



NIU NIU

Circular resources for good.

## Recent Highlights:

- Incorporation in Delaware as a C-Corporation.
- Investment by **SOSV-Orbit** secured.
- Most **innovative CleanTech Startups** in 2024 - Berlin

**NIU NIU**  
Resources Inc.

**SOSV**



## Problem

# Challenge for solving the Climate Crisis: Sourcing *clean* and *fair* supply of Critical Minerals.

Peaking demand

**\$166 B USD**

projected demand of Critical  
Minerals by 2030 by the  
*CleanTech Industry*

Finite Resources

**+30%**

of natural Critical Minerals  
deposits  
are unreliable

Wasted Value

**\$59 B USD**

worth of Critical Minerals are  
lost every year

due to scattered and inefficient informal  
management of dispersed e-Waste,  
which accounts for **83% of the world's**  
e-Waste value.

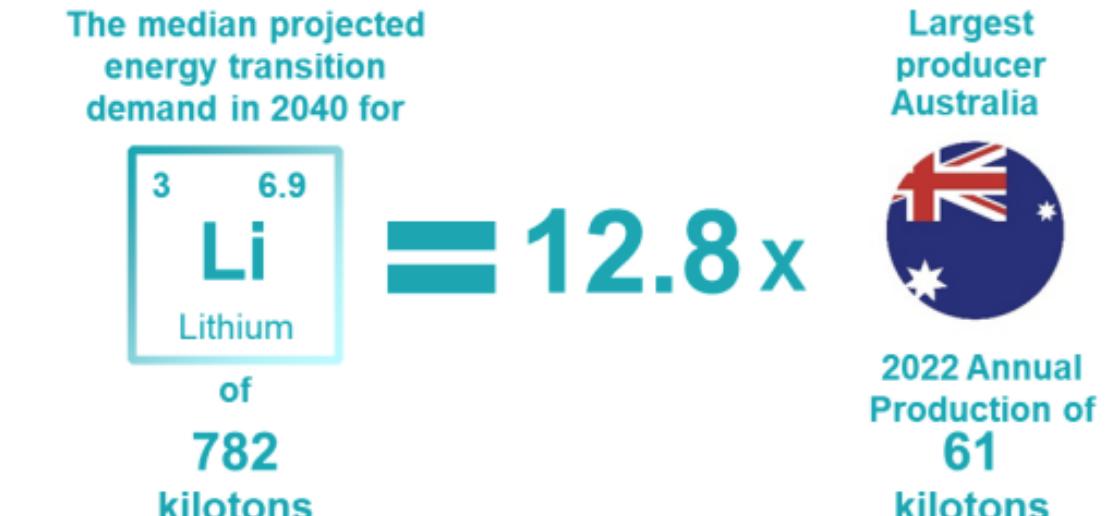
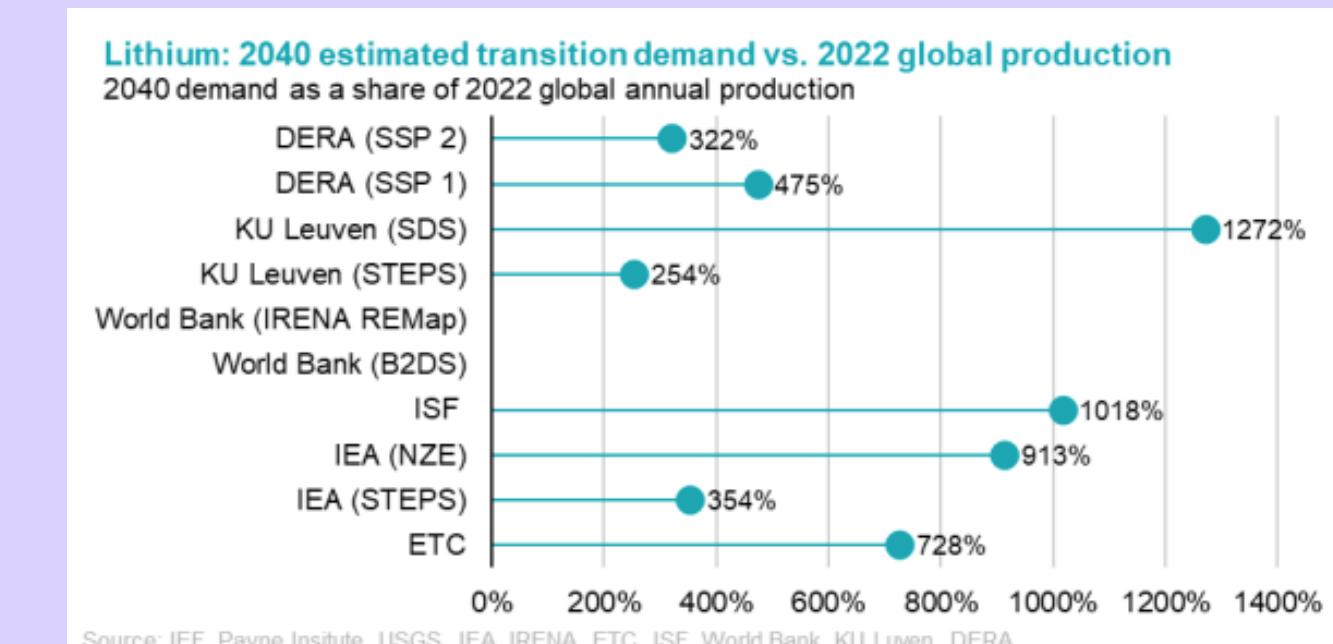
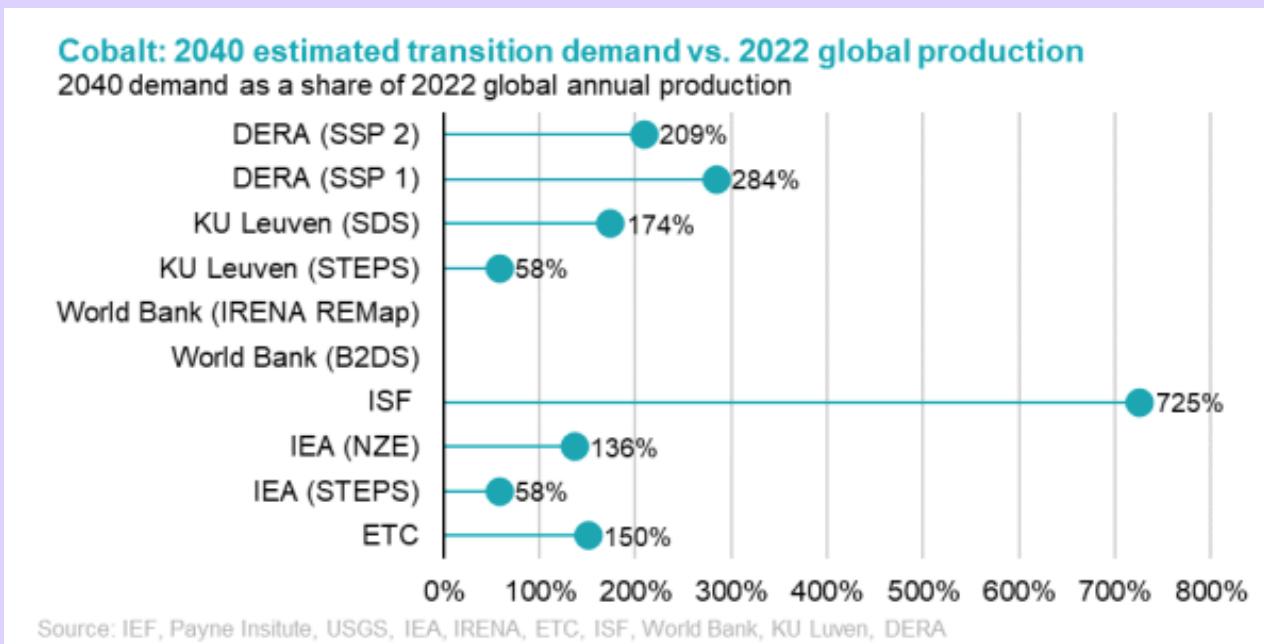
ETM: Energy Transition Minerals

The Role of Critical Minerals in Clean Energy Transitions, 2021, [bit.ly/ETMData](https://bit.ly/ETMData)  
ETM include lithium, cobalt, nickel, copper, graphite, rare earths, zinc, manganese, molybdenum, others.

The Global e-Waste Monitor 2020  
[bit.ly/eWasteGlobal](https://bit.ly/eWasteGlobal)

## Concrete demand examples

**Demand of Cobalt and Lithium will increase between 58% and 1271% by 2040; Today's existent supply is considerably insufficient.**

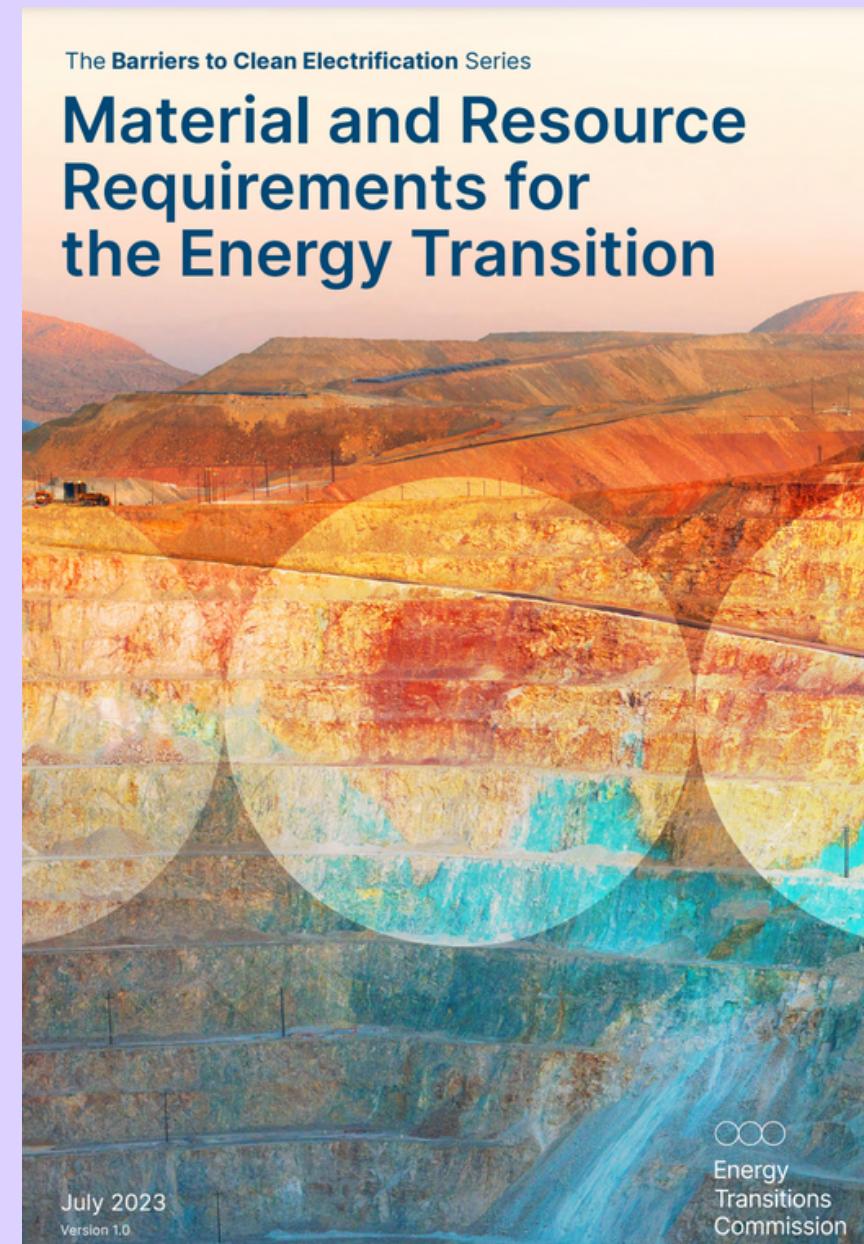


## Context &amp; Solution Validation

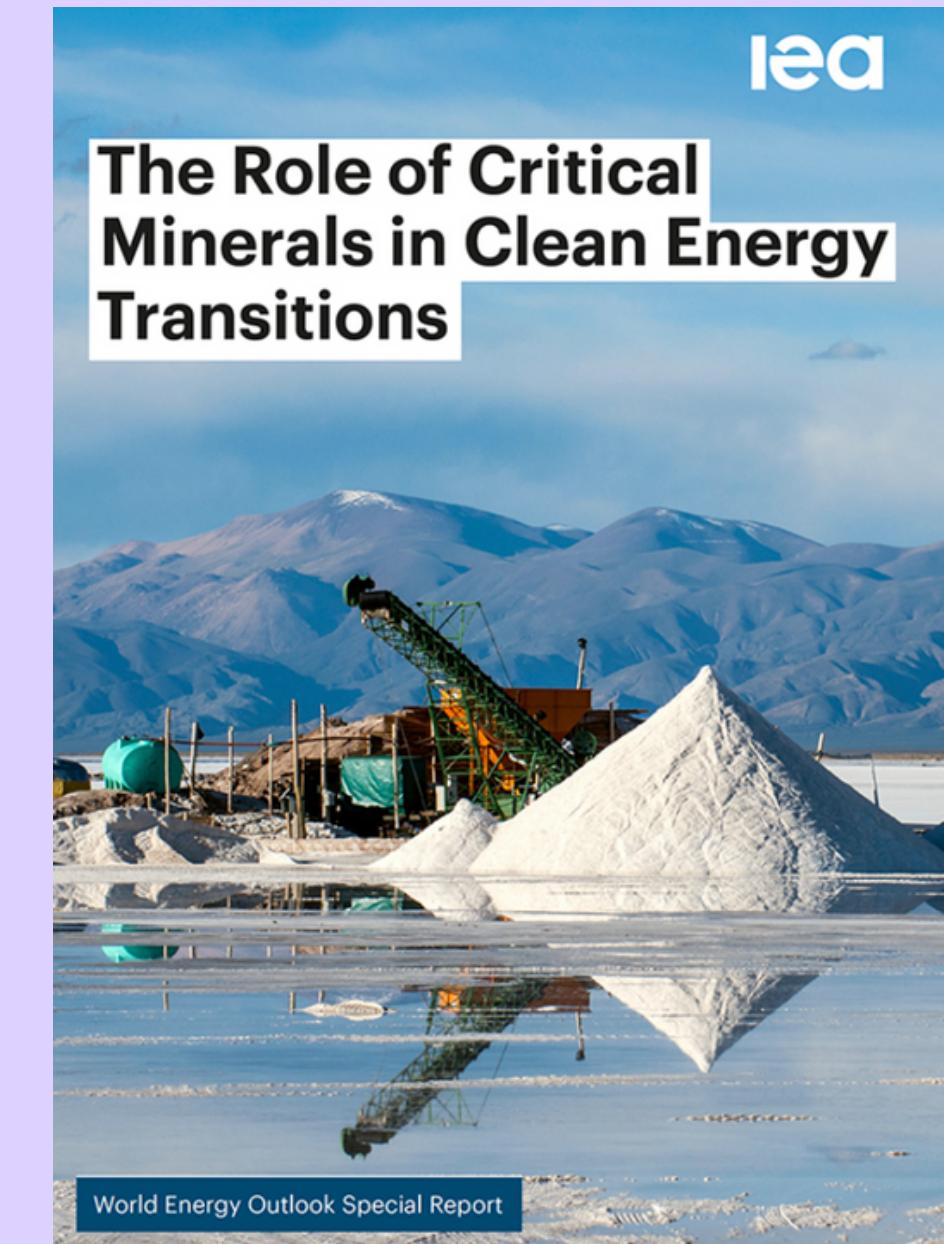
Recent studies highlight the **importance** and **urgency** of **circular supply** and **near-shoring** of critical minerals, like Cobalt and Lithium.



[bit.ly/mck-netzero](https://bit.ly/mck-netzero)



[bit.ly/ET-barriers](https://bit.ly/ET-barriers)



[bit.ly/ETMData](https://bit.ly/ETMData)

# NIU NIU becoming a Platform/Marketplace for the transboundary trading of Critical Minerals

e-Waste generator



Electronics OEMs



Components manufacturers



Civil Society

E-Waste Providers

Demand of Critical Minerals

**umicore**

NDA & D.D.



Joint Venture

**REDWOOD MATERIALS**

Initial Conversation



**Aurubis**

NDA & D.D.

**ABTC**  
AMERICAN BATTERY TECHNOLOGY COMPANY

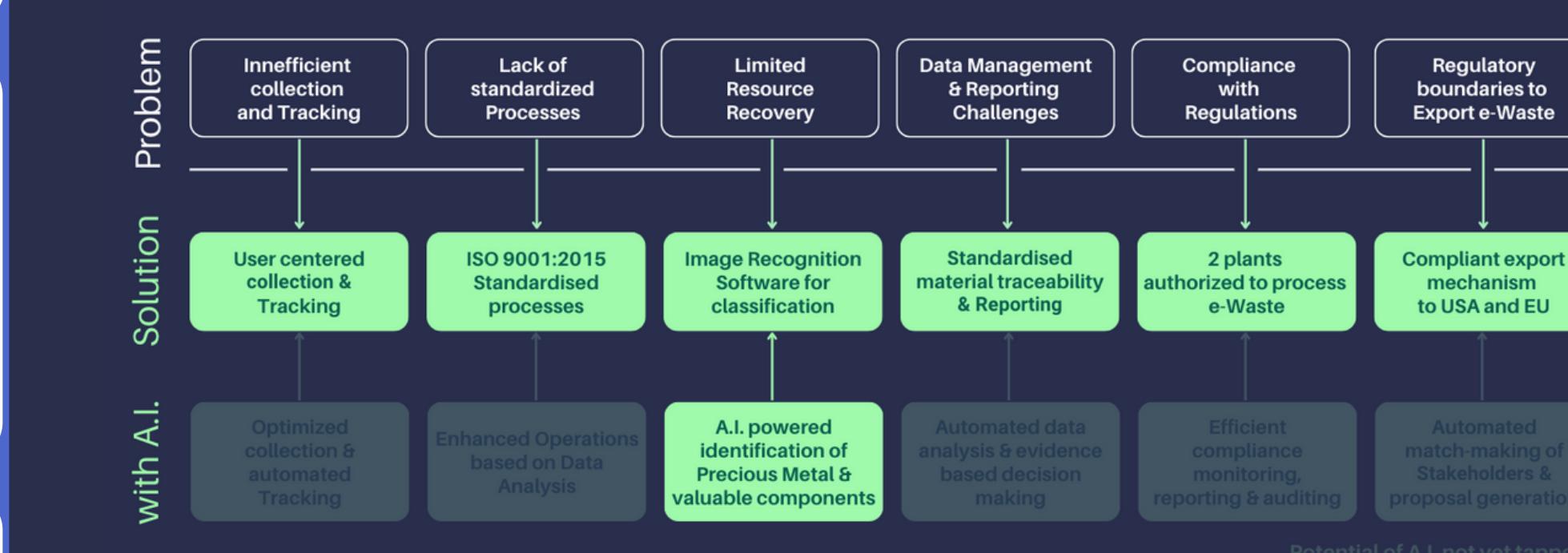
Purchase Agreement in place:  
500 t of Li-Ion Batteries

**hensel recycling**

NDA & D.D.

Precious Metal Recyclers

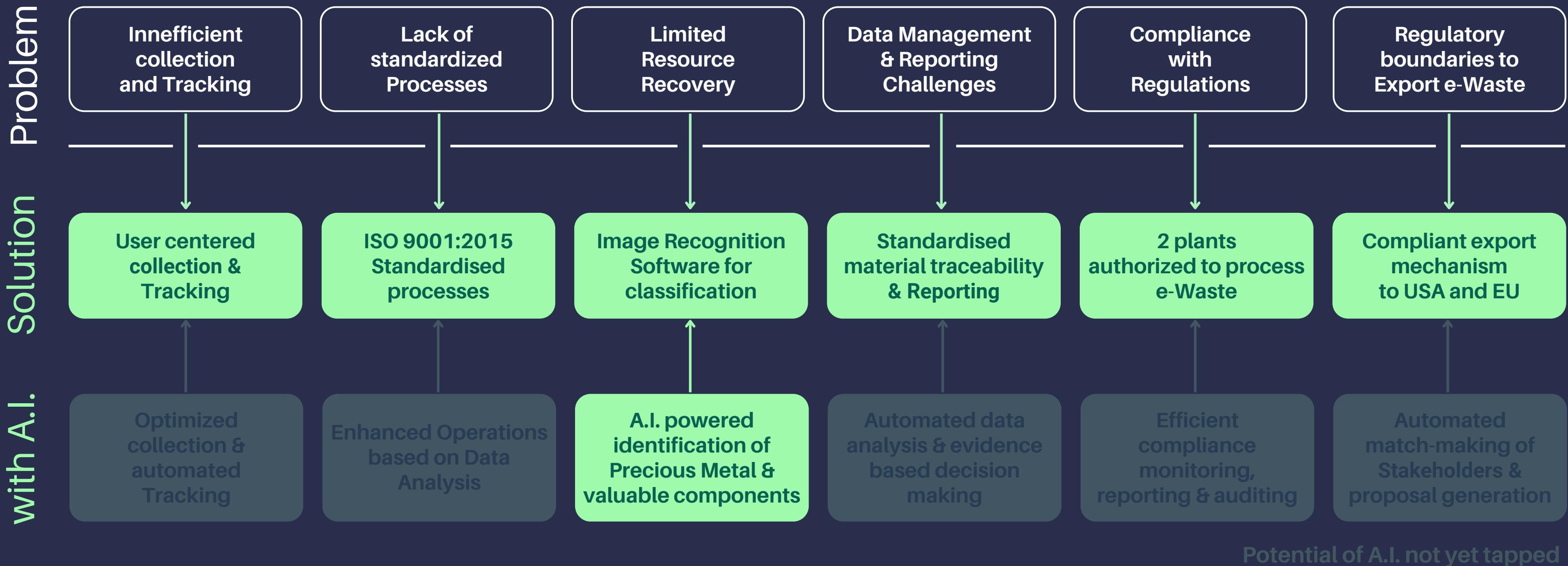
EV Producers



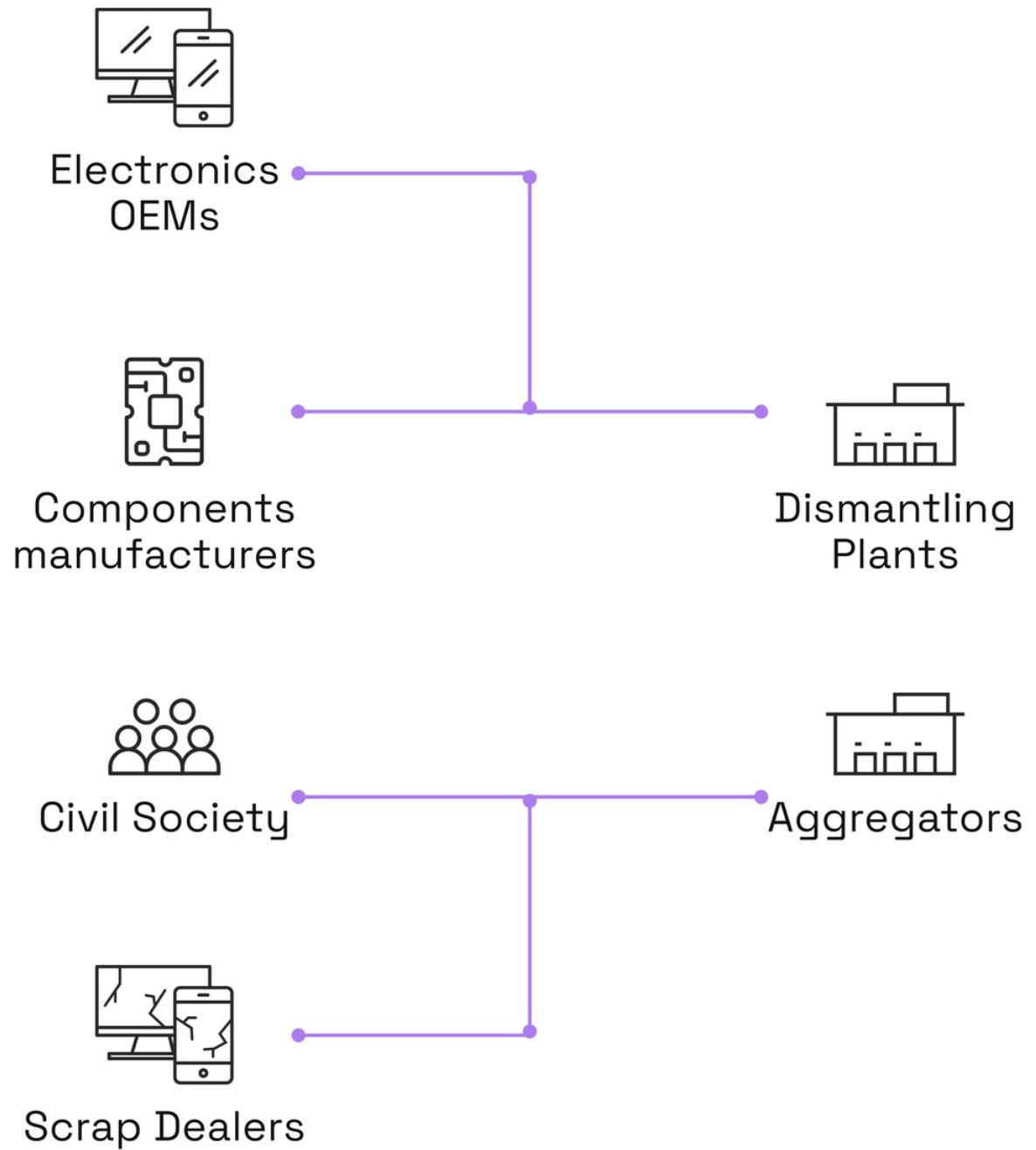
Solution

# NIU NIU's Operating System: e-OS

## Empowering an Efficient Critical Material Recovery from e-Waste

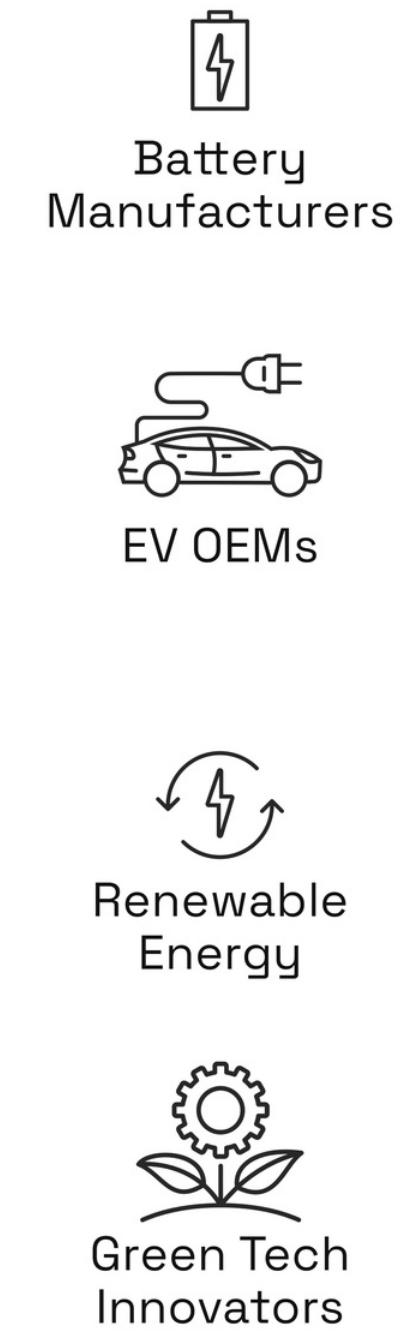


# The Operating System

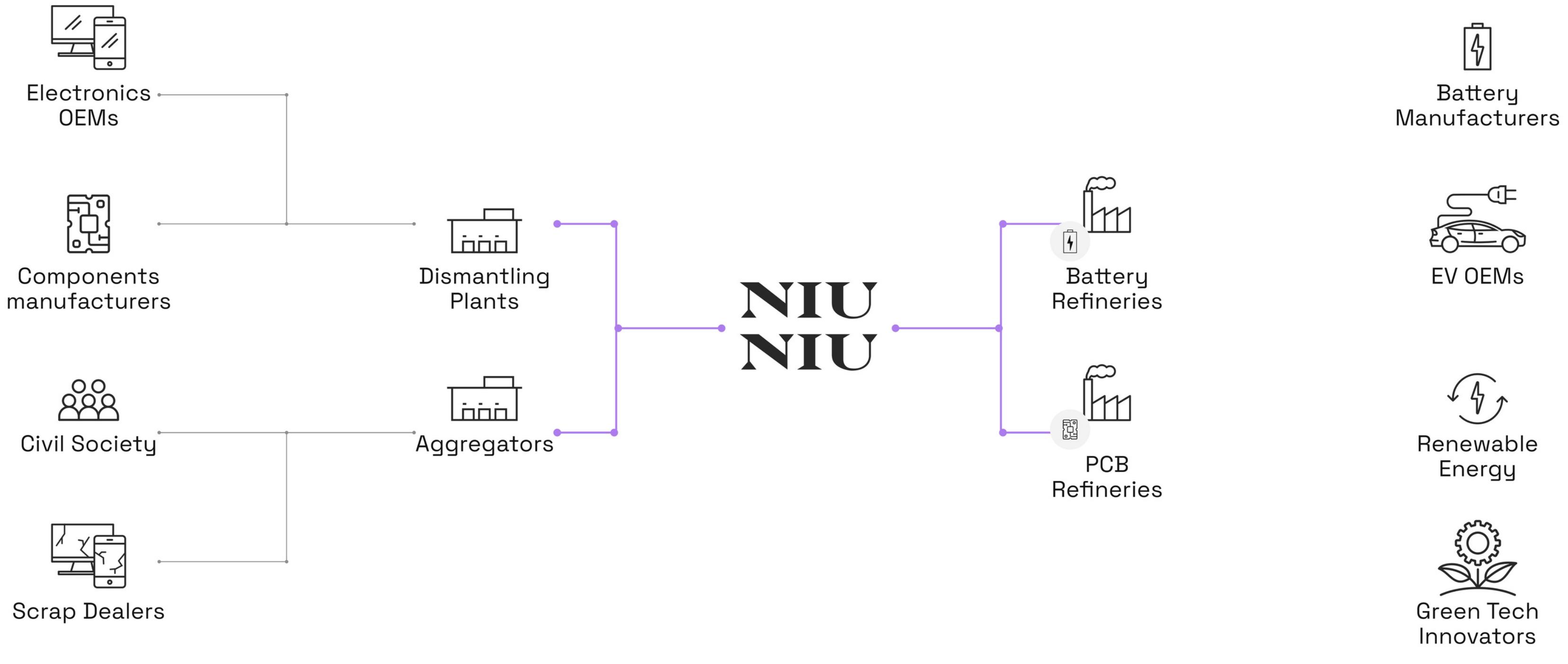


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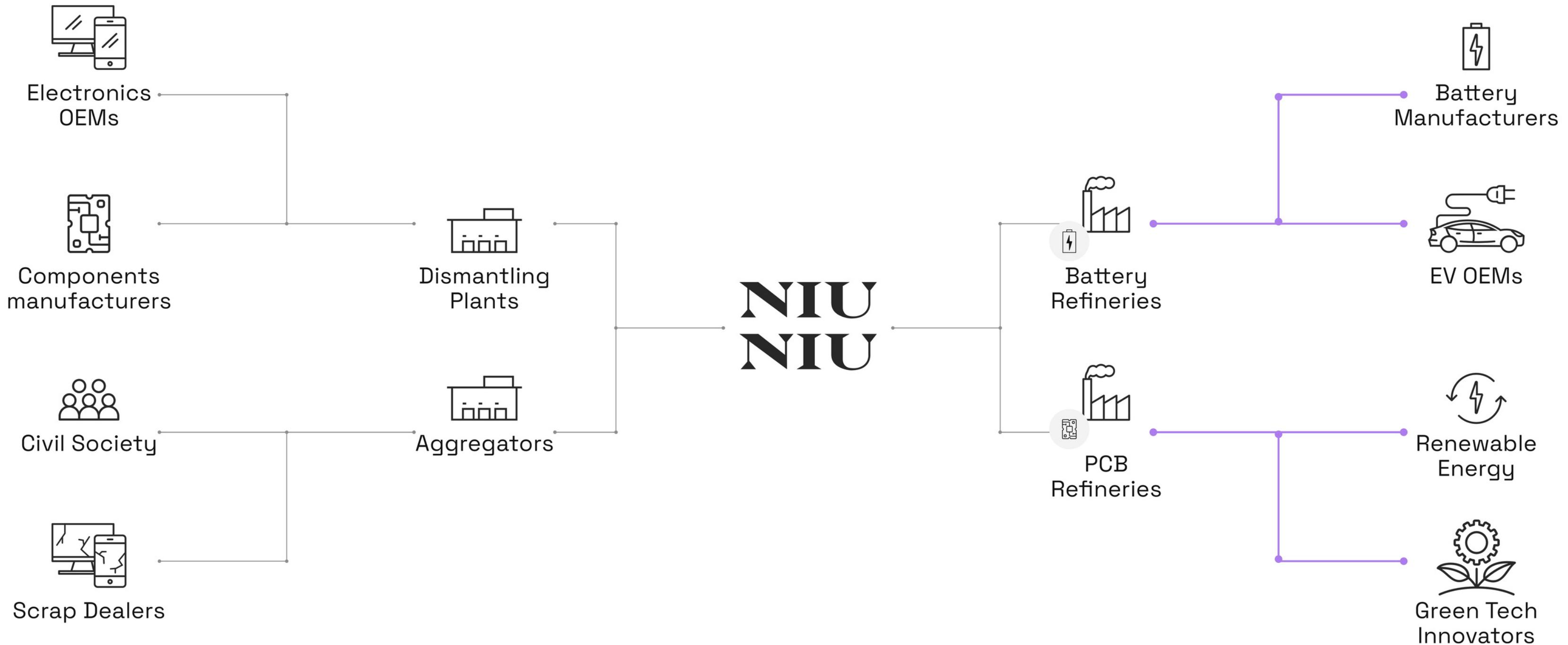
ESG Sceme



# The Operating System

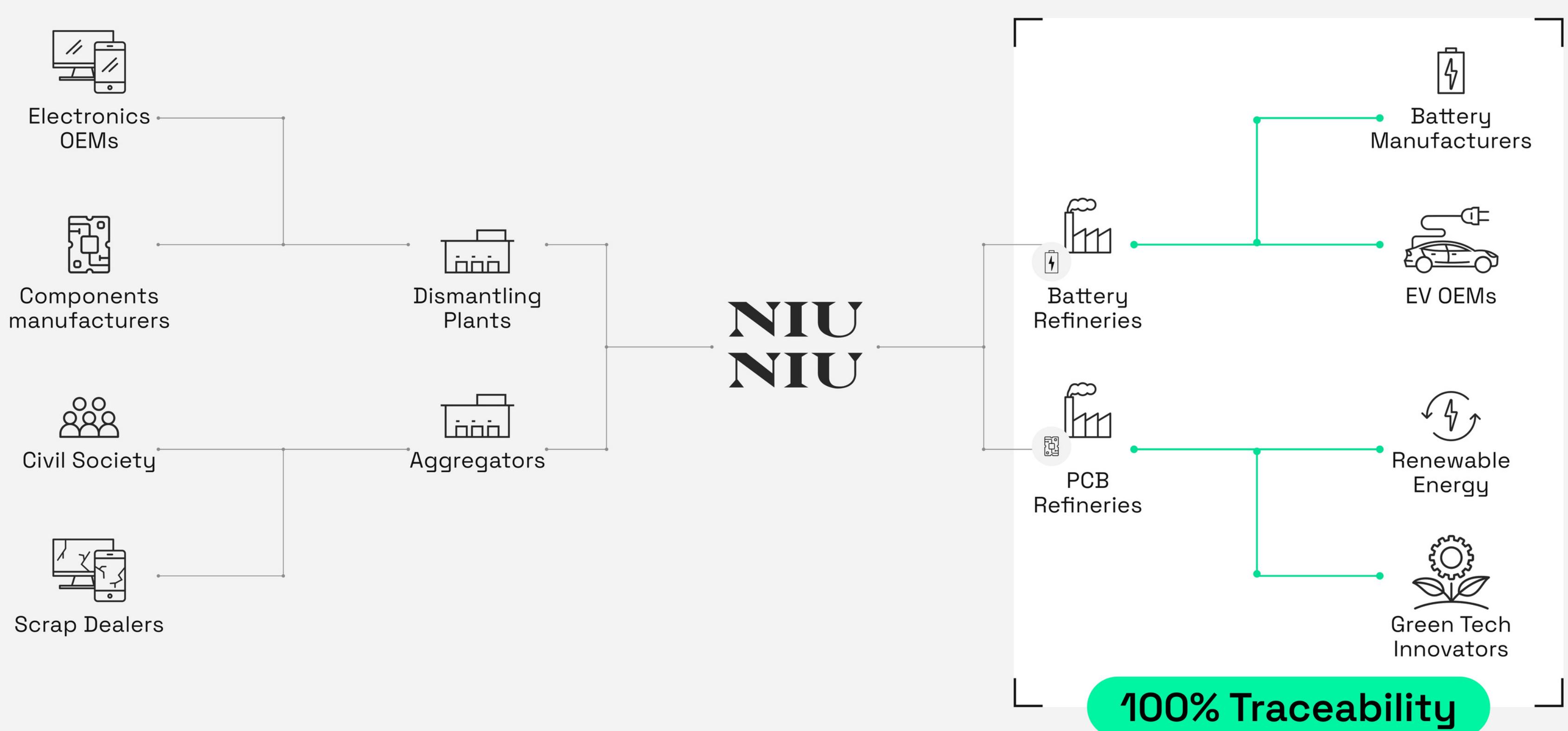


# The Operating System

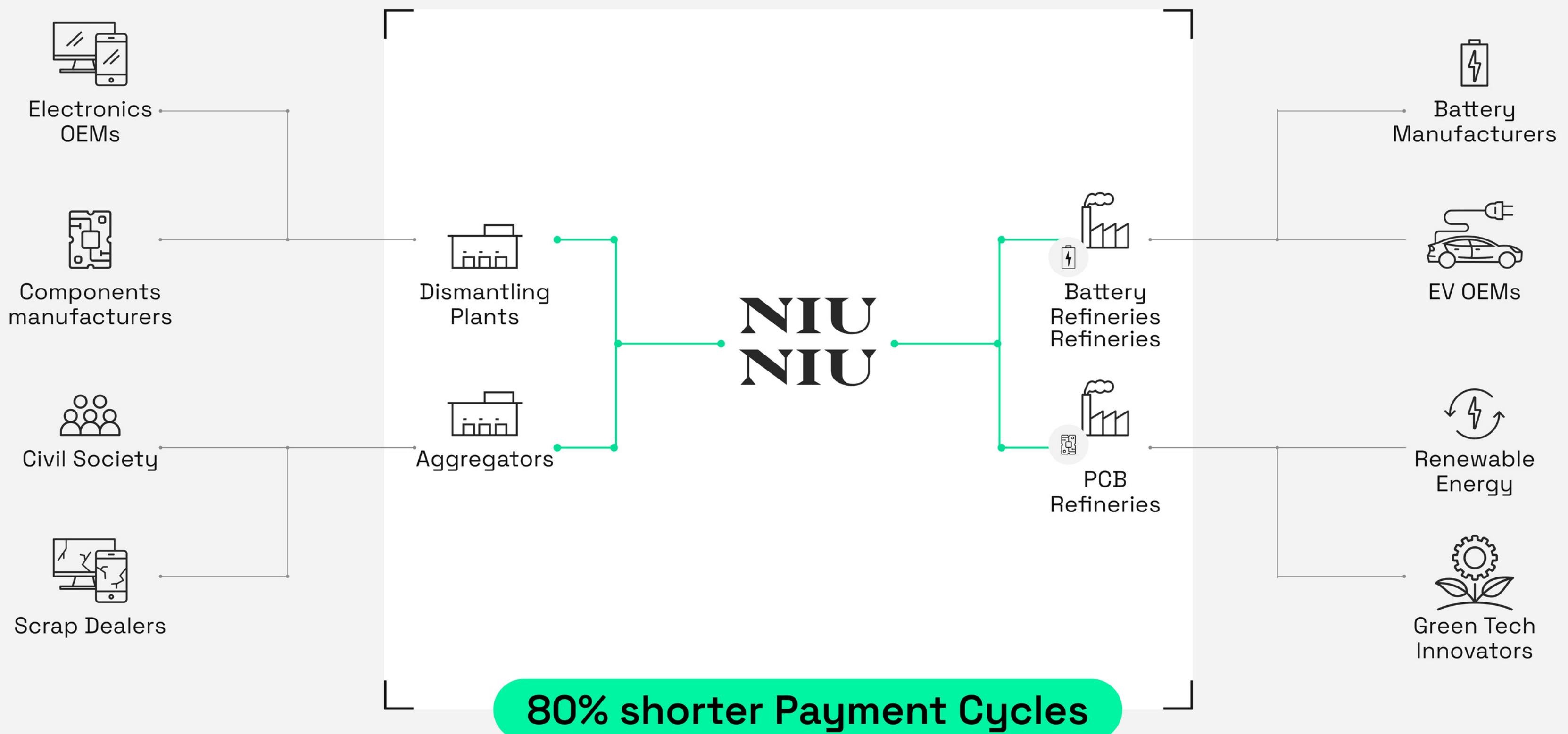


Material Traceability

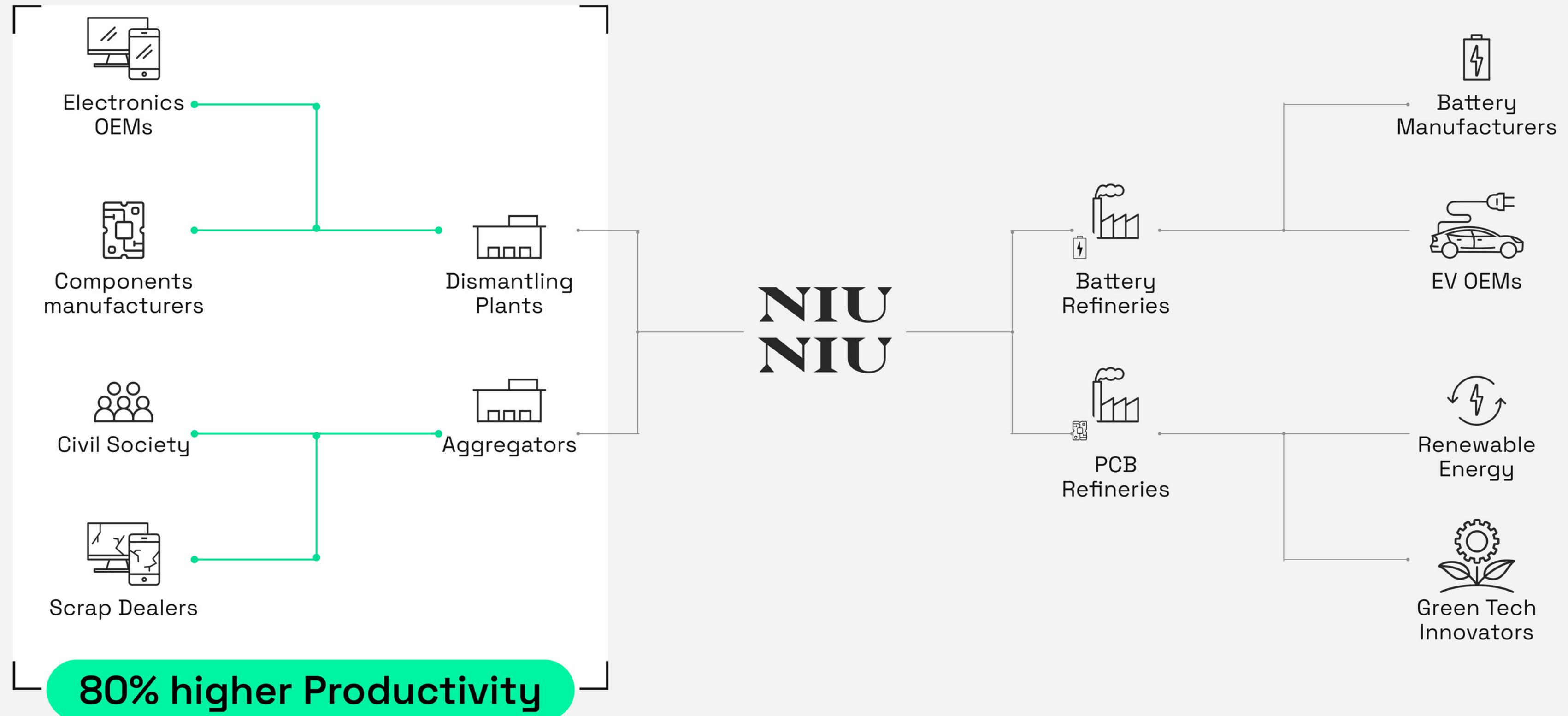
# Benefits



# Benefits



# Benefits

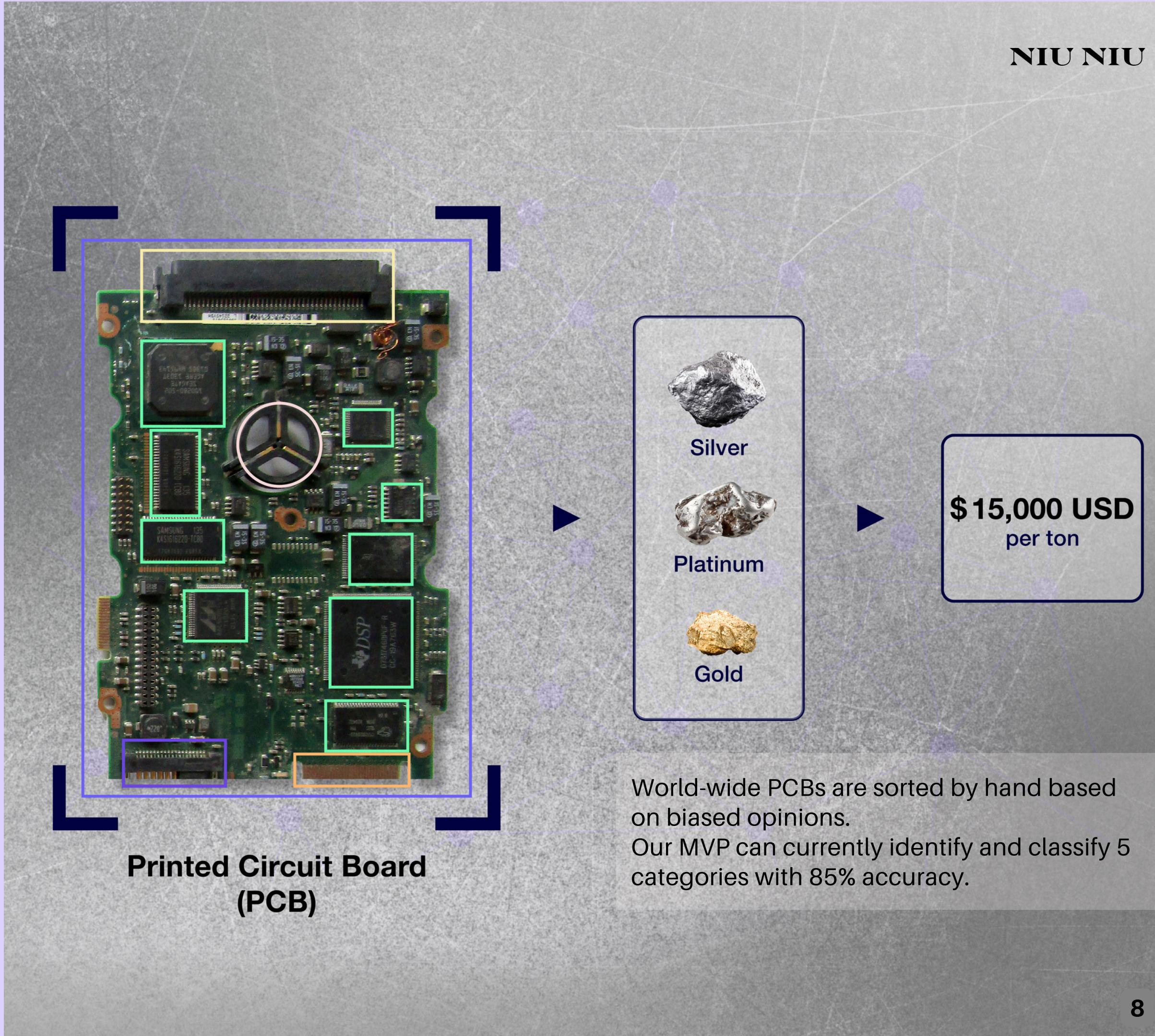


Secret sauce

## Benefits for business:

- ✓ 90% higher certainty at material procurement.
- ✓ 80% higher productivity at sorting.
- ✓ Better negotiation position at sales.
- ✓ 80% decreased payment cycle.

Our A.I. powered Image Recognition Software can identify the precious metal content within components.  
**Something that the human eye can not.**

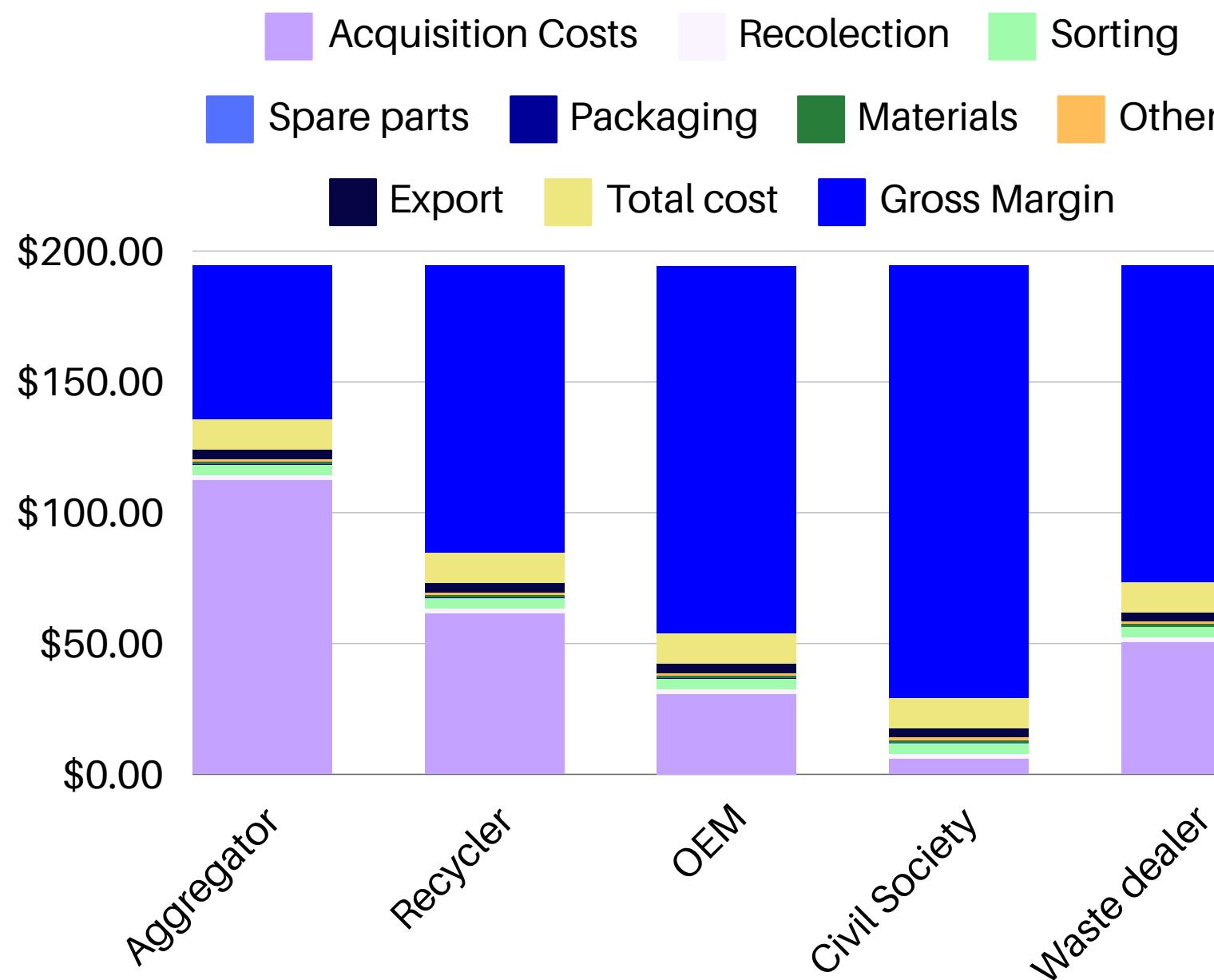


World-wide PCBs are sorted by hand based on biased opinions.  
Our MVP can currently identify and classify 5 categories with 85% accuracy.

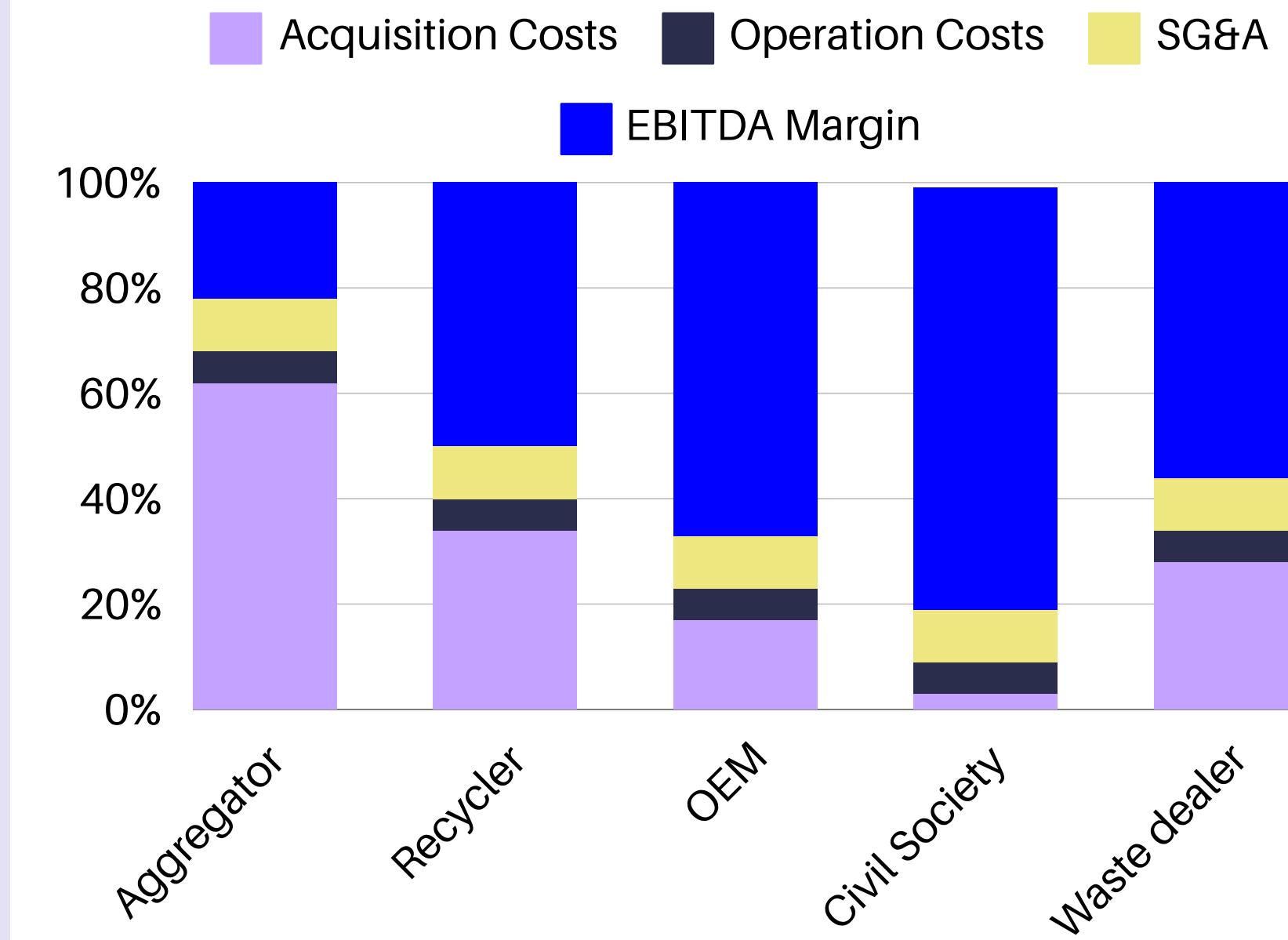
## Unit Economics

**NIU NIU's margin contraction mitigation strategy is based on diversification of sources: +60 channels piloted to date.**

**Unit Economics per kg in Mexico**

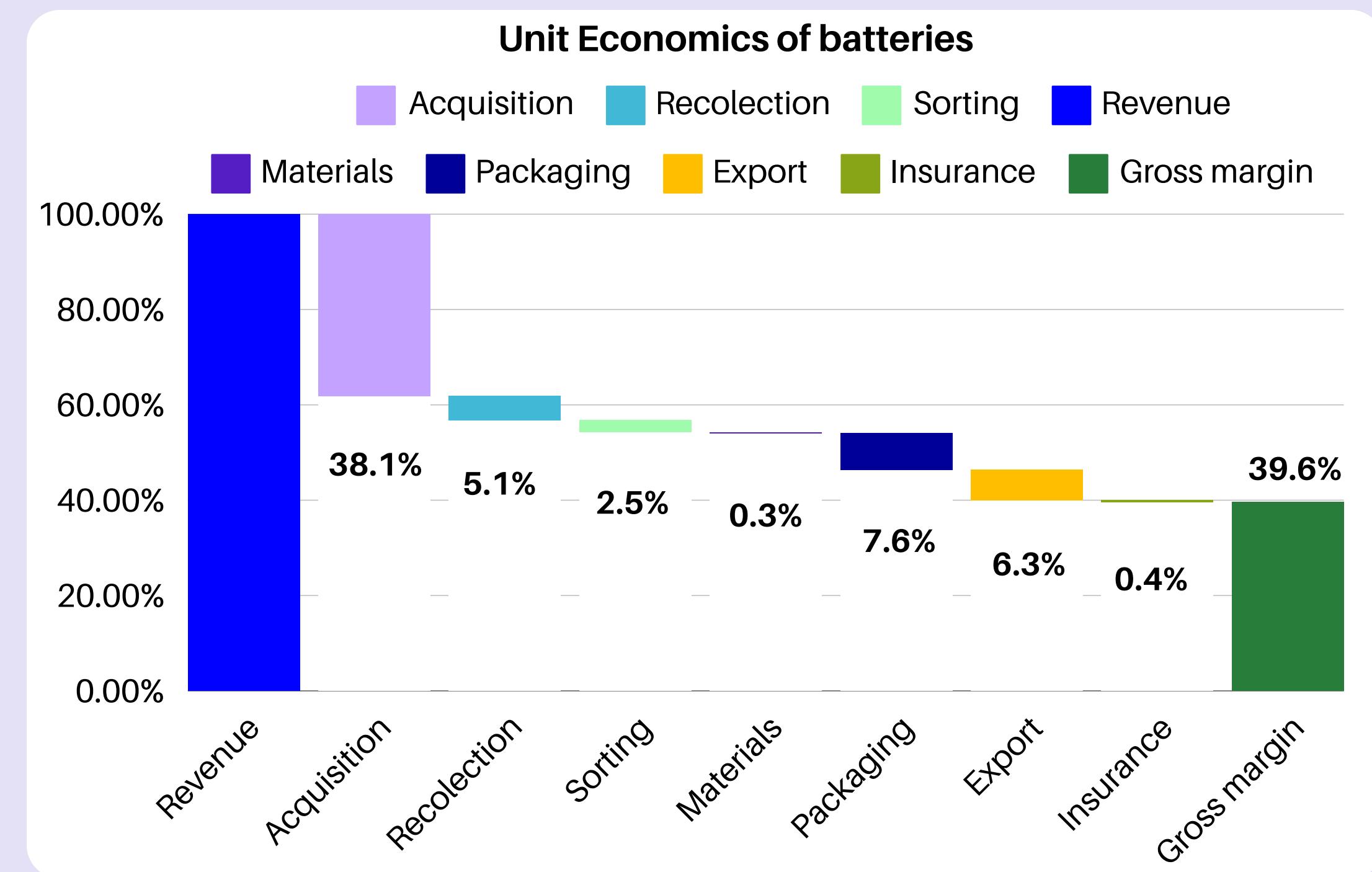


**Unit Economics per kg in Mexico**



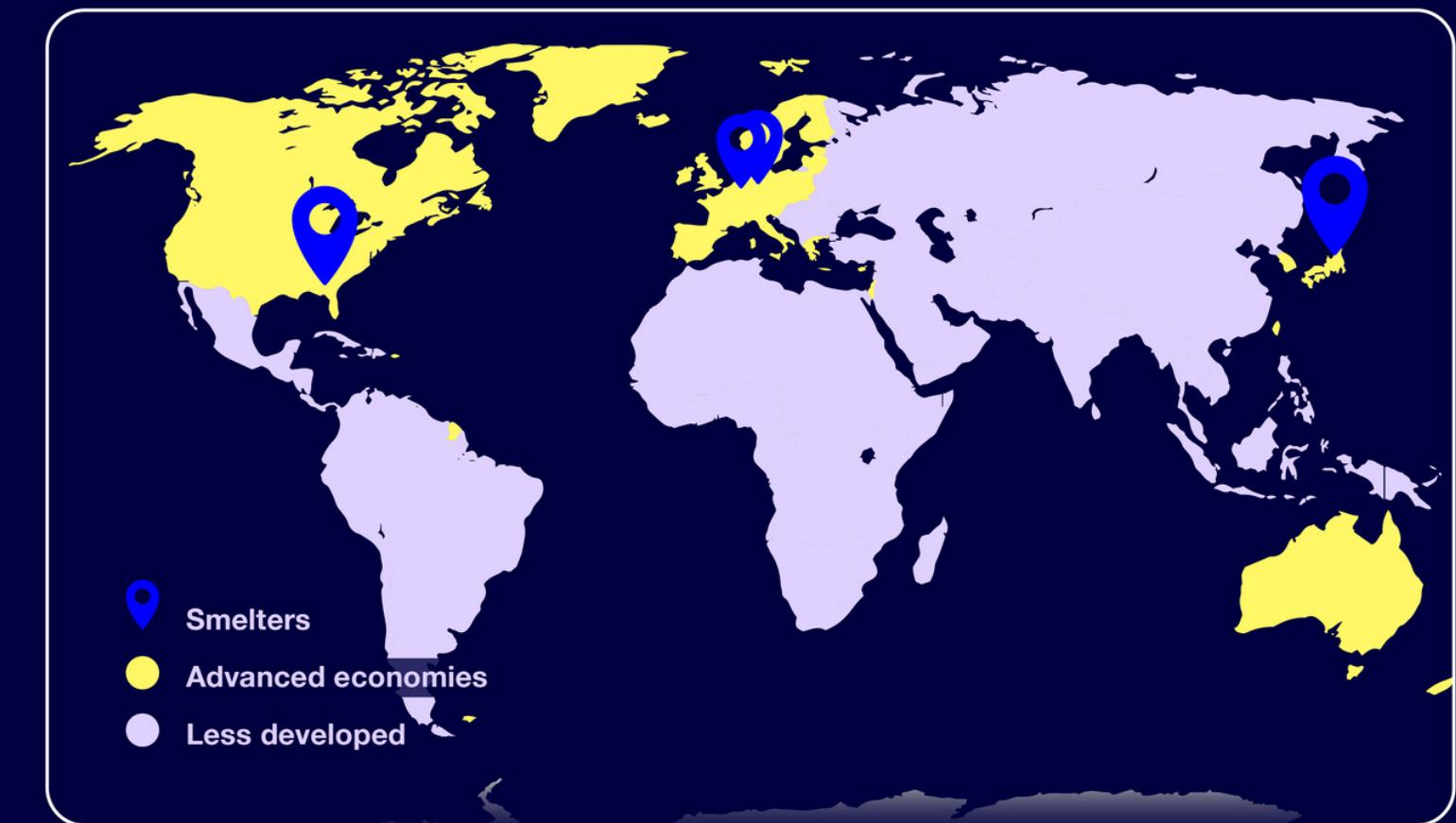
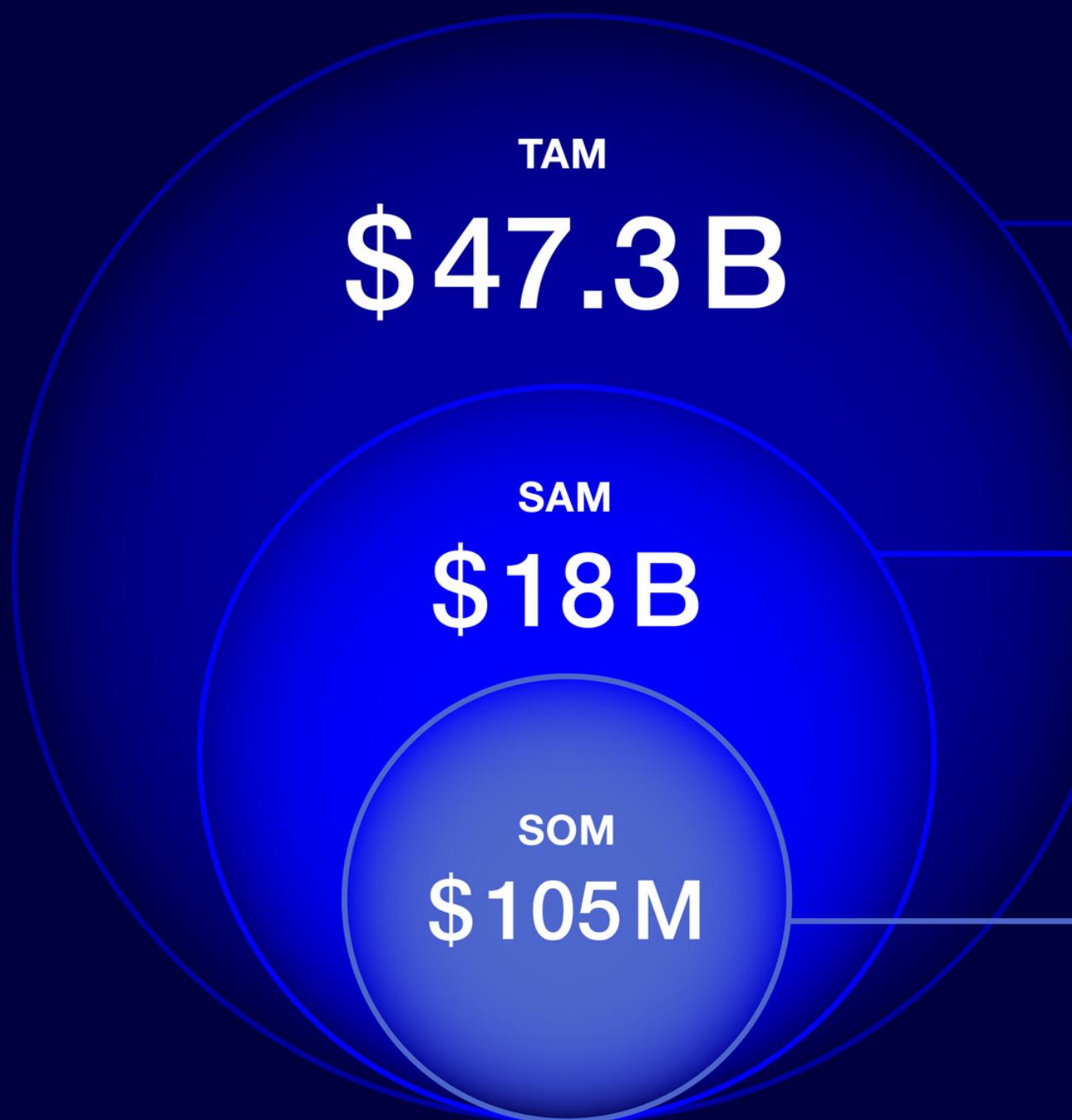
## Unit Economics

By working directly with generators, we can decrease the Cost of Acquisition by up to 90%.



## Market Opportunity

Mexico has become *the Hub* for EV-Production:  
Tesla, BMW, Fiat, GM and Ford will require ETMs and discard e-Waste.



Industry Context:  
Lithium-Ion Battery Market  
CAGR: 14.5%: \$118.15 B USD by 2030  
and PCB market: \$107.3 B USD by 2027

Forecast

# With 1.5 M USD Equity our Business Model allows for sustained growth in a 5 year Forecast.



## Milestones 2023-2024:

- P.O.C. Export channel
- P.O.C. Margins
- P.O.C. Execution Excelence
- P.O.C. Sourcing capabilities
- P.O.C. Platform Scheme
- A.I. - I.R. Software Development

## Key Metrics 2024:

- PCB Export N. America: 270 t
- Li-Ion B. Export USA: 360 t
- Sales: 58,9 M MXN; 3,3 M USD
- EBIT: 14,2 M MXN; 800 K USD

This projection is after raising \$1.5 M USD in Equity + \$1.5 M USD in Debt

Traction after Pre-Seed Grant

# With UNDP's funding we proved product-market fit and tackled the hardest market entry barriers.

2021-2023 Development during UNDP Funding

## Grant amount

**\$1.2M USD**

United Nations  
Development Program

**GRANT**



(No Equity or I.P. commitments)

## Milestones

- ✓ 2 plants operating with permits
- ✓ ISO 9001:2015 certification
- ✓ +160 tons of e-Waste processed
- ✓ MVP for Image Recognition Software base on A.I. for PCB sorting: 85% accuracy
- ✓ +18,500 Users



## Achievements

- ✓ 1st Prize: Business Model Category of Latin America
- ✓ 1st Prize: Berlin's Founder Institute Graduate
- ✓ Revenues: up to \$18K USD/month
- ✓ +60 Education Institutions participating

**OMNILIFE**  
GENTE QUE CUIDA A LA GENTE



**umicore**

**Aurubis**

Team

# Our management team combines experience and knowledge to grow, replicate and scale our vision.



## Dylan Roman Founder & CEO

B. Sc. Energy & Process Engineering  
M. Sc. Urban Management  
(with distinction)

- directed and managed \$1.2M USD & 72 employees successfully
- proven development experience in the main international agencies
- *Exist* grant recipient 2019
- certified *Agile Manager*
- *National Triathlon Champion 2006*



SIEMENS

Meltwater

USAID

PRO MÉXICO



## Maximilian Wolf | CFO

- M. Sc. Int. Strategy & Economics
- 12 years of experience analysing & funding business models
- Deep knowledge in financial structuring and capital markets advisory
- Advisory in sustainable finance to german corporates (ESG)
- 8 years experience as CFO building a food retail chain.



## Arturo Rosenthal | Operations Director



- Bachelor of Laws
- Experience in cross-border waste trading between Latin America and the world.
- Experience in Waste sector for more than 10 years, public and private



## Erube Flores | e-Waste Lead



- deep knowledge on PCB classification
- 15 years of empirical experience on e-Waste
- Solid Know-Who in the Lat-Am e-Waste sector
- Implemented and supervised operation's standards (e-Stewards, R2)



## Carlos Castro | A.I. Lead



- M. Sc. Data Scientist
- 8 years of experience in data modeling and analysis
- Software development: app, dashboards, algorithms, intelligence reports and code



## Prof. Dr. Guillermo Roman Chief Tech Advisor



- PhD Process Metallurgy
- +\$50M USD raised for development projects
- +120 international projects

Milestones to achieve in Seed Round

# 12 months from now, we will have proven our Business Model internationally and we will be ready to scale-up.

## De-Risking NIU NIU's Business Model in 12 months

### Proof of Execution Excellence

- ✓ Proof of **export capabilities** of HazMat
  - World-wide requirement in 2025
  - Export of +500 tons
- ✓ Proof of **Platform Scheme:**  
--> Use tech, know-how and know-who in external infrastructure and CAPEX
- ✓ ISO 9001:2015 certification in all processes



### Proof of Sourcing Capabilities

- ✓ Proof of **OEM Strategy** with ESG
  - Pilot with Deloitte
  - Pilot with Coppel
- ✓ Proof of **volume availability** with e-Waste dealers and recyclers
- ✓ Proof of **Permits Validity** along the value chain

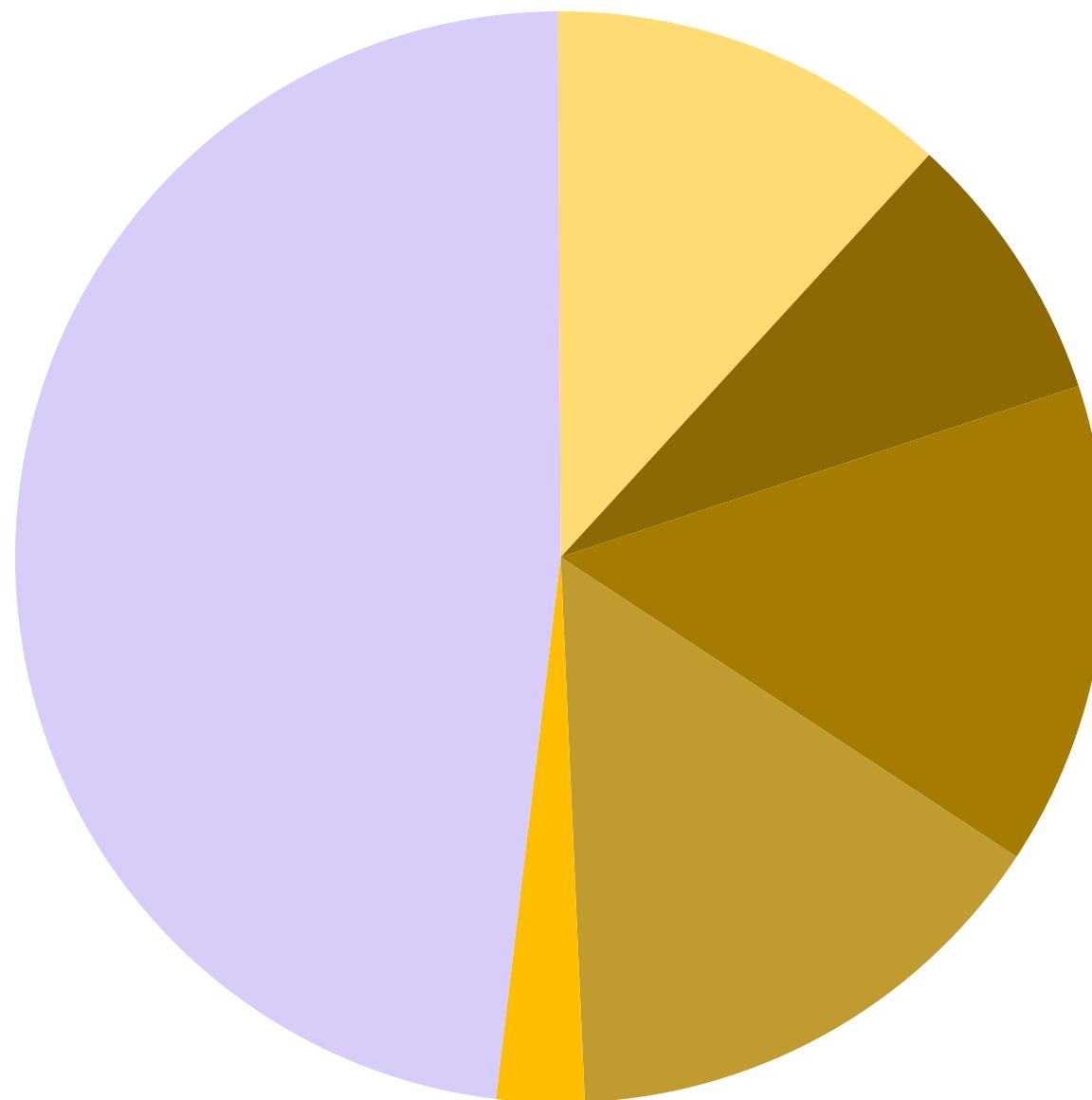
### Proof of Profitability

- ✓ Proof of **Market Demand** of Critical Minerals
- ✓ Proof of **Profit Margins** with Refineries and Brokers
- ✓ Proof of **Scalability** through Platform Scheme

What we are looking for:

**\$1,5 M USD in will help us secure 4-5% from the Mexican PCB Market and generate revenues of \$7,2 M USD after a 12 month runway.**

### 12 months of Use of Funds



- Operating Costs | 8%
- Payroll Management | 14%
- Payroll SG&A staff | 15%
- Other SG&A Costs | 3%
- CAPEX | 12%
- Inventory Debt | 48%

- ➔ Export of +500 tons PCBs in Year 1
- ➔ Grow Revenues to \$7,2M USD
- ➔ +10 tons of contaminated plastic collected
- ➔ Open distribution plant in US for 10%-15% higher profit
- ➔ Replication analysis in Latinamerica with 3 Pilots Plants

Thank you.

# Be there.

Dylan Roman  
[dylan@niu-niu.io](mailto:dylan@niu-niu.io)  
[www.niu-niu.io](http://www.niu-niu.io)

NIU NIU Resources Inc.  
2nd Floor Suite #2445, 447 Broadway  
New York, NY. 10013