

# Turning plastic recovery into verified environmental impact

Using Cardano to deliver trusted data that supports policy, compliance, and the circular economy

## Challenge

### Plastic pollution remains visible, but high-integrity data does not

Plastic waste accumulates across all regions of the world, yet the data needed to understand recovery activities remains deeply fragmented. Plastiks identifies a structural issue affecting governments, enterprises, and multilateral institutions alike: **plastic is everywhere, yet reliable information on what is collected, processed, or recovered is almost nonexistent**. Billions of tons of plastic enter the environment each year, but most recovery events are never measured, verified, or recorded in a form that informs policy or compliance frameworks.

**Informal waste pickers account for a significant share of global recovery work**, yet their contributions remain invisible within formal systems. Without a trusted process to capture and verify their activity, national and international reporting structures lack accurate data, while waste pickers themselves receive limited recognition or compensation.

Governments and UN programs face increasing regulatory pressure to demonstrate environmental progress, yet they operate without auditable datasets. As a result, **the path toward circularity is hindered by data gaps, uncertainty, and the persistent risk of greenwashing**.

Plastiks responds to this global challenge by establishing a reliable and verifiable measurement infrastructure that transforms recovery into public value.



#### Industry

- Recycled Plastics

#### Size

- USD 60.76 Billion (2025)<sup>1</sup>
- USD 132.33 Billion (2033)
- CAGR 10.4% (2026-2030)

#### The challenge

- Data invisibility
- Informal exclusion
- Policy uncertainty
- Greenwashing risk



#### The solution

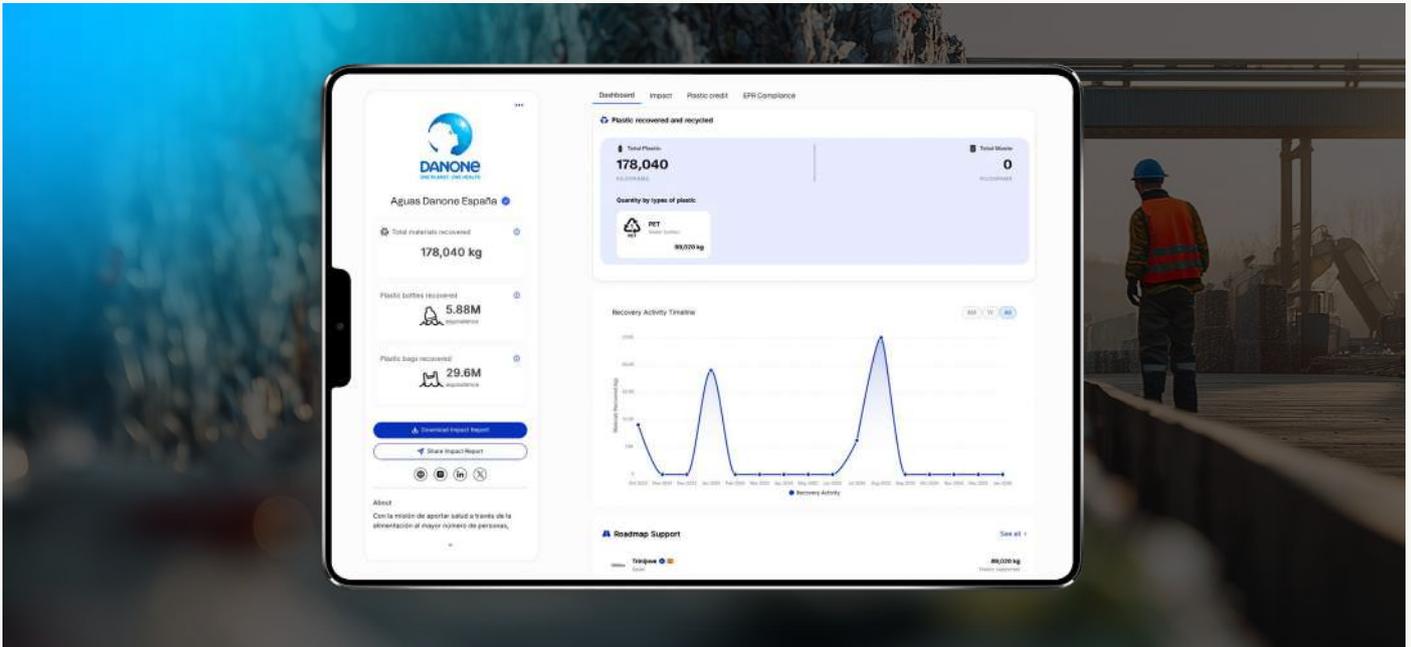
- Immutable MRV data
- Plastic Credit system
- Transparent reporting
- Community inclusion

“There is no future for recovery and recycling without data on-chain. And there is no trustworthy on-chain data unless it is verified against international standards before it is recorded.”

**André Vanyi-Robin**  
CEO and Founder of Plastiks

Solution

## A framework that delivers trusted environmental evidence



Plastiks delivers a comprehensive measurement, reporting, and verification (MRV) system that **converts plastic recovery activities into high-integrity digital records**. By using the Cardano blockchain as its foundational trust layer, Plastiks secures every kilogram of recovered plastic as immutable data, enabling transparency across governments, Fast-Moving Consumer Goods (FMCGs), Non-Government Organizations (NGOs), and impact investors. This infrastructure replaces manual reporting practices with verifiable evidence that supports environmental policy, procurement, and sustainability commitments.

The platform bridges formal and informal recycling networks, ensuring that waste pickers receive recognition and fair compensation while providing stakeholders with accurate and auditable datasets. **Recovery data is converted into Plastic Credits, enabling circular-economy initiatives** to access private capital and operate outside donor funding cycles. Real-time dashboards reveal the measurable progress of recovery operations and support Sustainable Development Goal (SDG) reporting for responsible consumption and climate action.

Cardano strengthens this framework through robust security, interoperability, and sustainable operations, enabling scalable MRV deployments across multiple countries.

### Solution Walkthrough



01. →



Recycling partners and waste pickers document recovery activities through digital tools. Validation protocols ensure accuracy at the source before registration on Cardano.

02. →



Every kilogram of recovered plastic is recorded as tamper-proof data on the Cardano blockchain, enabling cross-party verification for governments, UNDP, UNHCR, and FMCGs.

03. →



Verified impact data constitute a financial asset that enables sustainable investment in circular economy programs.

04. ↘



Impact dashboards display measurable recovery outcomes, support SDG alignment, and reduce greenwashing risks by providing verifiable evidence rather than estimates.

Results

## Measurable impact through trusted environmental data



### Community empowerment

Plastiks connects informal and formal recycling systems, enabling fair compensation and recognition for waste pickers who were previously invisible in environmental reporting frameworks.



### Strengthened compliance

Governments and enterprises receive auditable datasets that support EPR enforcement and sustainability reporting.



### Transparent dashboards

Real-time dashboards display verified progress toward SDG 12 and SDG 13, creating clarity for public and private stakeholders.



### Reduced greenwashing

Immutable records convert environmental claims into verifiable impact, increasing institutional trust and accountability.



### Circular finance activation

Plastic Credits enable recycling initiatives to access private capital, reducing reliance on donor aid and accelerating global impact.



## CARDANO

### Advantages



### Proven resilience

Demonstrated security and reliability support continuous operation



### Scalable network

Future-proof infrastructure supports platform growth without sacrificing performance



### Secure data

Robust architecture protects sensitive data, minimizing the risk of breaches or fraud



### Sustainable operations

Energy-efficient consensus and ethical governance align with sustainability efforts

Source  
<sup>1</sup> Recycled Plastics Market (2026 - 2033)



Cardano Foundation

The Cardano Foundation is an independent, Swiss-based not-for-profit advancing Cardano as a public digital infrastructure across a wide range of industries.

Contact us



cardanofoundation.org