PRESS RELEASE

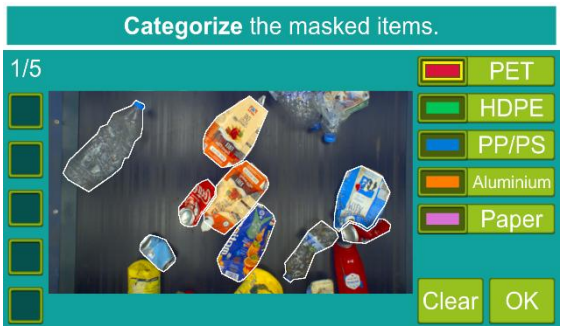
Game on for better recycling! Meet RECLAIM project at the Plastics Recycling Show Europe (PRSE) in Amsterdam and discover how our Recycling Data Game (RDG) is using AI, citizen science, and gamification to boost recycling awareness and revolutionising waste recovery in Europe's islands. Play the game and help keep your favourite Island destinations clean and plastic-free!

Rotterdam, 26 March 2025:

From concept to closed-loop systems, Artificial Intelligence (AI) is reshaping the plastics industry. By integrating intelligent algorithms combined with innovative technologies, such as machine learning, computer vision and fully automated portable robotic waste sorting systems, AI-powered innovations are maximising the circularity potential of plastics through enhanced material identification and categorisation. These advancements carry the capacity to mitigate the plastic waste crisis and contribute to sustainable waste management worldwide.

To this end, European Union-funded **RECLAIM project** is thinking **outside-of-the-box,** by fitting the world's first fully automated AI-driven waste facility inside a shipping container!

At this year's **Plastic Recyclers Show Europe (PRSE)** exhibition and conference at RAI in Amsterdam (April 1-2), RECLAIM will showcase its **Recycling Data Game (RDG)** at **Stand K50**. A mobile app-based game, the RDG **raises recycling awareness** among citizens while **training AI algorithms** to improve the efficiency and accuracy of plastic waste sorting.



By playing, users contribute data to help address scientific challenges in the RECLAIM project to enhance material recovery operations in European islands and remote locations through its key innovation: the **portable robotic Material Recovery Facility (prMRF)**.

Future of Decentralised Material Recovery is here!
The RDG is part of the RECLAIM project, which has developed a compact, AI-driven waste recovery unit that fits inside a standard shipping container. Built for remote or tourist-heavy regions—such as European islands—it brings industrial-level sorting capabilities directly to local communities. By decentralising material recovery, the **prMRF** reduces transport emissions, increases recycling efficiency, and supports a more circular economy.

The RECLAIM Project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No: 101070524

Here's what the game developer, the University of Malta, has to say on the RDG: *"The Recycling Data Game (RDG) is a digital game developed within the EU-funded RECLAIM project to engage citizens in our R&D efforts, promote recycling awareness, and support AI development for enhanced material recovery operations," said Prof. Antonios Liapis, Associate Professor at University of Malta.*

Set in the dedicated **"AI Innovation Hub"** feature area at PRSE, visitors will be able to play the game on tablets and interactive displays. *"Thousands of attendees and over 500 exhibitors will be able to play the game at PRSE's 'AI in Plastics Recycling' space on stand K50 using tablets and large interactive screens," said Matthew Barber, PRSE show director and global events director at Crain Communications.*

"AI is revolutionising plastics recycling and innovations on show at PRSE are at the forefront of that transformation. A version of the game focusing on plastics will launch at PRSE, helping RECLAIM to train and optimize AI algorithms for sorting plastics in portable robotic material recovery facilities, contributing to plastic waste management in remote areas such as islands in Europe," added Barber.

What's the Recycling Data Game?

The **Recycling Data Game** invites players to complete a series of fast-paced mini-games that mimic real-life recycling tasks**: identifying, categorising, and locating** recyclable objects from real images captured by the prMRF's conveyor belt. These user annotations feed into AI models, helping improve object recognition and sorting accuracy in real time. Players essentially become **co-developers of the AI**, while learning about waste streams and recycling challenges.

Designed with **10 diverse mini-games**—including one where users play as the sorting robot itself—the app creates a feedback loop between players and the AI system. As human input improves the AI, the game evolves to present new challenges, continuously enhancing both learning and performance.

Press Contact

Abhimanyu Chakravorty, Technical Communications Coordinator: achakravorty@iswa.org

The RECLAIM Project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No: 101070524