12 RESPONSIBLE CONSUMPTION AND PRODUCTION

WINDOU

AN ARTIFICIAL INTELLIGENCE INTEGRATED APPLICATION FOR RECYCLING WASTE SORTING AND CONNECTING CARBON CREDIT TRANSACTIONS FOR CONTRIBUTIONS TO RECYCLING WASTE

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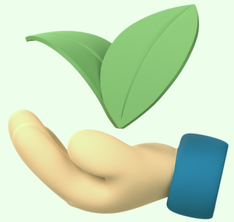
RESPONSIBLE CONSUMPTION AND PRODUCTION PATTERNS GOALS

The Responsible Consumption and Production Goal 12 is about ensuring sustainable consumption and production patterns, which is key to sustaining the livelihoods of current and future generations.

<u>Some of the key targets of SDG 12 are:</u>

1) Sustainable management and use of natural resources
2) Halve global per capita food waste
3) Responsible management of chemicals and waste
4) Substantially reduce waste generation
5) Encourage companies to adopt sustainable practices and sustainability reporting
6) Promote sustainable public procurement practices
7) Promote a universal understanding of sustainable lifestyles
8) Support developing countries' scientific and technological capacity for sustainable consumption and production
9) Develop and implement tools to monitor sustainable tourism
10) Remove market distortions that encourage wasteful consumption




Waste management
Sustainable resource management
Design for sustainability (D4S)
Cleaner production & resource efficiency
Sustainable transport
Eco-labelling & certification
Sustainable procurement
Sustainable marketing
Sustainable lifestyle
Sustainable consumption & production

THE CURRENT SITUATION

"Every year, approximately **3.9 million** tons of PET, LDPE, HDPE, and PP plastics are consumed in Vietnam. However, **only 1.28 million tons (33%)** are recycled, with the rest being disposed of, resulting in an annual waste of **$2.2-2.9 billion USD**."

WORLD BANK GROUP (2024)

"Vietnam thus becomes **one of the top five** countries globally contributing to plastic pollution in the oceans. Plastic waste accounts for the majority of waste found in river and coastal areas, comprising **94% of total waste and 71% of weight**. Over **60% of plastic waste** is single-use plastics."

TIEN THINH (2023)

“NEGATIVE” FACTS ABOUT CURRENT WASTE RECYCLING

The recycling of waste is still facing many negative impacts from the collection and sorting processes at recycling plants. Firstly, we need to acknowledge that recycling businesses serving the production process are lacking an active supply from households or businesses, while household recyclable waste accounts for up to 80% of the recyclable waste used in the consumption process.

The second issue lies in the shortcomings of the recycling sorting process at recycling plants. Recycling businesses have to spend millions of dollars on recycling sorting equipment and labor due to the lack of sorting recyclable waste at the source. Particularly, the health of workers is seriously affected during the sorting process due to exposure to a large amount of hazardous metals in the factory environment.

These negative impacts somewhat contribute to negative effects on the recycling chain business of enterprises, and we need to have solutions to address consumption and production issues, recycling waste in a progressive and efficient manner.

SOLUTION

With the current unscientific and haphazard disposal of recyclable waste into the environment, the emergence of an application capable of flexibly and intelligently collecting recyclable waste directly from households and businesses is critically necessary. Not only does it serve as a bridge between those in need of purchasing recyclable waste to serve their production processes, but it also helps recyclable waste sellers generate additional passive income or contribute to community projects through their contributions.

Moreover, with the growing prevalence of carbon credit trading in many countries worldwide, this presents an opportunity to foster awareness of sustainable business practices tied to responsible production and consumption among global enterprises.

MY SOLUTION

WINDOU is an online platform connecting sellers and buyers of recycled waste, providing the following features and services:

1) Classifying recycled waste through AI technology
2) Connecting Sellers and Buyers of Recycled Waste
3) Converting recycled waste into carbon credits
4) Accumulating contribution points for community projects

WINDOU

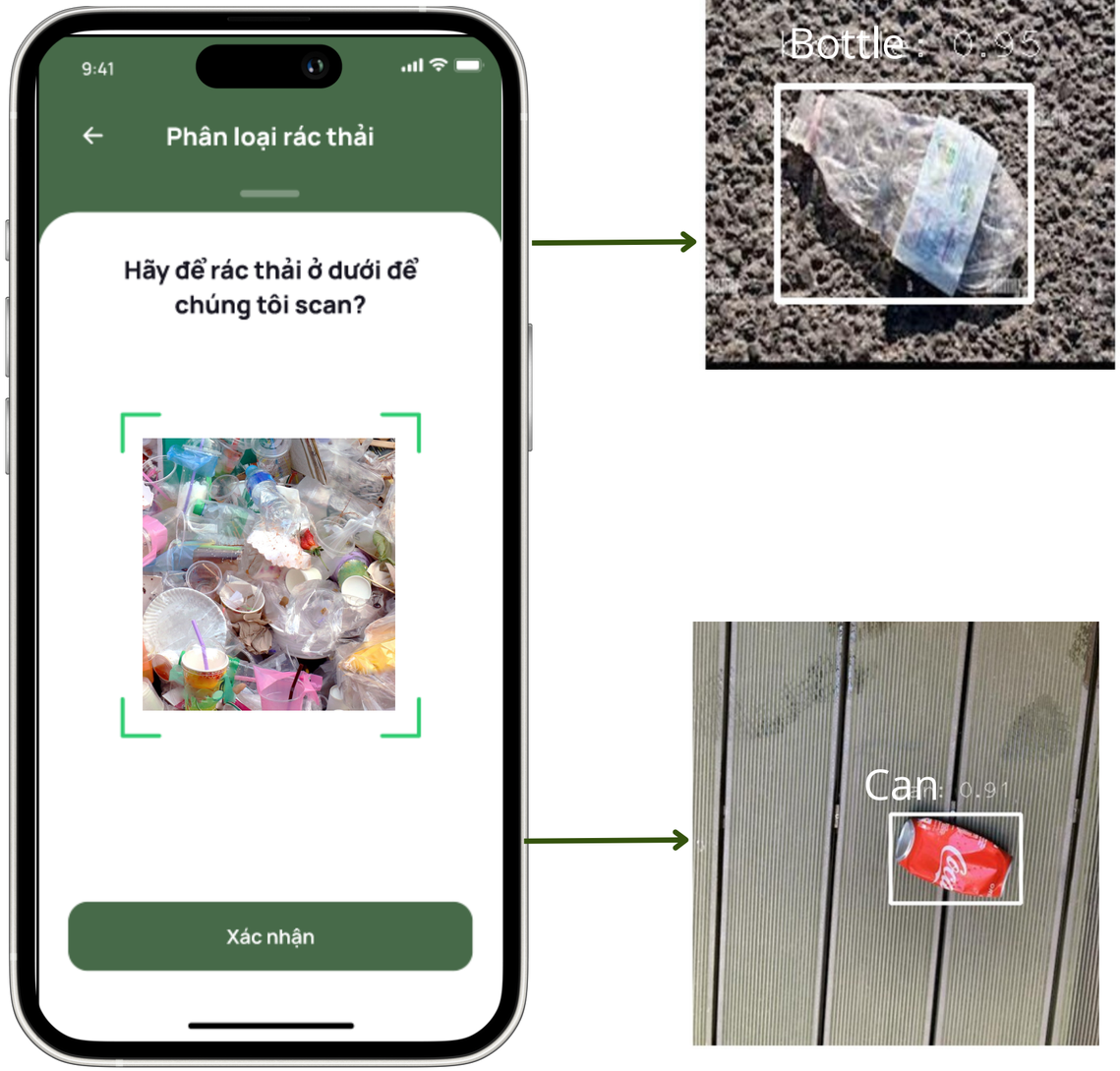
Smart recyclable waste business platform

Classifying recycled waste through AI technology

- This feature allows sellers to take photos of their recycled waste through the mobile application, and then the system will use **artificial intelligence technology to classify** them and assess the quality of the recycled waste.

- Features sorting tin cans, plastic bottles, heavy metals and cardboard to help users sort right at home.

- **AI has the ability to count and synthesize quantities** from tin cans and plastic bottles and record them on the application system to help buyers synthesize.

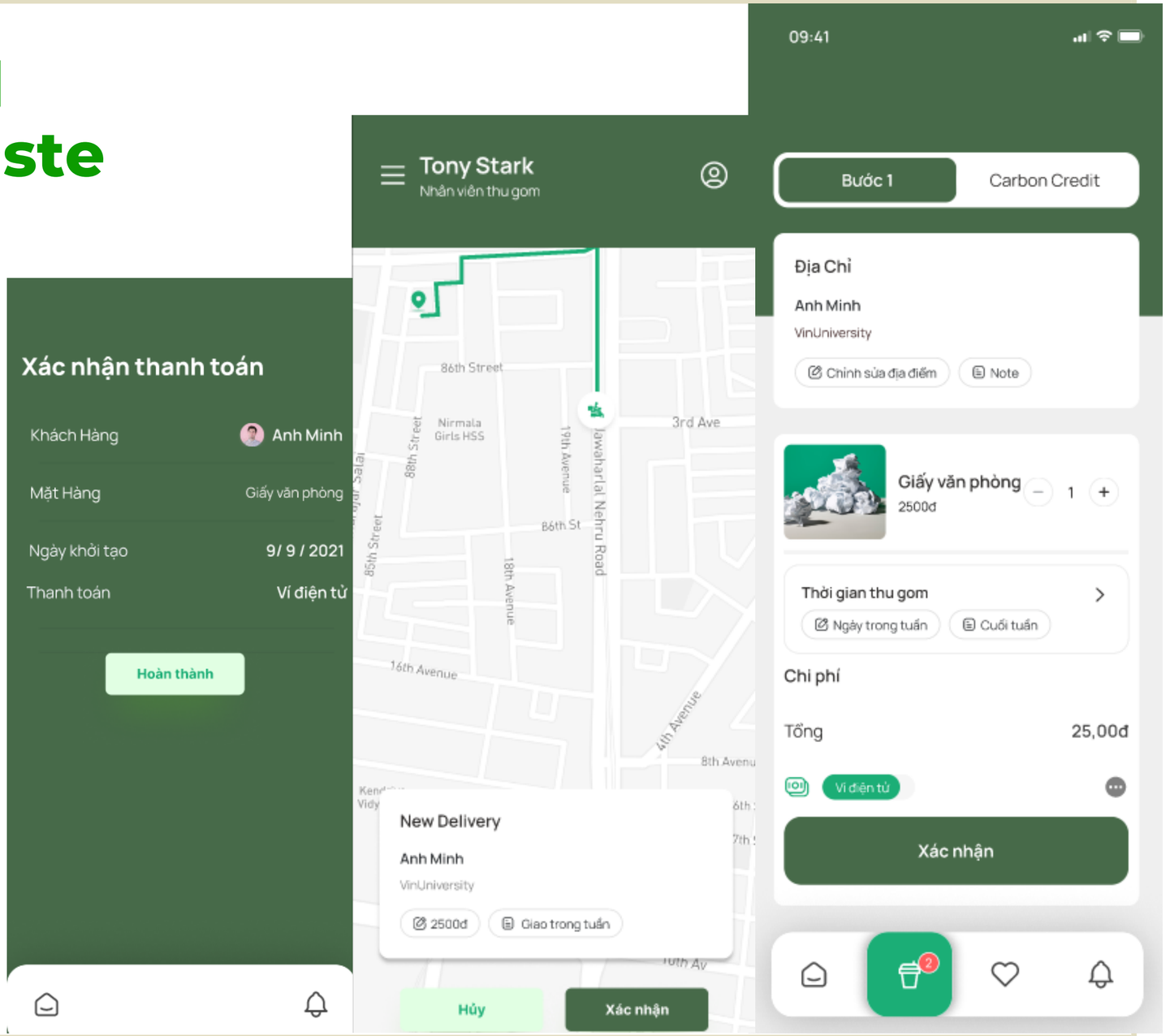


Connecting Sellers and Buyers of Recycled Waste

- The mobile application and website allow **sellers to post information** about their recyclable waste (previously classified at home through the integrated AI feature in the app) and **connect with recycling businesses** for them to come directly to collect.

- The application enables **scheduling appointments** for the recyclable waste buyers to move to the sellers' locations for collection.

- The app enables buyers of recyclable waste to **make direct payments** to the sellers upon confirmation through the app.

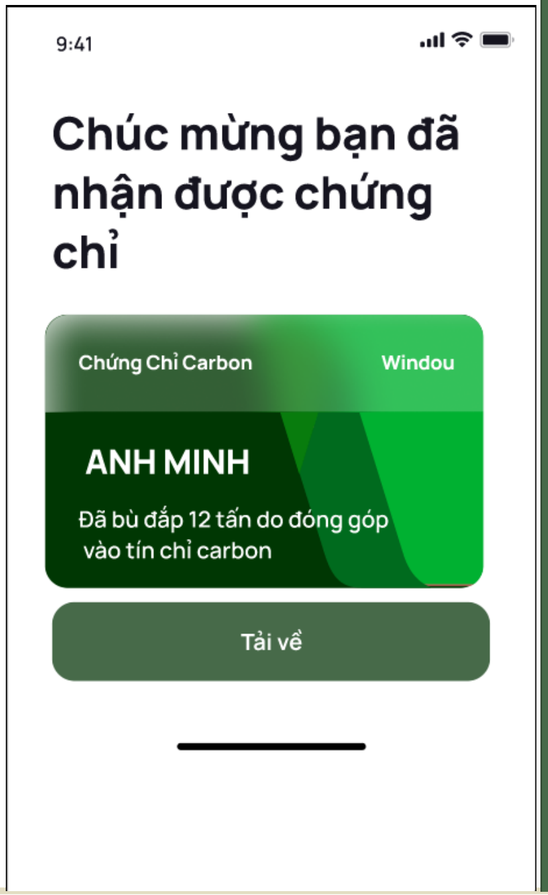


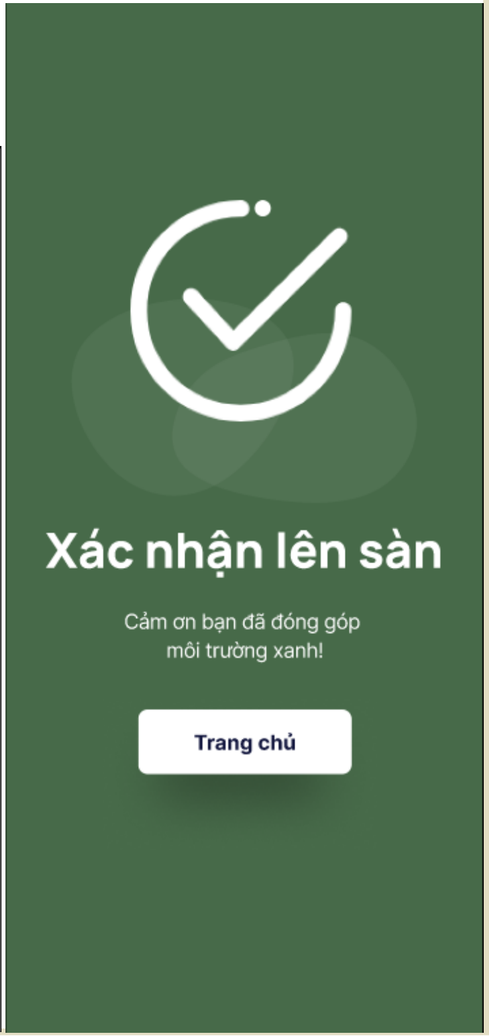
Converting recycled waste into carbon credits

- WINDOU provides a service to **convert recycled waste contributions** from businesses/companies **into carbon credits**, helping promote recycling and reduce the amount of waste dumped into the environment.

- The amount of recycled waste will be converted into **0.5 to 1 Carbon credit**.

- At the same time, the feature allows businesses licensed to trade Carbon credits to conduct transactions directly on the system.





OPERATING PROCEDURES

Photo

Classify

Carbon credit

Recyclable waste (sorted)

Carrier

Money

Recyclable waste (sorted)

Recyclables

AI Model

Business

Individual

Place to buy recyclable waste

Accumulating contribution points for community projects

- Without receiving recyclables, users can accumulate points when contributing to recycling waste or purchasing carbon credits, and these points can be used to **support community and environmental projects.**

- Information from the projects contributed by users will be updated in the system so that users can track the progress and have a sense of ownership in contributing to that community project.

Community projects contributed by WINDOU

A number of projects to help orphans and people in difficult circumstances participating in WINDOU are implemented based on contribution points from individuals and organizations when buying and selling recyclable waste on the application.

EFFECTIVENESS OF APPLICATION

- Reduce from 50% to 60% the cost of recycling waste classification activities of purchasing businesses
- Enhance awareness and educate the community about plastic pollution and recycling consciousness
- Carbon credits create growth opportunities for environmental companies from 50% to 75% of profits
- Enhance the role of social and environmental organizations

STRATEGIES FOR DEVELOPMENT OF WINDOU

Strategies 01

Raise awareness and ability to classify recyclable waste

Strategies 02

Create a smart connected environment for the recycled waste supply chain

Strategies 03

Create an environment to trade carbon credits and contribute to community activities

POTENTIAL MARKET

“By 2032, the global waste recycling services market is forecast to have surpassed a value of 90 billion U.S. dollars, registering a CAGR of 4.7 percent during the forecast period 2023 to 2032.”

Statista (2022)

“With the potential market in sustainable business tied to responsible production and consumption, WINDOU promises to become a bridge for the responsible and scientific use and recycling of waste in the future. Additionally, my solution also positively impacts awareness and the ability to sort recyclable waste and enhances the responsible consumption spirit of global citizens, especially the younger generation.”

CREATING CHANGE FOR RESPONSIBLE CONSUMPTION AND PRODUCTION

WINDOU is an intelligent application that can bring positive values to the sustainable development of the waste recycling industry and global carbon credit commercialization in the future. With the potential of AI technology application and a global connectivity environment, WINDOU hopes to become a solution that bridges the gap for the production, consumption, and recycling processes of recycled products for a sustainable development future.

- Sustainable business
- Positive impact on the environment
- Raise awareness of green living

“Sustainability is not just about adopting the latest energy-efficient technologies or turning to renewable sources of power. Sustainability is the responsibility of every individual every day. It is about changing our behavior and mindset to reduce power and water consumption, thereby helping to control emissions and pollution levels.”

Joe Kaeser

Thank You!

WINDOU PLATFORM Presentation

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