

ganiga

*the AI*

*that makes the difference*

# WHO IS GANIGA

Ganiga is an innovative startup in the Cleantech and Circular Economy sector. We develop smart bins with artificial intelligence to optimize waste management, improving recycling and reducing environmental impact. Our solution solves problems related to waste separation efficiency, reduce cost and co2 emission promotes sustainability, and easily integrates with existing infrastructure, contributing to a greener future



## HIGH COSTS

High costs such as staff for sorting and potential fines are a significant burden on the expenses related to proper waste management.



## LACK OF DATA

The lack of accurate data on waste disposal patterns poses challenges in planning and optimization, as it prevents the detailed quantification of management costs.



## IMPROPER WASTE

Many communities grapple with the issue of failed waste separation through approaches that are both ineffective and costly.

# DATA OF THE PROBLEMS

**460M/t**

The annual production of plastic is 460 million tons, but only 9% of it is recycled.

The impact of the number of people not properly sorting waste.

**80%**

**82%**

The incidence of people who are dissatisfied with the waste management system.

# VISION

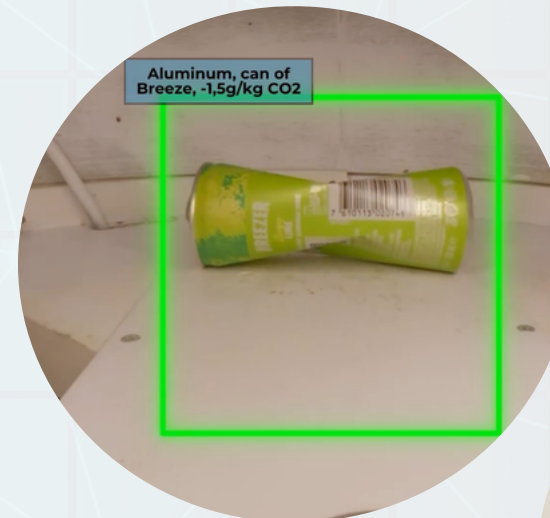
Ganiga's vision is to revolutionize waste management, aiming to have a Hooly solution for every scenario. In the short term, our goals are to sort multiple types of waste simultaneously and generate data on the brand of discarded waste.

Our commitment is to provide a comprehensive and efficient waste management solution that adapts to diverse situations, contributing to a more sustainable and data-driven approach to waste disposal



# SOLUTION

- **Waste Management Optimization:** Ganiga automates waste collection and sorting through AI, reducing operational costs and pollution. This solution creates optimized collection routes.
- **CO2 Emissions Reduction:** Ganiga's technology promotes recycling through our AI-based sorting system, estimating a reduction of approximately 500 tons of CO2 emissions per year related to waste management, contributing to a more sustainable future.
- **Data-Driven Analytics:** Ganiga collects detailed data on waste disposal patterns, providing valuable insights for informed decisions, helping to understand the environmental impact and optimize waste management.



# DATA OF SOLUTION

**+300%**

Increase rate of  
waste recycling

The impact of the  
number of people not  
properly sorting waste.

**-30%**

**-7B\$**

Approximately **75%** of waste generated in the United States is recyclable; however, currently only about 30% is being recycled. This inefficiency in the recycling process results in an annual waste of approximately **\$7 billion** in valuable materials that could be recovered and reused.



HERE'S THE IMPACT HOOOOLY! ARE HAVING ON THE PLANET  
THE GREENHOUSE GAS EMISSIONS REDUCED ARE EQUIVALENT TO:

Greenhouse gas emissions from



**1M km**

by an average passenger vehicle

CO<sub>2</sub> emissions from



**47M**

Number of smartphones charged

Greenhouse gas emissions avoided by



**17K**

Trash bags of waste recycled instead of landfilled

Carbon sequestered by



**500**

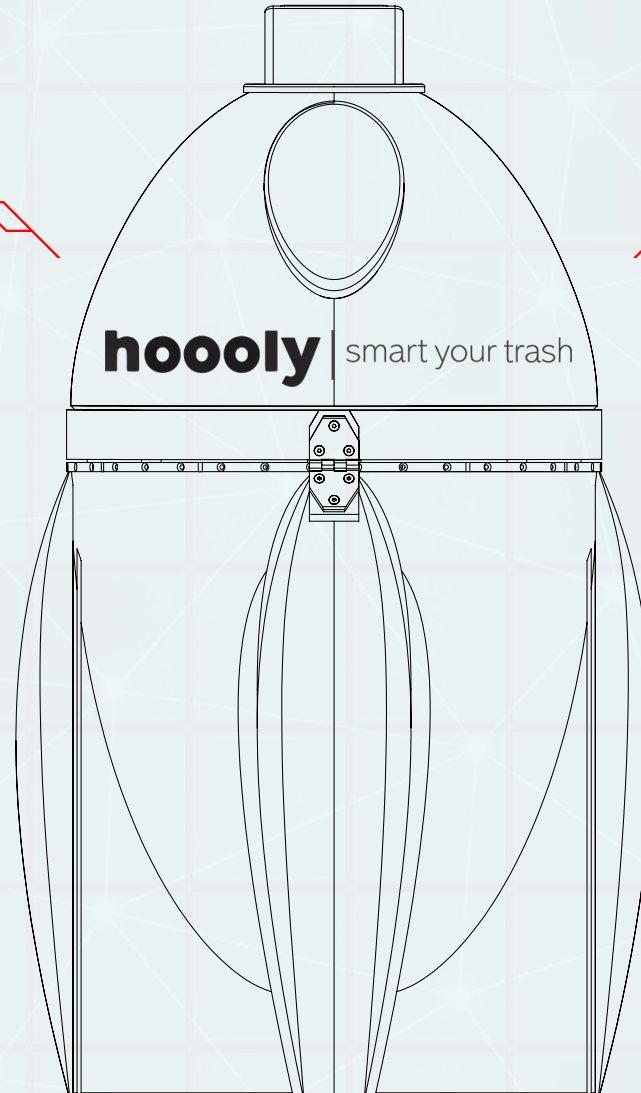
Acres of U.S. forests in one year



# A HOOLY! FOR A SMART THE FUTURE

## THE FUTURE

Hooly! recognizes and separates waste autonomously, helping to improve the quality of separate waste collection. It provides detailed statistics on waste sustainability and CO2 emissions saved.



## FEATURES

Our innovative solution (**AI**), including **Gen AI** for text-to-image waste generation for self-training, to **automatically** recognize and separate waste. We employ Gamification to engage and educate citizens, encouraging responsible disposal practices. Furthermore, we analyze **data** and **statistics** to monitor and optimize waste management. This not only enhances the environment but is also estimated to yield significant cost savings and a substantial reduction in **CO2** emissions associated with waste management.

# PRODUCT FEATURES

## (AI)DEEP LEARNING

AI utilizes DL/ML algorithms to recognize and separate various types of waste materials, enhancing the efficiency of recycling processes.

## (AI)BIG DATA

The system collects detailed data on waste disposal patterns, providing valuable information for informed decisions. This real-time data collection enables precise waste management and optimization, resulting in cost reduction and CO2 emissions reduction. Additionally, the algorithm recognizes waste brands, offering advertising opportunities.

## GENERATIVE AI

The use of AI, including generative AI for converting text to image waste for self-training, is at the core of the waste sorting system.

## IOT

Ganiga's smart waste containers are equipped with sensors and technology capable of identifying and categorizing waste as it's disposed of. This real-time monitoring system allows for optimized waste management.

## GAMIFICATION

Ganiga promotes environmental awareness through informative messages on its app, transforming waste management into a participatory experience. It also offers incentives like cashback to encourage sustainable practices.

**HOOOLY!**

# A SMART BIN TO SMART APP



Real-time  
Monitoring



Bin Localization



Cashback and  
Collaborations



Constant  
Communication  
and Education

# CUSTOMERS, PARTNERS



# MILESTONES

**Ganiga has achieved significant milestones and received notable recognitions along our journey:**

- Winners of the prestigious ' Non Sprecare' award at Luiss University in Rome.
- Champions of the Startup Cup at the Technological Hub.
- Received the ' America Innovazione' award and acknowledgments from the Chamber of Deputies.
- Participation in Italy's flagship startup event, SMAU Milan, on October 1st.
- Selected for Ecomondo in Rimini, one of the world's leading environmental events, in November.
- Honored with the Innovazioni award by Confindustria in Pescara.
- Among the 18 most innovative startups chosen to present our company in Silicon Valley, with support from the Tuscany Region.
- Selected by ITA to participate in CES Las Vegas, the world's premier innovation event.
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**In addition, we have recently completed a 400,000 euro pre-seed funding round and successfully sold the first 50 units of our product. These achievements reflect our dedication and steady growth in the field of innovations and sustainable solutions.**



# TEAM



**Nicolas Lorenzo Zeoli**  
**CEO & CO FOUNDER**

Commercial area Strategic  
partnerships, Product and  
AI manager



**Gabriele Cavallaro**  
**CO FOUNDER**

Purchasing office manager  
Relations with suppliers



**Michele Cesario**

Head of strategy and  
economic development



**Francesco Zingariello**

CTO - AI ENGINEERING



**Flavia Lorena Biondi**

Communication manager



# MEDIA COVERAGE

**Forbes**

Il Sole

**24 ORE**



**Il Messaggero**



**millionaire**

**la Repubblica**



**LA NAZIONE**

**HUFFPOST**

**tom's HARDWARE**

**CORRIERE DELLA SERA**



Consumer  
Technology  
Association

**IL TIRRENO**



**QUOTIDIANO NAZIONALE**

**INNOVIT**  
ITALIAN INNOVATION & CULTURE HUB



**StartupItalia**



**L'Espresso**





# THANKS FOR ATTENTION

Email [info@ganiga.it](mailto:info@ganiga.it)  
Mobile +39 327.00.67.842  
Find we on [@ganigainnovation](#)

WEB



“Let's revolutionize waste management together for a more sustainable and cleaner future.”