the remaining revenue is split equally between EARTH and the recovery partner. So far, we have managed to fulfill 100% of the pickup requests and 100% of the time paid e-waste owners higher cash reward than public recycling centers (summary: we offer higher value, speed and convenience!). Bonus: If customers choose to dropoff the e-waste to our warehouse directly, they get an additional hero bonus of 20% i.e. total of 45% of the e-waste recycling revenue (which is 4x the reward at public recycling centers). Furthermore, our Heroes also generate at least 50% more per km than driving for Grab.

### **POTENTIAL RETURN/REVENUE MODEL**

For example, Malaysia generates 1,000,000 tons of electronic waste per year, and recycles



no more than 20% of it. The remaining 800,000 tons are a potential \$1 billion untapped market. By providing an on-demand pickup service, the remaining 80% of individual e-waste owners who are unlikely to recycle through public recycling centers are likely to start recycling. This will not only generate economic value for all sides, but also protect the environment by diverting toxic waste away from landfills and reducing the consumption of fossil fuels to mine new metals from the ground for manufacturing new products, as the e-waste recovery process makes existing metals available again for new production at a fraction of the cost.

Our business model generates min. 2x ROI after factoring all the cash rewards, logistics and storage costs and our company is on-track to capture up to 25% of the overall electronic waste market in Malaysia within 5 years. Our revenue is generated by selling refurbished devices, spare parts and precious metals recovered from the collected e-waste. Our volume has grown 10x since our founding in 2018 and we have been cash flow positive since the 1<sup>st</sup> month.

Not to mention, that Malaysia only represents 2% of the global e-waste market which is estimated at \$50 billion per year. Our upcoming app will allow easy expansion to other countries to replicate the same success, capture more volume and accelerate our overall growth rate. Our next launch targets are ASEAN countries, then rest of Asia, followed by Africa, Latin America, Europe and US respectively within the next 5 years.

## **COMPETITION**

Our current competition is only able to process a maximum of 20% of the e-waste volume produced by Malaysia. Due to the complex logistics challenges and seemingly high costs of collecting small pickups from thousands of customers every month, which we have already optimized and solved profitably, none of our competitors (whether public or private) has been able to provide a similar service for the past 10 years.

Government recycling centers typically require e-waste owners to drop off their e-waste themselves, or private recycling centers usually run collection events in residential blocks every 1-3 months etc. However, by offering free on-demand pickup we are opening a completely untapped segment of the market, i.e. e-waste owners who have never recycled before or are unlikely to



recycle through current channels. This has led to rapid growth and great feedback from our customers who mostly have never recycled their electronics before and have never received such a high cash reward for their recycling efforts.

## **EXECUTION PLAN/GO TO MARKET STRATEGY**

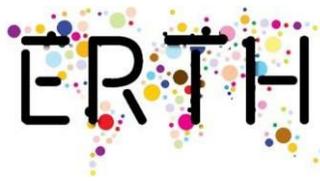
By eliminating middlemen, we generate higher returns by sharing the recycling revenue with a fewer number of parties. Our competitors typically share the revenue with 5-6 different companies, so they pay little or no cash reward to the e-waste owner (0-10%). By shortening the supply chain, we can share 20-35% of the recycling revenue with the e-waste owner which is higher than all our competitors. We have partnered with a logistics provider who has over 5000 pickup heroes around Malaysia and can support up to 1,000 requests per day. We also partnered with a refurbishing and repair company to sell refurbished devices and spare parts after all customer data is wiped. We also have a metal recovery partner where we send all the remaining e-waste which has no re-sell value. All our partners can support 10-100x of the current volume. We have doubled our collected volume since last May since and have reached a total volume of 100 tons of e-waste by the end of October 2019 (up from 10 tons in February 2019). We also use cashless e-wallet apps to pay our customers once the hero has delivered the items to our warehouse for sorting and reward calculation. We would love to work with Alipay to enhance this process further.

## **FINANCIALS**

Our current burn rate is 1,000RM / month for storage costs, + 1,000RM/ton of collected e-waste (including cash rewards and logistics). Our storage capacity is currently 5 tons of e-waste, and we sell the ton on average for 3,000RM. So, our revenue was 200,000RM for 100 tons of e-waste, and our costs including cash rewards, logistics and storage did not exceed 50000RM.

Our next goal is to raise up to 1M RM (250000 USD) to

- 1- Launching AI waste recognition system (powered by Alipay) that will recognize any type of waste and tells you where to throw, as it's also provided with a button for e-waste pickup.
- 2- launch EARTH in new cities and countries.
- 3- Increasing our team size in 2020.



## THE SOCIAL IMPACT

We managed to collect over 100 tons of electronic waste in 2019, most of which would have ended up in landfills. By 2020 end, we expect to have collected 1000 tons of e-waste and paid over 1000,000RM in cash rewards to e-waste owners who mostly would have never recycled without our on-demand, convenient, fast and easy solution, and our collection heroes would have either been unemployed or earning very low income per km driven on Grab.

The amount of e-waste we have recycled to date has reduced greenhouse gases (GHG) by the equivalent of over 20,000 trees. We help make electronic recycling mainstream, when in fact, all attention is focused on other types of waste but e-waste is actually the silent killer because it is responsible for 70% of the heavy metal toxic contamination in the environment and e-waste in landfills can last up to 1,000,000 years without decomposing wreaking havoc on the soil, water, plants and animals, before eventually reaching the human food chain.

### **ERTH has a social impact because:**

- 1- Heroes and consumers are getting paid for recycling and we also provide the on demand free pickup service (We are just like Didi shushing and UBER for e waste collection)
- 2- We are solving a global environmental problem which is land contamination and air/water pollution.
- 3- At EARTH we can generate profit from running an impact business.
- 4- EARTH contributes to SDGs fair production and consumption as we are closing the loop between electronics consumption and recycling. We have to mention that e-waste recycling contributes to Climate change solutions and smart sustainable cities. Technologies will always grow, and we came with a smart solution for end-of-life devices.

\* So It's a win win win situation for people,planet and profit \*

In 2019 We collected e-waste that have value of 50K USD/ we paid half of it as cash rewards for consumers and heroes.



## THE TEAM/RELEVANT EXPERIENCE

### **Nahed Eletribi:** (Co-founder/Director)

Award-winning social entrepreneur with a background in Political Science. She has been recognized by President Barack Obama at the Global Entrepreneurship Summit 2016 and have previously run several social enterprises focused on environmental restoration, women's health issues and income inequality. At EARTH, she is responsible for NGO partnerships, awareness programs and word-of-mouth marketing. She also ensures that our partners are handling our e-waste in the most environmentally friendly manner and regularly reporting our sustainability impact to governmental and other public organizations.

### **Some highlights to mention:**

- **FIRST WINNER** in UN International Youth Innovation Conference 2019- Matchmaking and Scaling-up of Youth-led Good Practices Competition in Shenzhen China.
- Top 9 Social Innovations in Southeast Asia, Top 3 Social Innovations in Malaysia by Alipay-NUS in Singapore 2019
- Public Speaker / Islamic Digital Economy Forum 2019- Malaysia.
- Attended Arab Internet Governance Forum- IGF in Beirut 2015
  
- Participated in internet governance initiative by African Union 2016.
- Launched (ERTHx Paid Internship Program) that aims to include more than 1000 Malaysian Citizen by 2020/2021.
- Participated in planting more than 500 trees in (Plant for Peace) initiative, Indonesia 2016.
- Best Participant Award, RIYS 2016, Indonesia.
- Best Social Worker, Canadian Embassy- Egypt 2015.
- Best Women-Led Initiative/ Social Enterprise, American Embassy- Egypt 2016

### **Mohamed El-Fatary:** (Founder/CEO)

award-winning serial entrepreneur with a background in Computer Science and International Business with experience of more than 10 years in high growth



businesses. Previously he has won the President of Finland's Internationalization Award and has built a company that reached 190 countries globally. Mohamed is strongly passionate about environmental causes as he has spent most of his life advocating better environmental practices and innovating solutions that could help underprivileged communities in Africa gain access to renewable electricity, water and wireless connectivity. At EARTH, Mohamed is focused on accelerating growth, signing strategic partners and increasing overall collection volume. He is also handling investor relations and social media marketing.