ISSUE 2 Q2/2024



ECO INSIGHT

Unveiling INSEE Ecocycle Sustainability DNA



INSEE Ecocycle Vietnam Sets Record in PCB-Contaminated Oil

INSEE Ecocycle Vietnam has achieved a record-breaking feat in treating PCB-contaminated oil for its customers.

INSEE Ecocycle takes immense pride in receiving the highest volume of PCBs (54,945 tons) within one project. This accomplishment involved a dedicated team effort, with collection at the customer's warehouse completed in six working days, utilizing 14 trucks and a team of employees, drivers, and helpers.

INSEE Ecocycle Vietnam started treating PCB in 2011 as the only and leading company for this special kind of waste in Vietnam until now. We have a full license to collect, and store PCB at both CATL & HONC and then co-processing with strictly gas emissions measurements, fully complying with legal requirements. During the process, all risk assessments, and safety requirements are always in place to make sure we keep our employees, customers, society, and environment safe.

HIGHLIGHTS IN THIS ISSUE

INSEE ECOCYCLE VIETNAM
COLLABORATES WITH
CUSTOMERS IN
ENVIRONMENTAL
ACTIVITIES

INSEE ECOCYCLE LANKA
WINS GOLD AWARD AT
THE GREEN INDUSTRY
AWARDS 2024

INSEE ECOCYCLE
THAILAND COLLABORATES
WITH SINTEF ON OPTOCE
PROJECT TO PROPOSE
SOLUTIONS FOR OCEAN
PLASTIC

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INSEE Ecocycle Collaborates with Customers in a Series of Meaningful Environmental Activities

More than just a reputable partner in the field of waste management, INSEE Ecocycle aims to be a trusted companion, working hand in hand with our customers towards a sustainable future. The meaningful "Green Collaboration, Green Message Spreading" series of activities in the past month are proof of this commitment.

Waste collection "Together to beat plastic pollution"
Objective: To help raise awareness among factory
workers and keep the environment clean
Activity: Collected garbage around the Ty Bach
factory area, helping to improve the landscape around
the workplace of thousands of employees.
Achieved result: Collected 183 kilograms of waste.

Exchange waste for gifts "Green Collaboration, Receive Attractive Gifts"

Objective: To raise awareness of waste classification, emphasize the importance of treating waste properly, and minimize negative impacts on the environment Activity: Exchanged waste for gifts.

Achieved result: The program received the enthusiastic participation of nearly 100 workers/employees at the factory.

<u>Collaboration for a Month of Safety - Health - Environment</u>

Objective: To raise awareness and responsibility for waste classification among all levels of workers/employees at the factory
Activity: Participants took on the challenge of sorting waste and receive many attractive prizes from the program.

Achieved result: The program received the enthusiastic participation of over 100 workers/employees at the factory.

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The Remarkable Journey of INSEE Ecocycle and its Customers in the Series of Activities Guiding Chemical Spill Response and Waste Classification

In Q2 2024, the INSEE Ecocycle team embarked on a truly memorable journey alongside customers through a series of activities guiding chemical spill response and waste classification. The activities were implemented to assist customers in enhancing the knowledge of the workforce regarding the management of storage, identification, and classification of waste at the source. Additionally, participants were equipped with solid knowledge of the use of chemical safety data sheets, basic first aid knowledge, and practical skills for chemical spill emergency response.

The positive acknowledgment from customers and the enthusiastic participation of trainees at the facility served as powerful motivation, propelling INSEE Ecocycle to continuously develop training and consulting services and expand a range of beneficial activities to support customers.

Let's take a moment to reflect on the memorable efforts of the INSEE Ecocycle team in the collaborative journey with customers.



SRI LANKA PAGE 4



INSEE Ecocycle Wins Gold Award at the Green Industry Awards 2024

INSEE Ecocycle won the Gold Award at the 2024
Green Industry Awards, presented by Sri Lanka's
Industrial Development Board during the 1st
International Symposium on Green Industry
Initiatives for Sustainable Industrial Development.
This recognition, awarded under the Sound Chemical
Management category, took place at BMICH on June
23.

The Industrial Development Board honored INSEE Ecocycle for its dedication to creating large-scale, innovative, and sustainable solutions for the industrial waste challenges faced by local conglomerates, multinational corporations, and government institutions in Sri Lanka.

This award acknowledged INSEE Ecocycle's national contribution to providing innovative solutions for lab wash-off waste for universities, state research institutions, regulatory authorities, and commercial laboratories, and in eliminating persistent organic pollutants from the country.

INSEE Ecocycle Conducts a Series of Beach Cleanup Programs with INSEE Cement to Mark World Environment Day 2024

INSEE Ecocycle and INSEE Cement, in collaboration with the Sri Lanka Police, participated in a beach cleanup initiative at ten locations along the coastal stretch from Negombo to Wattala to commemorate World Environment Day 2024. Aligned with INSEE's Sustainability Ambition 2030, the program aimed to preserve coastal areas and the environment, and to educate community and school children on the importance of proper waste management to prevent land and water pollution.

The waste collected during the cleanup was managed sustainably by diverting recyclable materials to recycling and co-processing non-recyclable materials, ensuring no residues or harmful emissions.

The event promoted community involvement, with over 2,000 participants, including members of the Sri Lanka Police, local community members, INSEE staff, and students and teachers from 14 schools, along with other government institutions and NGOs. Certificates of participation were awarded to the school children to encourage their commitment to environmental conservation. Additionally, INSEE Cement donated Sanstha Cement bags to support infrastructure development activities in the 14 schools.



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Empowering Future Leaders: Awareness Sessions for School Children on Waste Management

INSEE Ecocycle collaborated with the Polonnaruwa Municipal Council to conduct the second school awareness session of the year at three national schools in Polonnaruwa: Polonnaruwa Royal Central College, Thopawewa National College, and Seewali College.

As Sri Lanka's pioneer in waste management, we inspired young minds with practical insights and emphasized crucial principles such as "Reduce, Reuse, and Recycle" to empower the next generation with best practices in waste management.

INSEE Ecocycle is shaping a community committed to sustainability and paving the way for a cleaner and greener Sri Lanka!

INSEE Ecocycle Installs the Third Ocean Strainer

INSEE Ecocycle and MAS Foundation for Change, an independent non-profit organization dedicated to cleaner oceans, enhanced global biodiversity, and access to clean water, have advanced their joint initiative by installing the third ocean strainer in the Obesekarapura canal. The first ocean strainer is located in Galle, and the second in the Dematagoda Canal.

The Ocean Strainer is a simple and costeffective trash trap that floats across canal expanses, effectively capturing plastic waste before it reaches the ocean.



INSEE Ecocycle engineers have utilized environmentally friendly practices to fabricate these ocean strainers internally by incorporating scrap materials collected from waste management operations and cement production.

Through this collaboration, INSEE Ecocycle and the MAS Foundation for Change aim to inspire other organizations, governments, and individuals to take decisive action against plastic pollution.

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INSEE Ecocycle Collaborates with SINTEF to Propose Solutions for Reducing Ocean Plastic Pollution

The Ocean Plastic Turned into an Opportunity in Circular Economy (OPTOCE) project highlights ongoing efforts to transform ocean plastic into a valuable resource within the circular economy. The project reveals findings from its study on Thailand's waste management potential, noting that the cement industry has the capability to dispose of low-quality and non-recyclable plastic waste. This initiative represents a sustainable waste solution aligned with the goals of a circular economy.

The OPTOCE project, established by the Norwegian research institute SINTEF and funded by the Norwegian Government's development program to combat marine litter and microplastics, focuses on studying and finding ways to eliminate nonrecyclable plastic waste and reduce plastic waste entering the oceans. The project collaborates with local entities in multiple countries, including four partner Asian nations-China, India, Thailand, and Vietnam—to study various types of non-recyclable and low-value plastic waste in large quantities. It explores the opportunities and drawbacks of involving the cement industry in plastic waste management in Thailand and other regional countries. The goal is to find appropriate disposal methods that sustainably address ocean plastic waste.

As part of the OPTOCE efforts in Thailand, the research institute SINTEF has partnered with INSEE Ecocycle to explore the potential of co-processing non-recyclable plastics in cement kilns. This pilot demonstration involves using plastic waste from landfills to produce Refuse-Derived Fuel (RDF) as an alternative fuel in cement production. The testing was conducted under different conditions to assess each potential impact by analyzing various technical data, including calorific value, process and quality parameters, and detailed standard measurements. The pilot's results showcased how the involvement of the Thai cement industry has high potential to help solve non-recyclable plastic waste management issues, much of which would otherwise leak and end up in the ocean.

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INSEE Ecocycle Joins Forces with Royal Thai Fleet and OPTOCE to Organize Beach Cleanup on World Ocean Day

INSEE Ecocycle is dedicated to addressing the issue of marine litter, with a particular focus on the significant amounts of plastic waste that leak into the ocean. In partnership with various organizations, the company organized a beach cleanup event on World Ocean Day, June 8, 2024, to raise awareness about ocean conservation and propose concrete solutions to this pressing problem.

Approximately 150 volunteers, including employees from INSEE Ecocycle, members of the Royal Thai Fleet, and participants from the OPTOCE seminar, gathered at Dongtan Beach in Sattahip District, Chonburi Province. The collected waste was sorted and processed into alternative fuel for coprocessing in cement kilns, enabling the energy recovery from waste and promoting sustainable solutions for marine litter.

The volunteers cleaned a 1.2-kilometer stretch of the beach, collecting a total of 2,285 kilograms of trash. Over 2,000 kilograms of Refuse-Derived Fuel (RDF) was collected, which will be sent to INSEE Ecocycle for use as an alternative fuel in cement production, replacing coal.





INSEE Ecocycle Launches Think Waste Wise Initiative and Food Waste Composter at INSEE Arsa Border Patrol Police Learning Center in Amnat Charoen Province as Part of INSEE Green School Project

INSEE Ecocycle joined Siam City Cement in setting up a waste management facilities including waste segregation area and a food waste composter at INSEE Arsa Border Patrol Police Learning Center in Amnat Charoen Province to encourage fundamental waste management behavior among children and support circular economy.

By demonstrating a commitment to sustainability and community development, INSEE Ecocycle enhances reputation as a responsible organization. This builds positive community engagement and strengthens relationships with local stakeholders.

INSEE Ecoycle is committed to support the community and engage related stakeholders, particularly through sustainable initiatives aimed at reducing waste and addressing plastic leakage into oceans.

Extended Producer Responsibility in the Not-So-Circular Economy

Rising living standards globally have led to increased resource consumption, putting significant strain on Earth's reserves.

Experts predict that by 2050, we may need resources equivalent to three planets to meet consumption demands. While many companies make small efficiency improvements, overall waste production continues to grow, with businesses often passing pollution and waste disposal costs onto society.

For sustainable manufacturing, corporations must address these externalities and develop a true circular economy. This involves accepting extended producer responsibility, meaning they are accountable for the disposal or treatment of their products after consumer use.

Currently, most commercial output is unrecycled, with global plastic recycling rates estimated at only 14 to 18%. The lack of sufficient waste management infrastructure, particularly in the ASEAN region, poses a significant challenge. Governments have been slow to act, leaving the private sector to seek innovative solutions. However, businesses typically do not prioritize waste management unless it negatively impacts their profitability.



"Together, we can create a better future"