



DOW

2023

DOW THAILAND ESG REPORT



SCGC-DOW
GROUP



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สุรศักดิ์ แสงนาค



MESSAGE FROM PRESIDENT

I am pleased to present Dow Thailand's 2023 ESG Report, which showcases our continuous journey in Environmental, Social, and Governance (ESG) matters through our expertise in materials science and strategic partnerships.

Our commitments to protect the climate, transform waste into valuable products, and close the recycling loop are unwavering. We have made significant progress in these areas, and our ongoing efforts demonstrate our dedication to promoting sustainable development while conducting business with integrity.

To achieve the 2050 carbon-neutral targets, we have implemented a range of measures to reduce carbon emissions, from our product portfolios and production optimization to countless partnership programs.

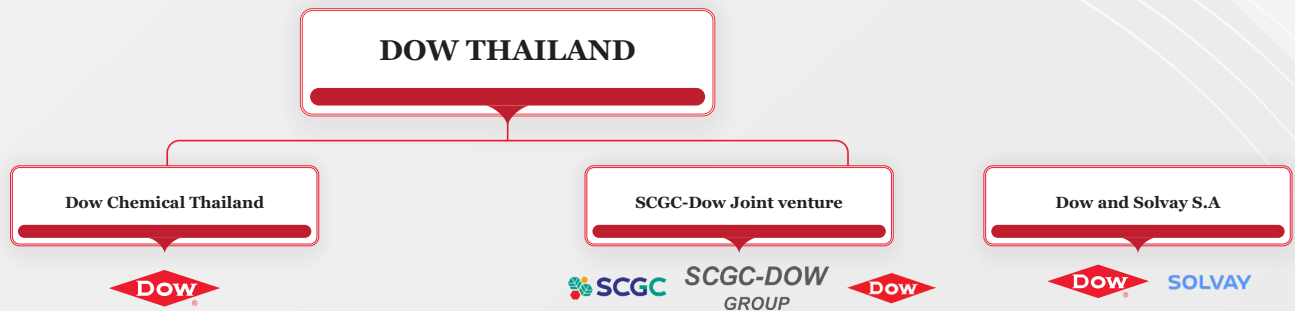
To eliminate plastic waste and advance the circular economy in Thailand, we have launched new products and partnerships to promote recycling and waste segregation at the source. I invite you to read this report to learn more about our initiatives and the positive impact we are making.

Lastly, I would like to extend my heartfelt thanks to all our stakeholders, partners, customers, and employees who have contributed to our sustainability journey. Together, we can continue to drive positive change and create a more sustainable future.

Chatchai Luanpolcharoenchai
President, Dow Thailand

DOW THAILAND

THE LARGEST DOW'S MANUFACTURING BASE IN THE ASIA PACIFIC



Founded in 1897 by Herbert Henry Dow, one of the world's leading chemists and innovators, Dow has an ambition to be the most innovative, customer-centric, inclusive, and sustainable materials science company in the world. As of 2023, Dow operates more than one hundred manufacturing facilities in more than thirty countries and distributes products to more than 150 countries. With a global workforce of approximately 35,900 people, Dow remains committed to advancing its mission on a worldwide scale.


2023 NET SALES
\$47.6B


INNOVATION CENTERS
12
In 10 countries on 4 continents


MANUFACTURED SITES
>98 sites
In > 30 countries


GLOBAL REACH
>150 countries

Our Journey:



Dow Thailand operates 13 factories in **Rayong province**, located in Map Ta Phut Industrial Estate, Asia Industrial Estate, and WHA Eastern Industrial Estate (Map Ta Phut).

Learn more about
Dow Thailand



www.dowfamilythailand.com



DOW'S MAIN PRODUCT GROUPS

1. Performance Materials & Coatings
2. Industrial Intermediates & Infrastructures
3. Packaging & Specialty Plastics



DOW THAILAND GROUP'S KEY MARKETS

1. Packaging Industry
2. Building & Infrastructure Industry
3. Mobility
4. Consumer Care
5. Electrical Appliances Industry
6. Electronic Industry
7. Paints & Coatings Industry
8. Adhesives & Sealants Industry

31,800 metric tons of CO₂ reduced from improvement in the Polyethylene, Propylene Oxide and Polyurethane process.

Siam Polyethylene co., Ltd. received the Climate Action Leading Organization (CALO) award (Gold level) from Thailand Greenhouse Gas Organization (TGO).

31,000 mangrove trees were planted with a long-term maintenance action under Dow & Thailand Mangrove Alliance Project.

“**92%** overall satisfaction with Dow Thailand's CSR programs and an **89%** community satisfaction index resulted from more than **3,400** hours volunteered by over **600** Dow employees.”

1,400 community volunteers and **200** child development centers, nurseries, and kindergartens participated in Dow-EF Project.

“Our community projects and activities benefited **102,500** people.”

More than **2,000** teachers from **1,200** schools had been trained on the Small-Scale Chemistry Laboratory under the Dow Chemistry Classroom Project.

OUR 2023

ENVIRON

ES



SOCIAL

HIGH LIGHTS

MENTAL



SG



GOVERNANCE

132 projects were submitted for DOW-CST Award from 50 provinces (the highest team participation ever).

7 New Carbon Footprint Label Products (CFP) and Carbon Footprint Reduction Labels were added, bringing the total number of certified products to **47**.

Thailand is **1** of **7** countries to receive the Dow Business Impact Fund for the Small-Scale Pyrolysis Unit Project, to transform plastic waste back into oil which can be used to produce new plastic resins.

Building Thailand's 1st MRF for plastic circularity with a social enterprise model located in Ban Chang, Rayong Province with capacity **1,000 – 1,200** tons per year of used materials.

Over **136.5** tons of waste have been collected and sorted throughout the year.

65 Students received an opportunity to work at Dow through an internship program.

New breakthrough record of Zero LIFE and LIFE-potential-altering health incidents (LIFE and P-LIFE) for **4,673** days

E: ENVIRONMENT

SUSTAINABILITY GOALS & TARGETS

Dow Thailand is committed to **protecting our climate**, **transforming the waste** with circular/renewable solutions, and **closing the loop** through the innovation of recyclable or reusable materials. In 2023, we continue to accelerate our actions towards achieving the **2025 Sustainability Goals** to maximize economic, environmental, and social values

2025 SUSTAINABILITY GOALS:



SUSTAINABILITY TARGETS



Carbon Reduction



1. Protect the Climate

By 2030, Dow will reduce its net annual carbon emissions by 5 million metric tons versus its 2020 baseline (15% reduction). By 2050, Dow intends to be carbon neutral.



Eliminating Plastic Waste



2. Transform the Waste

By 2030, Dow will transform plastic waste and other forms of alternative feedstock to commercialize 3 million metric tons of circular and renewable solutions annually.



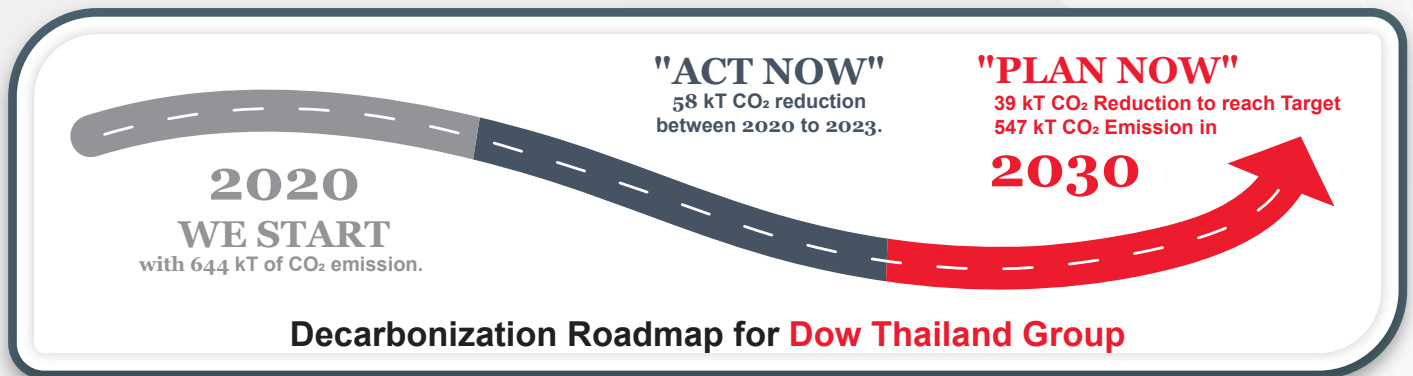
3. Close the Loop

By 2035, Dow will close the loop by enabling 100% of Dow products sold into packaging applications to be reusable or recyclable.

2023 HIGHLIGHTS: ENVIRONMENT

By embracing global sustainable goals and targets, Dow Thailand Group continues to advance a sustainable future through its expertise in materials science and partnerships. This involves a continual enhancement of processes and products, coupled with collaborative efforts alongside our partners.

CARBON REDUCTION: **PROTECT THE CLIMATE**



OUR PROCESSES

To protect the climate and move toward a sustainable future, Dow Thailand Group continues to reduce GHG and improve efficiency in our operations. The 2023 highlights of our Green House Gas (GHG) Reduction in Operations include:

Siam Polyethylene Plant Reduced **~2,700** metric tons of CO₂ Emission

- Optimizing steam operating setpoint at flare to minimize steam consumption.
- Utilizing new plug flow reactor to reduce electricity consumption at reactor pump.
- Improving ethylene recycle process to reduce fresh ethylene consumption.

Propylene Glycol Plant Reduced **~28,900** metric tons of CO₂ Emission

- Improving Propylene recovery from a scrubber.
- Optimizing Steam utilization process.
- Improving efficiency to optimize power consumption.

Polyol & Formulated Polyol Plant Reduced **~200** metric tons of CO₂ Emission

- Reducing Cycle time of pre-mixing grade product and implement Flexible cycle time reduction to reduce power usage.
- Optimizing steam utilization in the product storage tank.
- Improving power efficiency.

OUR PRODUCTS

Dow's products not only contribute to the achievement of our sustainability goals and targets but also benefit our planet, aiding customers in their own sustainability endeavors. Through continuous product improvement, Dow offers a technology portfolio and application expertise to advance the journey toward a low-carbon society and a sustainable world.

Our seven new products used in the packaging sector and solar cell production with the Carbon Footprint of Products (CFP) certification in 2023 were:

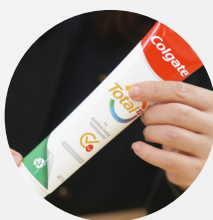
AFFINITY™ 1880	ENGAGE™ PV 8680
AFFINITY™ 1881	ENGAGE™ PV 8688
DOWLEX™ 2038.68G	INNATE™ TF80
ELITE™ 5538G	

This helps local producers strengthen their competitive advantages as the global market is concerned about greenhouse gas emissions.

IN ADDITION, DOW THAILAND GROUP LAUNCHED A NUMBER OF NEW SUSTAINABLE PRODUCTS IN 2023:

Recyclable laminate toothpaste

Developed from a single material plastic using Dow's ELITE™ and DOWLEX™ resins without a layer of aluminum foil making it easy to be recycled. In collaboration with Kimpai Tubes, it is **the 1st laminated tube in Thailand** that was recognized by The Association of Plastic Recyclers (APR).



Sustainable Cosmetics

A nature-derived, high-performance surfactant, EcoSense™ APP-1000 was nominated & shortlisted for Best Ingredient Award 2023 from the in-cosmetics Asia event, and Beauty Rebalanced 2.0 & Sustainable Hair Care Collection, representing a significant advancement in sustainable personal care with 13 innovative products that harness natural extracts and biodegradable ingredients.



BETAFOAM™

Acoustical Foam Systems have superior noise, vibration, and harshness (NVH) reduction. The innovation also reduces carbon emissions by making the car lighter compared to other materials.



ECOGROUND™

Utilizing a Waterborne Acrylic Binder System, an innovative playground that prioritizes safety, health, and environmental friendliness.



Food packaging designed for recyclability

An innovative food packaging bag made from Dow's special grade of polyethylene certified by Thailand Greenhouse Gas Management Organization (TGO) as a low carbon footprint product. This collaboration with Absolute Flexible accelerates the competitiveness of Thai food products in European markets with its recyclable benefit.



SURLYN™ for LVMH Beaty

This perfume packaging utilizes bio-based, renewable raw materials such as cooking oil and bio residues from other industries. It is developed with the goal of creating value from waste and reducing the extraction of natural resources.



Liquid Applied Sound Damping –LASD

This liquid-sprayed material is used for cabin floor coating to reduce interior noise. It utilizes a smaller amount of high-performance material, contributing to a lighter vehicle, energy saving, and reduced CO₂ emissions.



DIAMONDLOCK™

Polyurethane adhesive which can adhere to a variety of surfaces. It is easy to use, has low viscosity, and contains non-detectable Volatile Organic Compounds (VOCs). Diamondlock™ meets green buildings criteria (LEED certified) set by the U.S. Green Building Council and has won a bronze medal from the Edison Awards.



OUR COLLABORATIVE PLATFORMS

Dow Thailand engages actively in national and international associations and collaborative platforms, leveraging our efforts to maximize positive environmental impacts and champion sustainable development initiatives.

DOW & THAILAND MANGROVE ALLIANCE:

Initiated from our mangrove and biodiversity conservation as the efforts to mitigate global warming and prevent marine debris since 2008, Dow Thailand, Department of Marine and Coastal Resources (DMCR), and Rayong Province established Dow & Thailand Mangrove Alliance as a mangrove conservation network.

Key activities and achievement were:



MANGROVE HABITAT CONSERVATION:

31,000 mangrove trees were planted with a long-term maintenance actions (accumulating from 2009).

MANGROVE MONITORING SYSTEM:

Dow Thailand collaborated with DMCR and Geo-Informatics & Space Technology Development Agency (GISDA) in applying satellite data for monitoring of mangrove, planning mangrove management, and preventing mangrove encroachment.

<https://change.dmcg.go.th/main>



WASTE COLLECTION FROM MANGROVE FOREST:

3.5 metric tons marine debris were collected (accumulating from 2020).

NETWORK VOLUNTEER FOR MANGROVE CONSERVATION:

Involving a total of **3,100** Dow volunteers, local communities and stakeholders (accumulating from 2009).

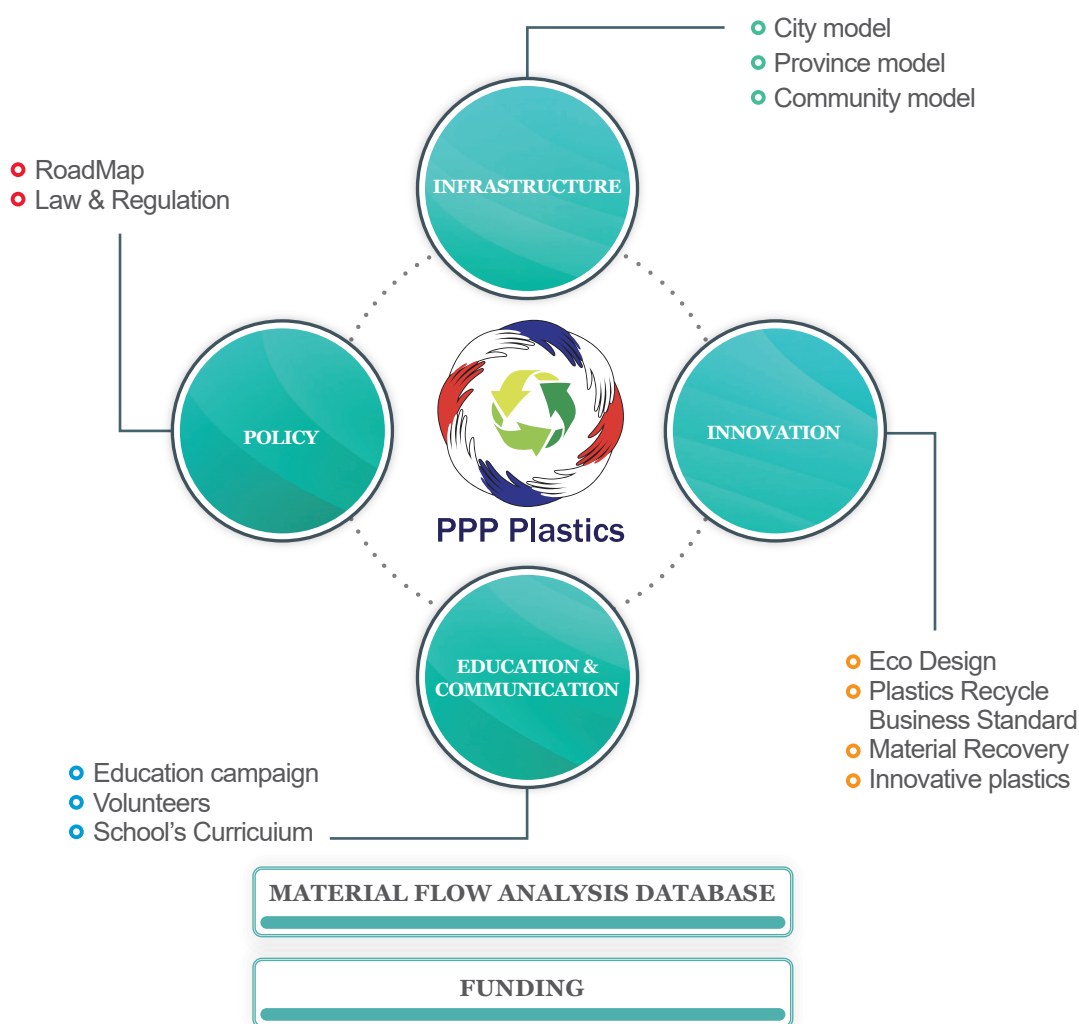
SUSTAINABLE TOURISM:

In 2023, Dow Thailand and Pak Nam Pra Sae municipality promoted sustainable tourism training program and support equipment for ecotourism such as cameras, birdwatching equipment, and uniforms. Almost **100** residents participated in the program.

ELIMINATING PLASTIC WASTE: STOP THE WASTE & CLOSE THE LOOP

Since 2018, Dow Thailand has been working closely through a public-private partnership, “**Thailand PPP Plastics**,” to build a circularity ecosystem for plastics. A number of initiatives and models were executed, covering developing and implementing **national policies**, building systems and models for **plastic circular economy**, promoting **innovation** for used plastics, supporting **education** to change behavior toward waste segregation at the sources, and establishing a **national database** for plastics.

PPP Plastics: Public Private Partnership for Sustainable Plastics and Waste Management was established in 2018 to support the implementation of Roadmap on Plastic Waste Management. Dow Thailand is a founding member and taskforce leader of PPP Plastics.



The knowledge, experience, and lessons learned from implementing projects under PPP Plastics were integrated and analyzed to identify approaches to further strengthen a waste management system in Thailand to concretely drive a circular economy for used materials, especially plastics. In 2023, “**Smart Recycling Hub**” project was developed to address challenges on waste management systems and transform to a circular economy. The project integrated technology and innovation of national scientific institutes and extensive knowledge from international experts.

“SMART RECYCLING HUB PROJECT”

“Smart Recycling Hub Project” aims to recover high-quality plastic feedstock of at least **50,000 tons/year** by 2026. The project has been piloted in Bangkok & its vicinity, plus three provinces (Chachoengsao · Chonburi · Rayong) within Eastern Economic Corridor (EEC).

PROJECT SCOPE



Feasibility studies



Building Infrastructure - Material Recovery Facility (MRF) & circular economy ecosystem - Law and regulations



Building capacity of the formal and informal sector



Registration of the informal sector

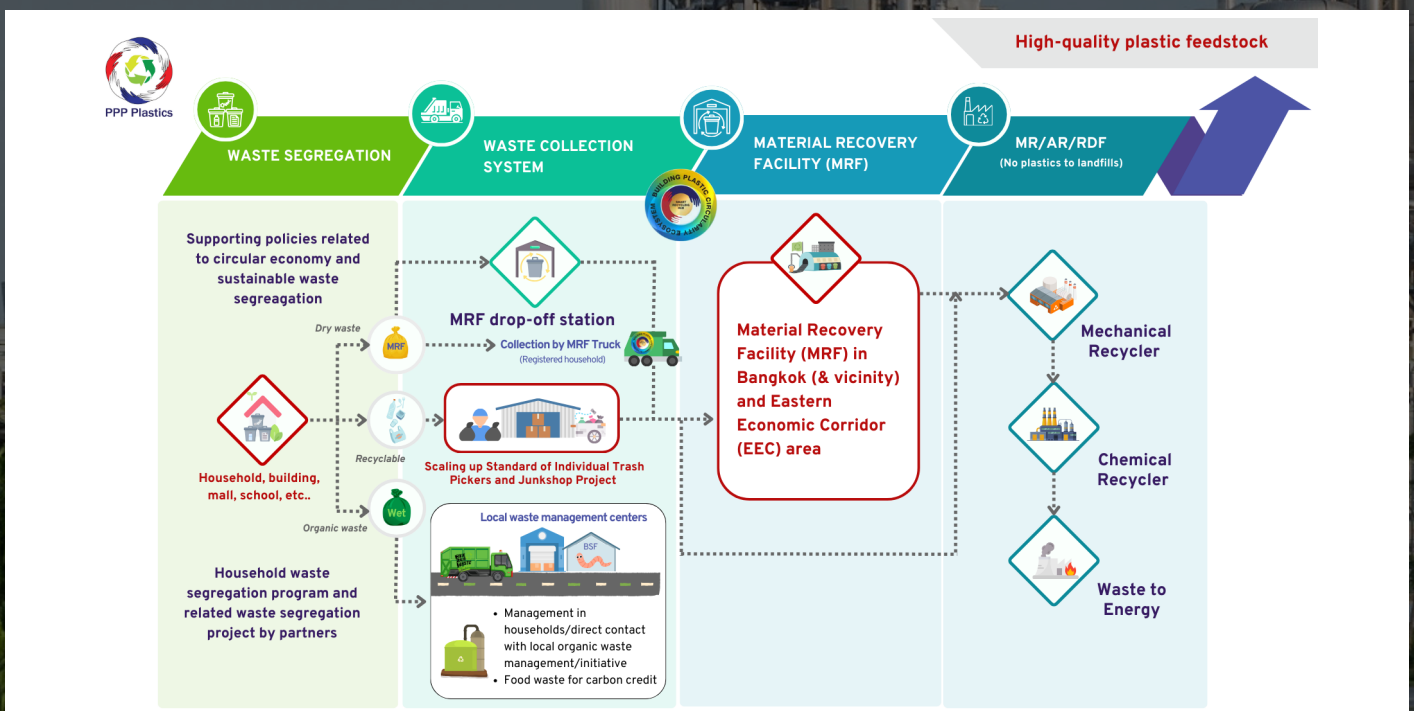


Communication and advocacy for waste segregation at the source



Partners joining collaboration announcement of Smart Recycling Hub in September 2023

The diagram below shows the integration of waste management elements, current policies, waste management models, and initiatives under the Smart Recycling Hub project to build a plastic circular ecosystem.



BUILDING BLOCKS OF SMART RECYCLING HUB

Waste management and circular economy policies

Dow Thailand, together with our public-private partner, has been actively supported the development and implementation of the national policies including **National Agenda on BCG Model, Roadmap on Plastics Waste Management, EPR Policy, and Eco-design policy.**



Waste segregation at the sources models and initiatives

The community waste segregation, infrastructure models, and initiatives supported by Dow Thailand and through our efforts via PPP Plastics which have been integrated in the Smart Recycling Hub include:



Wangwa Model and Rayong Less Waste: Scaling up community waste segregation model and income generation from sustainable waste management in Wang Wa Community, Rayong province, to provincial waste management in all 68 municipalities in Rayong.

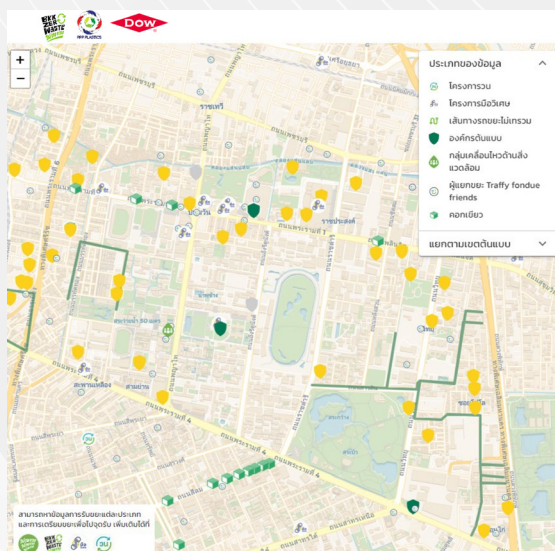


Paklad Zero Waste: Developing youth leaders and a zero-waste school network in Paklad Muslim community, Samutprakarn province.



KohKlang Model: Promoting community waste segregation at sources and additional income generated from a used material model and building a community learning center at KohKlang Community in Bangkok.

BMA Green Map: Initiating an online map for waste segregation initiatives, drop off points, and a network of active citizens for sustainable waste management in Bangkok. <https://greenmap.vercel.app/>



Magic Hand x Won and BMA Magic Hand: Establishing drop off points for plastics, starting from collecting 12 types of flexible plastics through Magic Hand x Won and expanding to collecting all types of plastics including flexible film, HDPE, PET, mixed plastics, and UHT cartons (BMA Magic Hand).



The Siam Pieces Project: Collaborating with Siam Piwat to create a model for Zero-Waste to Landfill for malls and shopping centers and a model for enhancing the capacity of the informal sector/ junk shops.



Klongtoei Model and Eco-digiclean Klongtoei: Building on waste segregation at the sources for buildings in big cities and developing a national digital platform "Recycling Market" to match households and buyers for recyclable materials (junkshops/ waste pickers).



Banchang MRF: Building Thailand's first MRF for plastic circularity with a social enterprise model located in Ban Chang, Rayong Province. The Banchang MRF's capacity can recover 1,000 – 1,200 tons per year of used materials.



S: SOCIAL

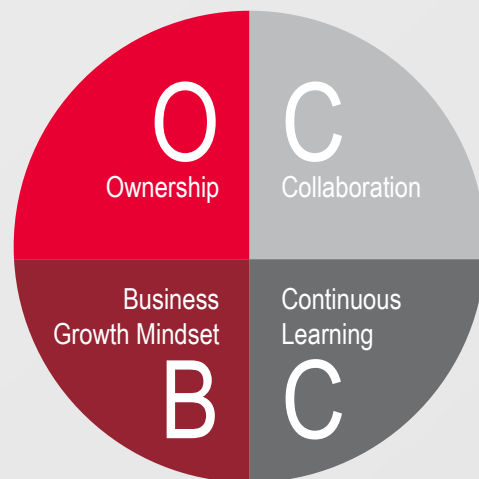
Dow Thailand places a high priority on **Inclusion, Diversity, and Equity** (ID&E) for all. We have embraced Dow's global ID&E strategy covering seven key areas with the vision of becoming a global leader in valuing inclusion, fostering workforce diversity, and promoting fairness for everyone.



OUR PEOPLE

We believe that everyone can make a difference at work by creating good day-to-day experience for others.

Dow Thailand promotes “**OCBC culture**” among our people; and adopts six dimensions: **Healthy, Happy, Easy, Wealthy, Family, and Opportunity**. These dimensions ensure a positive and fulfilling experience for our people throughout their career journey from entry to retirement.



DOW IS THE WORLD “Great Place to Work®”

In 2023, Dow Thailand was certified as a Great Place to Work®. We prioritize our people; committing to robust company cultures; and consistently live by our core values.

Company cultures: Inclusion, Diversity and Equity

Core values: Integrity, Respect for people and protecting our planet.



We're a **Great Place to Work®**
Certified™ Company!



WHAT MAKE **DOW** THE WORLD'S “Great Place to Work®”

We ensure a safe workplace and created a special Employee Experience (EX) program to meet the unique needs of our people and support freedom of work.

EMPLOYEE SAFETY IN WORKPLACES

ZERO

- LIFE and P-LIFE injury recorded injuries / illness events “since 2011”.
- Process Safety Incidents
- Process Safety and Containment Events (PSCE) Compliance Deviation Level 1 and Level 2 for “7 consecutive years”

New Breakthrough record of Zero LIFE and
LIFE-potential-altering health incidents (LIFE and P-LIFE) for
4,673 days

EMPLOYEE RESOURCE GROUPS (ERGs)

Employee Resource Groups (ERGs) play a pivotal role in fostering a diverse and inclusive workplace by offering a platform for active engagement, innovative ideas sharing, and making impact on society. Through ERGs, our people can showcase their talents, enhance their skills and grow professionally while driving positive changes to their organizations and communities.



GAAN (Global African Affinity Network):
A network for employees who are interested in African culture.

pr!me

PRIME: A network and allies for employees aged 50+
• Thailand Sustainability Project Competition
• Prime Webinars on retirement plan and financial well-being
• Mentorship program



GLAD: A network and allies for LGBTQ+
• Happy Pride Month program



ADN (Asian Diversity Network): A Network for employees who are interested in Asian cultures.

- Fortune Cookies Game on Chinese New Year
- Songkran Festival (or Thai New Year)

RISE

RISE: Peer-to-peer assistance for employees with less than 8 years of service at Dow.



DEN (Disability Employee Network): A network to support physically and mentally challenged employees.

- Old calendars donation as materials for braille book to the Foundation for Blind under the Royal Patronage of H.M. the Queen
- World Autism Awareness Day
- Hearing Heart Program

WIN!

WIN: A network and allies for women
• ALL In ERG Fund: The Freedom Project educates about the dangers of sexually transmitted infections (STIs) due to unprotected intercourse, and methods for testing when at risk. It also covers the differences in symptoms between HIV infection and AIDS, to ensure that youth understand, prevent, and safely manage the risks.



RISE

pr!me



WIN!

SPECIAL PROGRAM AND TOOLS FOR OUR PEOPLE

Employee's Physical, Mental, Financial Health Program

FlexBen: Flexible Benefits package for employees and family including LGBTQ+ couples.

Design Your Day: Flexible working hours ability to design a day to work from home.

EZpath tool and Listening Agent Development: Platforms to promote inclusion and psychological safety in the workplace.

Power Club, Power Program, and Power Clinic: A support program for Power application users to improve their productivity.

increased **1500%** in number
of solutions compared to 2022 (20 vs. 300+)

more than **900** person-hours/year
work reduction.

Technician Job Shadowing Program & Development: Job rotation program for employees to explore and learn a new skill or experience in distinct functions.

Skill Lane: Online courses provided for improving skills as a life-long education for up to two hundred employees per year.

Retirement Preparation: A life-long education program about effective financial awareness and management in preparation for retirement.

Happy Go Round: Joyful activities to reduce a stress such as painting classes, cooking classes, and others offered to employees.

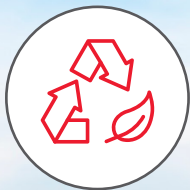
Accelerate Great & PacD Application: Peer-appreciation program utilizing digital technologies to enhance employees' experience.



OUR COMMUNITY

Dow Thailand continues to embrace Global Citizenship priority areas to drive progress within our communities and advocate for positive social transformations.

Our Global Citizenship Strategy aligns with Dow's ambition by promoting an inventive, sustainable, and inclusive future where our communities can thrive, all individuals have equitable access to STEM and skilled trades careers, and our people are empowered to drive changes. Three priority areas* are:



Sustainability



Thriving Communities



STEM & Skilled Trades

**Renamed according to new Dow Global Citizenship Strategy (2024)*

SUSTAINABILITY:

Dow Thailand advocates for circularity, decarbonization, waste management, and healthy ecosystems, focusing particularly on communities bearing a disproportionate share of the risks and costs associated with the environment.

#PullingOurWeight

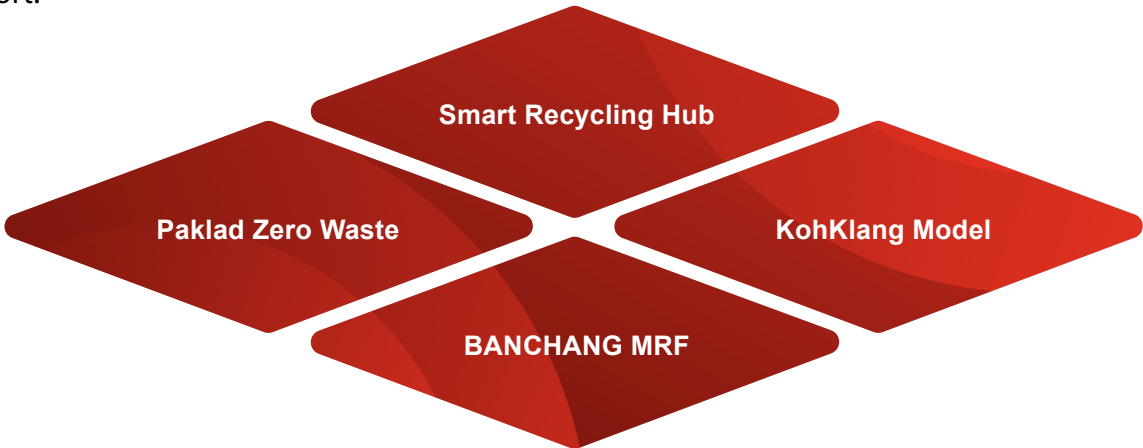
Launched in 2003 and aligned with Dow's global initiatives, Dow Thailand Group #PullingOurWeight activities address marine debris issues through collaboration with partners and local communities in Rayong province and in Bangkok. This goes beyond a single cleanup day. In addition to beach and waterway cleanups, activities also promote responsible waste management through hands-on trash pick-up experiences, educational programs, and exhibitions. Volunteers, including Dow Thailand's customers, are empowered to separate waste at its source. The cleanups and educational activities organized throughout the year have collected and sorted over **136.5** tons of waste (accumulating from 2003).

Highlight activity: **International Coastal Cleanup Day Activity**

A large-scale cleaning effort is held on every 3rd Saturday of September, coinciding with International Coastal Cleanup Day. Dow Thailand has led the beach clean-up on this day in Rayong province for 21 consecutive years since 2003, with over **3,000** volunteers in 2023.

WASTE MANAGEMENT AND CIRCULAR ECONOMY PROJECTS

Our projects on waste management and circular economy are described in the "Environment" section of these report.



THRIVING COMMUNITIES:

“With **92%** overall satisfaction towards Dow (Thailand)’s CSR programs and an **89%** community satisfaction index resulting from **3,443** hours volunteered by **618** Dow employees, these endeavors showcase tangible benefits that align with stakeholders’ interests and contribute to sustainable development and enduring success.” Our projects and activities benefited **102,500** people.

2023 ACTIVITIES HIGHLIGHT FOR OUR COMMUNITIES:

Dow’s employees participated in local cultural events, religious rituals, school activities, and charity programs to strengthen relationships with the communities and enhance well-being in the neighborhoods.

CONSERVATION AND PROMOTION OF THAI TRADITIONAL FABRICS

Dow Thailand supports and promotes 3 local community enterprises producing traditional fabrics in Rayong Province and develops learning centers.

- The Rayong Local Textile Conservation Center, Ban Phe Municipality (Tha Muk-eyelet weaving technique)
- The Khlong Nam Hu Community Enterprise, Map Ta Phut Municipality (using rice milk as part of fabric softener)
- The Tan Batik Community Enterprise, Ban Chang District



These 3 local communities took parts in “**Weaving Our Stories**”- the 190th anniversary of diplomatic relations between the United States and Thailand.



Scan to
learn more



ENGAGING IN LOCAL TRADITIONAL ACTIVITIES

Boon Khao Lam: Local tradition in the 3rd month of the lunar calendar in which communities come together to make Khao Lam (sticky rice with coconut milk in bamboo tubes). We provided ingredients to make Khao Lam to 29 communities in Map Ta Phut.

Songkarn: Thai New Year and National Elderly Day. We participated in Songkran and visited 43 communities in Map Ta Phut and Banchang. In addition, we co-organized recreation activities for the elderly and provided food and traditional gifts to show respects and appreciation.

Kathin Ceremony: Rope offering to monks at the end of Buddhist Lent. We partnered with the community to hosted Kathin in 18 temples and raised donations to support temples and Buddhist communities.

Loy Krathong: Light festival taking place on the night of the full moon in the 12th month of the Thai Lunar calendar to worship the Goddess of Water. We celebrated the festival with more than 10 communities.

Grand Mosque's event: Making contributions and participating at the Grand Mosque's event with the Islamic community in Map Ta Phut.



COMMUNITY PARTNERSHIP ASSOCIATION (CPA)

The first collaboration among industrial entrepreneurs in Thailand working toward developing an environmentally friendly industry and promoting sustainable communities. Dow Thailand Group is a founding member and active member of CPA. 2023 highlight were:



Rayong Industrial Estates achieved the highest eco-industrial city scores in Thailand.

100% of CPA's member company facilities renewed Eco Factory Certification.



60 community enterprises benefited through Thammasat Model, and around 15-million-baht additional income generated. (250k per enterprise).

> 1,000 fellowships and scholarships provided to nursing/ undergraduate/ vocational students in Rayong (since 2011).

15 communities were awarded the LESS Model (Low Emission Support Scheme) which is a project that helps create a low-carbon society.

1,500 people/year benefiting from CPA's Mobile Clinic, operated since 2011.

6,200 students and teachers from 24 schools in Rayong participated in career and higher education guidance seminars.

NEIGHBOR CARE PROJECTS

For 10 consecutive years, Dow Thailand has engaged approximately **1,600** Dow volunteers in almost **60** projects and activities to improve the well-being of communities.

Highlight projects in 2023 includes:

COMMUNITIES

- Construction of sport court for elderly at Samnakthon Subdistrict Administrative Organization
- Renovation of library room “Happy Club” for elderly at Banchang Municipality.
- Construction of recycled plastics concrete blocks walkway at Khotpor Park (Chedi Klangnam) Rayong.

SCHOOLS & YOUTHS

- Renovation of playground for safety at Watnoenkraprok School
- Renovation of school’s toilet for hygiene at Watsakaew School
- Setting up vegetable plots for school lunch at Bankhaohuaimahad School.
- Organizing Dow Next Gen “English Camp” at Chomchonwatsuwanrangsang School.

OTHER CONTRIBUTION TO COMMUNITIES

Additional contributions of Dow Thailand to national foundations, communities, and schools in 2023 were:

- Contributing to annual “Cold Weather Relief Assistance” to **Red Cross Thailand** by donating winter gears.
- Supporting **the Prostheses Foundation for HRH Princess Mother** by providing polyurethane products to produce prosthetic legs.
- Providing equipment for first aid rooms in 5 schools in Rayong Province, including Wat Prachummit Bamrung School, Wat Noen Kraprok School, Ban Phayun School, Wat Map Chalud School and Wat Takuan School
- Participating in and contributing to the “9 Months 9 Walks for Good Health and Happy Life” activities in collaboration with Ban Chang Municipality.
- Supporting essentials for mothers with newborn through Health Promotion Group, Rayong Provincial Public Health Office to promote early childhood development.



STEM & SKILLED TRADES:

YOUTH AND EARLY CAREER DEVELOPMENT PROJECTS AND INITIATIVES

Dow Chemistry Classroom: In 2013, Dow Thailand, alongside the Chemical Society of Thailand, initiated the "Dow Chemistry Classroom" project to enhance chemistry education through Small-Scale Chemistry Laboratory techniques. The project's influence expanded in 2021 with a crucial collaboration with the Office of the Basic Education Commission, Ministry of Education (OBEC). Key activities include:



- **Public On-site and On-line Trainings** on small-scale chemistry laboratory for high school science teachers in Thailand. The trainings were organized in Bangkok and including caravan session with Nation Science Museum (NSM) throughout Thailand region.

- **Dow Academy training sessions (Train the Trainer)** for intermediate educators to provide an opportunity for educational advancement.

At the end of 2023, more than 2,000 teachers from 1,200 schools had been trained on the Small-Scale Chemistry Laboratory under the Dow Chemistry Classroom Project.

- **DOW-CST Award** a competition for applying the small-scale laboratory to creating new experiments. In 2023, 132 projects were submitted from 50 provinces (the highest team participation ever). 32 winning teams will be supported to participate in Pure and Applied Chemistry International Conference (PACCON 2024).

Dow-EF Project: Promoting the development of brain's Executive Function (EF) in early young children through systematic learning methods and activities in collaboration with Rak Luke Learning group. This project has been implemented for 8 consecutive years.

2023 key activities included:



- Organizing Play & Learn with EF on Children's Day
- Online trainings on how to raise children using EF
- EF Guideline Training for teachers in Rayong and expansion to Bangkok in 2023 by **60** EF facilitators.

- **1,400** community volunteers and 200 child development centers, nurseries, and kindergartens participated.

FIRST® Lego® League & FIRST® Tech Challenge: Promoting STEM education and developing critical thinking, innovation and invention via robotics development and computer programming competitions. We have **5** Dow volunteers as judges.

- **50** team participated in FIRST® LEGO® League Challenge, and **40** team participated in FIRST® LEGO® League Explore, with a total of **600** participating kids (season 2023/2024)

- 5th First® Tech Challenges organized at The Prince Royal's College, Chiangmai a total of four hundred youths participated. Four winning teams will be partially supported by Dow Thailand to compete in Houston, Texas in the USA in 2024.



PARTNERING TO BUILD A STRONG MANUFACTURING WORKFORCE

Dow Thailand builds a talented manufacturing workforce through providing opportunities for internship program, scholarships, and awards.

Internship Program: Opportunities for students to explore and learn from hands-on approaches in meaningful projects, and workshops for interns “The Secret Skill” to develop soft skills critical for work.

65 students from universities and technical colleges— received an opportunity to work at Dow through an internship program in 2023.

Scholarships

Dow Thailand has been providing scholarships to promoting science and technology learning, and developing STEM workers into the future labor markets for more than 20 years.

In 2023, 6 Science, Technology, and Engineering scholarships were provided through national leading universities to promote chemical engineering.



Awards and MOU

Supporting in Prime minister's Science Award: Dow Special Award, junior high school level to the Bangkok Christian College, Bangkok team with a project to study factors affecting the shape change of sago beetle worms.



SIGNED MOU with the Faculty of Engineering, Mahidol University for collaboration on sharing our knowledge, experience, and innovative technology in the classrooms to disseminate knowledge and elevate the skills of Thai engineers to a worldwide standard.



G: GOVERNANCE

Dow Thailand is committed to maintain high standards in our work, products, and conduct globally. We adhere to the highest ethical standards, guided by our core values: Respect for People, Integrity, and Protecting Our Planet. Our strong corporate governance not only benefits shareholders but also builds trust in our company.

DOW VALUE:
RESPECT FOR PEOPLE, INTEGRITY,
AND PROTECTING OUR PLANET

OUR APPROACHES INCORPORATE:



Independent Board oversight of strategy, risks and opportunities.



Maintaining a Board with diverse backgrounds and relevant skills and experiences, with over **50%** women at the management level and higher.



Engaging regularly and receiving feedback from a wide variety of stakeholders, including stockholders, customers, suppliers, and employees.



Aligning ESG approach and goals with the company's largest areas of enterprise risk and opportunity.



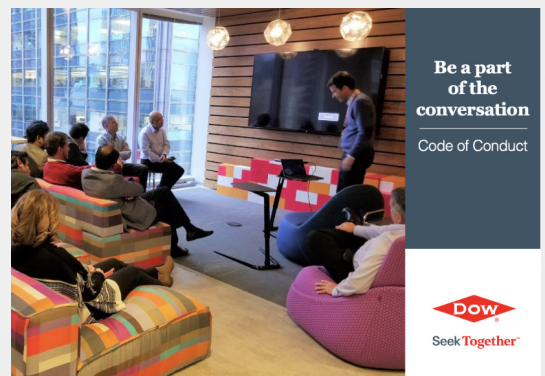
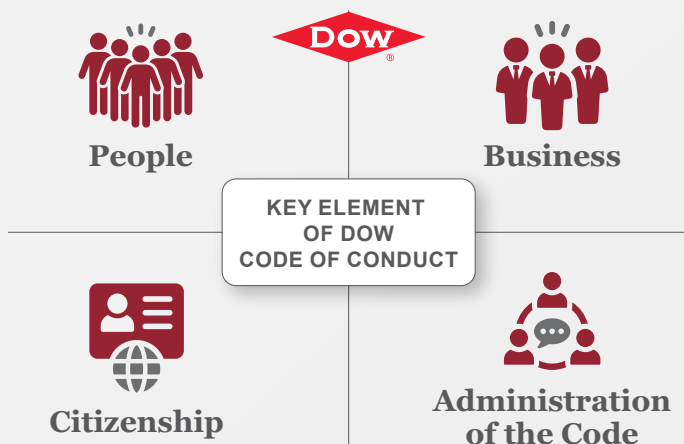
Designing compensation programs to support our business and ESG priorities.



Ensuring a culture of integrity through an effective code of conduct and ethics program.

OUR INTEGRITY FRAMEWORK

The Dow Code of Conduct provides a framework for making ethical choices that comply with the law and demonstrate strong principles and social responsibility in all our business practices.



Download Dow Code of conduct:
<https://corporate.dow.com/content/dam/corp/documents/legal/437-00001-01-dow-code-of-conduct.pdf>

Please visit the following link for more details of our framework for integrity



Dow Code of Financial Ethics

<https://corporate.dow.com/en-us/about-dow/corporate-governance/living-our-values/financial.html>



Dow Position on Human Rights

<https://corporate.dow.com/en-us/about-dow/corporate-governance/living-our-values/human-rights.html>



Dow Position on Respect and Responsibility

<https://corporate.dow.com/en-us/about-dow/corporate-governance/living-our-values/respect-responsibility.html>



Dow Position on Anti-Bribery & Anti-Corruption

<https://corporate.dow.com/en-us/about-dow/corporate-governance/living-our-values/anti-bribery-anti-corruption.html>

2023 HIGHLIGHT GOVERNANCE AWARDS

- **2022 Good Governance Award** for Environmental and Safety Excellence (Green Star Award) and 2016 – 2022 Gold Star Award from the Industrial Estate Authority of Thailand
- **2023 AMCHAM Corporate Social Impact Awards** with Platinum Level from American Chamber of Commerce in Thailand. Dow has been honored as an organization with outstanding social responsibility for the 13th year in a row and received a platinum award for the fourth consecutive year. This reflects Dow's commitment to creating a positive impact on society through valuable and continuous business activities in Thailand.
- **Royal Plaque of Honor** from Her Royal Highness Princess Maha Chakri Sirindhorn, the Prostheses Foundation of H.R.H.
- **Climate Action Leading Organization (CALO)** for Siam Polyethylene co., Ltd. from Thailand Greenhouse Gas Management Organization (TGO). This results from the organization's responsible efforts to reduce greenhouse gas emissions to eventually become carbon neutral.



- **Eco Factory Certification** from the Federation of Thai Industries (FTI) and the Industrial Estate Authority of Thailand (IEAT): a certification for the company's dedication to conducting business in a way that takes social, economic, and environmental concerns into account.

OUR KEY 2023 PARTNERSHIP



- United Nations Global Compact (*Promoting environmental, social and governance principles*)
- Bio-Diversity Network Alliance (*Fulfilling Sustainable Development Goals and Aichi Biodiversity Targets*)
- TBCSD (*Tackling climate change, air pollution, plastic and electronic waste, and biodiversity challenges*)
- PPP-Plastics (*Driving sustainable plastic waste management and circularity*)
- TIPMSE (*Addressing circular economy of post-consumer packaging*)
- Petroleum Institute of Thailand (*Enhancing sustainable development and competitiveness of the industry and the country*)



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