

Dow Thailand Group

SUSTAINABILITY REPORT 2015



SCG-DOW
GROUP



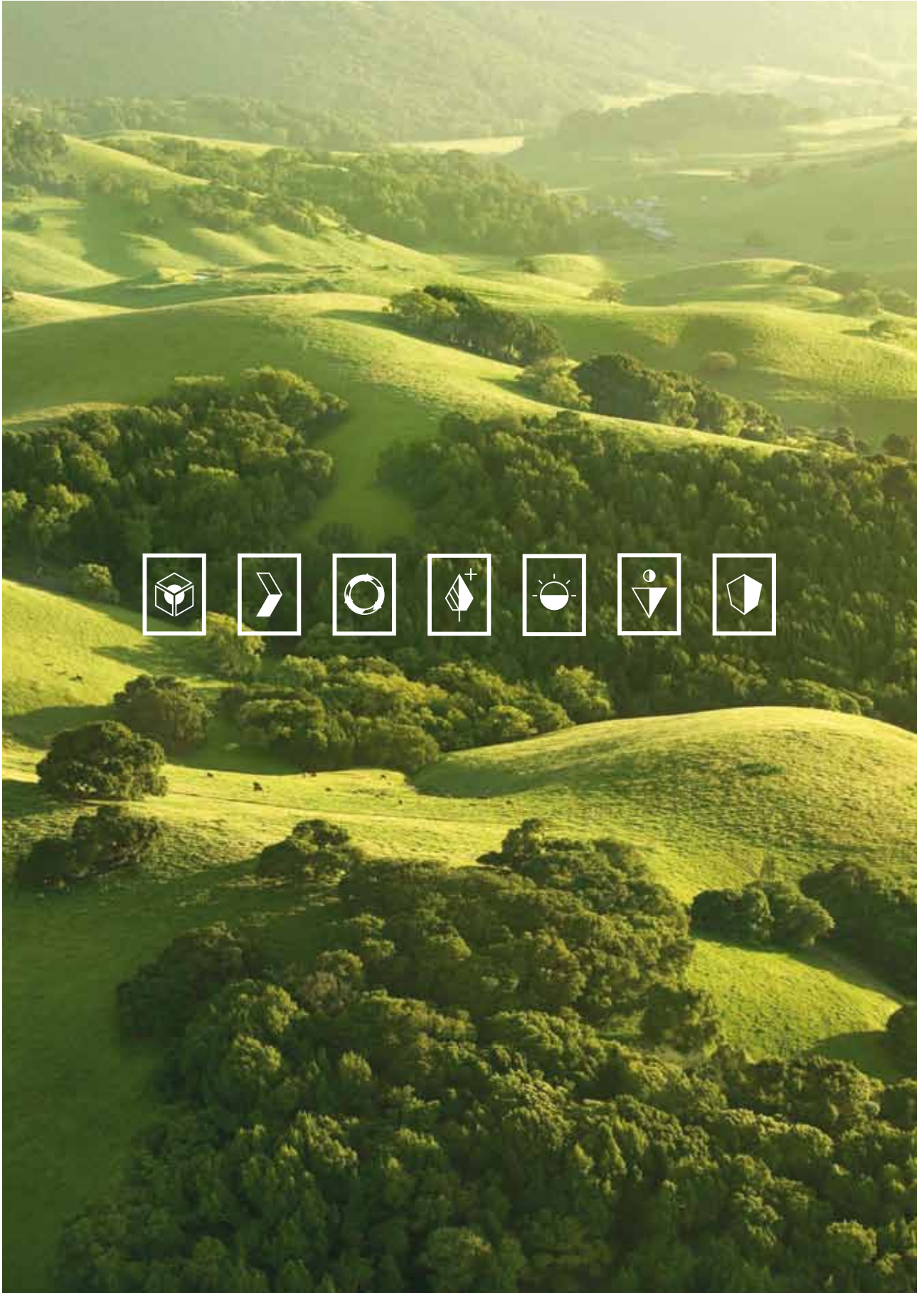
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**Moving
Sustainability
Forward**

At Dow, by combining the 'Human Element' with our passion for science – we constantly strive to deliver long-term value with sustainable, global solutions. Our 2025 Sustainability Goals will help redefine the role of business at its intersection with society. They will be our guide as we work to improve the well-being of humanity with solutions that are good for business and good for the world.

Andrew N. Liveris
Dow's Chairman and CEO



2025 SUSTAINABILITY GOALS

Redefining the Role of Business in Society

Firmly committed to our pledge to sustainability, Dow applies the principle of sustainable development to every undertaking by using resources more efficiently, providing value to our customers and stakeholders, delivering solutions for human needs, and enhancing the quality of life of current and future generations.

Dow's Sustainability Pillars

As a world leader in applied chemistry, Dow is positioned to drive changes by delivering sustainable and innovative solutions that contribute to human progress and the growth of our business. Dow organizes its sustainability focus around four key pillars.



Smart Solutions for Today

Our technologies enable our customers, and their customers, to develop products and services for a more sustainable future.



Innovations for Tomorrow

We contribute to the sustainability of society and our planet by developing innovative technologies for current and future markets.



Responsible Operations

Our infrastructure has a positive impact on our company, our communities, and ourselves, making our operations a model for others, wherever we operate.



Partners for Change

We are the leader in advancing all aspects of sustainability, openly collaborating with customers, suppliers, communities, civil society, and governments.

Dow's 2025 Goals (Blueprint), the Company's third set of sustainability-related goals since 1995, build upon its previous decade-long commitments. Dow's 2005 Environment, Health & Safety Goals (Footprint) resulted in US\$ 5 billion in safety, waste, water and energy savings after a US\$ 1 billion investment. Dow's 2015 Sustainability Goals (Handprint) provided more sustainable products and solutions addressing global challenges in food, energy, sustainable water supplies and improved personal health.

Dow's seven 2025 Sustainability Goals are as follows:



Goal 1: Leading the Blueprint

Dow leads in developing a societal blueprint that integrates public policy solutions, science and technology and value chain innovation to facilitate the transition to a sustainable planet and society.



Goal 4: Valuing Nature

Dow applies a business decision process that values nature, which will deliver business value and natural capital value through projects that are good for the Company and good for ecosystems.



Goal 5: Increasing Confidence in Chemical Technology

Dow increases confidence in the safe use of chemical technology through transparency, dialogue, unprecedented collaboration, research and the Company's actions.



Goal 2:
**Delivering
Breakthrough
Innovations**

Dow delivers breakthrough sustainable chemistry innovations that advance the well-being of humanity.



Goal 3:
**Advancing
a Circular
Economy**

Dow will work with other industry leaders, non-profit organizations and governments to deliver six major projects that facilitate the world's transition to a circular economy, where waste is designed into new products and services.



Goal 6:
**Engaging
Employees
for Impact**

Dow people worldwide directly apply their passion and expertise to advance the well-being of people and the planet. By 2025, Dow employees worldwide will apply their talents to positively impact the lives of 1 billion people.



Goal 7:
**World-Leading
Operations
Performance**

Dow maintains world-leading operations performance in natural resource efficiency, environment, health and safety.

AWARDS/RECOGNITIONS IN 2015



Green Meetings Certificate (5 consecutive years)

Thailand Business Council for Sustainable Development
(TBCSD)

- Dow Thailand Group



3Rs Awards and the Zero Waste to Landfill Achievement Awards

Department of Industrial Works, Ministry of Industry

- Polyethylene Plant
- Polyolefin Encapsulant Films Plant
- Specialty Elastomers Plant

3R+ Awards

- Polyethylene Plant
 - » Silver level from 'Reducing Wastewater from Catalyst Preparation Process Project'
 - » Honorable mention level from 'Reusing Water from Solvent Separation Tank Project'
- Polyolefin Encapsulant Films Plant
 - » Bronze level from The 'Paperless Encapsulant Process Solution Implementation Project'

2015 Good Governance Awards

Industrial Estate Authority of Thailand (I-EA-T)



"Gold Star" awards: 9 plants

- Styrene Monomer and Ethyl Benzene Plant (Siam Styrene Monomer Co., Ltd.)
- Polystyrene Plant (Siam Polystyrene Co., Ltd.)
- Polyethylene Plant (Siam Polyethylene Co., Ltd.)
- Polyol Plant and Formulated Polyol Plant (Dow Chemical Thailand Ltd.)
- Styrene-Butadiene Latex Plant (Siam Synthetic Latex Co., Ltd.)
- Synthetic Latex Emulsion Plant (Carbide Chemical (Thailand) Ltd.)
- Acrylic Emulsion Plant and Poly-Acrylic Acid Plant (Rohm and Haas Chemical (Thailand) Ltd.)



"Green Star" awards: 14 plants

- Styrene Monomer and Ethyl Benzene Plant (Siam Styrene Monomer Co., Ltd.)
- Polystyrene Plant (Siam Polystyrene Co., Ltd.)
- Polyethylene Plant (Siam Polyethylene Co., Ltd.)
- Polyol Plant and Formulated Polyol Plant (Dow Chemical Thailand Ltd.)
- Styrene-Butadiene Latex Plant (Siam Synthetic Latex Co., Ltd.)
- Specialty Elastomers Plant (Siam Synthetic Latex Co., Ltd.)
- Synthetic Latex Emulsion Plant (Carbide Chemical (Thailand) Ltd.)
- Polyolefin Encapsulant Films Plant (Dow Chemical Thailand Ltd.)
- Acrylic Emulsion Plant and Poly-Acrylic Acid Plant (Rohm and Haas Chemical (Thailand) Ltd.)
- Propylene Oxide Plant (MTP HPPO Manufacturing Co., Ltd.)
- Propylene Glycol Plant (Dow Chemical Thailand Ltd.)
- Hydrogen Peroxide Plant (MTP HP JV (Thailand) Ltd.)



Corporate Social Responsibility, Department of Industrial Works (CSR-DIW) Award 2015

Department of Industrial Work, Ministry of Industry

- Propylene Oxide Plant
- Propylene Glycol Plant
- Polyol Plant
- Formulated Polyol Plant
- Specialty Elastomers Plant
- Polyethylene Plant



Safe Enterprise Certificate

Department of Labour Protection and Welfare, Ministry of Labour

- Dow Chemical Thailand Ltd.
 - » Polyol Plant
 - » Formulated Polyol Plant
 - » Polyolefin Encapsulant Films Plant
 - » Propylene Glycol Plant
 - » Polyether Polyol Plant
- Carbide Chemical (Thailand) Ltd.
 - » Synthetic Latex Emulsion Plant
- Rohm and Haas Chemical (Thailand) Ltd.
 - » Acrylic Emulsion Plant
 - » Poly-Acrylic Acid Plant
- Siam Synthetic Latex Co., Ltd.
 - » Styrene-Butadiene Latex Plant
 - » Specialty Elastomers Plant
- Siam Polystyrene Co., Ltd.
 - » Polystyrene Plant
- Siam Styrene Monomer Co., Ltd.
 - » Styrene Monomer and Ethyl Benzene Plant
- Siam Polyethylene Co., Ltd.
 - » Polyethylene Plant (Train I)
 - » Polyethylene Plant (Train II)
- MTP HPPO Manufacturing Co., Ltd.
 - » Propylene Oxide Plant



Carbon Footprint Certificate

Thailand Greenhouse Gas Management Organization (TGO)

- Product: Linear Low-Density Polyethylene (Siam Polyethylene Co., Ltd.)
- Product: ENGAGE™ Polyolefin Elastomers (Siam Synthetic Latex Co., Ltd.)
- Product: Polyol RA440 and Monopropylene Glycol (Dow Chemical Thailand Ltd.)
- Product: Propylene Oxide (MTP HPPO Manufacturing Co., Ltd.)



Eco Factory Certificate

*The Industrial Environmental Institute,
The Federation of Thai Industries*

- Propylene Oxide Plant (MTP HPPO Manufacturing Co., Ltd.)
- Propylene Glycol Plant, Polyol Plant and Formulated Polyol Plant (Dow Chemical Thailand Ltd.)
- Specialty Elastomers Plant (Siam Synthetic Latex Co., Ltd.)
- Polyethylene Plant (Siam Polyethylene Co., Ltd.)



2015 AMCHAM Corporate Social Responsibility Excellence Recognition Award in Gold Level and Creative Partnership

The American Chamber of Commerce

- Dow Thailand Group

MESSAGE FROM THE MANAGING DIRECTOR

SR
G4-1



JIRASAK SINGMANEECHAI

Managing Director

Dow Thailand Group

**Dow Thailand's
sustainability
goals have
enabled corporate
businesses to go
hand in hand
with public benefits.**

This has been another great year for Dow Thailand Group. Besides scoring commercial successes, we garnered several awards and recognition from assorted institutions. In the first quarter, we launched the Polyether Polyol Plant in Asia Industrial Estate which did not contribute only to the domestic economy, but also to Thai industrial environmental standards through the introduction of sophisticated technologies to curb energy consumption by 50 - 70 percent apart from elimination of all solid waste.

Dow Thailand currently houses 15 world-class plants, delivering products to fulfill the demand of industrial customers, such as the consumer industry, pharmaceutical industry, plastics industry, automotive industry, electronics industry, construction industry, and others in Thailand and the Asia Pacific region. In 2015, the total production was almost two million tons.

Dow Thailand's sustainability goals have enabled corporate businesses to go hand in hand with public benefits. Such goals are valid for 10-year periods. Dow Chemical, USA, declared its sustainability operations in pursuit of sustainability goals, executed them, and achieved them for the past 20 years, namely the 2005 Sustainability Goals (during 1995 - 2005 period), and the 2015 Sustainability Goals (during 2005 - 2015 period), which were just achieved last year. The current 2025 Sustainability Goals, to be achieved from 2015 to 2025, form the global goals for Dow worldwide. These are available for your perusal on page 4.

Throughout the nearly five decades of Dow's business existence in Thailand under the sustainability approach, we have taken seriously safety and environmental concerns in parallel with the corporate citizen's roles in society. Last year we initiated projects and activities in promotion of work safety together with countless others for society and communities, all of which have been presented in this report.

The achievements and successes faced by Dow Thailand would not have become possible without the marvelous support of all employees, customers, and business partners. I would like to express my wholehearted appreciation for your continual support given to Dow Thailand Group.





STRATEGY AND PROFILE OF DOW THAILAND GROUP

Name of reporting organization

SR
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Dow Thailand Group comprises the companies of Dow Chemical Thailand and SCG-DOW Group.



Primary brands, products, and/or services

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G4-4

Dow Thailand Group consists of a total of 15 wholly-owned subsidiaries and SCG-DOW joint venture group of companies together with 15 world-class plants equipped with state-of-the-art technology and combined annual production capacity of more than two million tons of products for local and regional distribution. The group's total investment (gross initial investment in plants during start up which is not accounted for any accumulated depreciation) is approximately 135 billion baht (US\$ 4 billion) and its total assets as of December 31, 2015, was approximately 96 billion baht or US\$ 2.7 billion.

Dow Thailand Group has more than 1,000 lists of product families sold in Thailand. Either produced locally or imported for sales, these high-quality products are classified as follows.

1. Products produced in Thailand: Being Dow's largest production base in Asia Pacific, every plant of Dow Thailand Group is equipped with world-class, sophisticated technology as well as high-standard environmental and safety management systems. A variety of products are produced in Thailand and can be separated into five major groups as follows.



- Polyethylene** – The success of Dow's first polyethylene factory in Asia Pacific that effectively responded to the needs of local and international markets especially those in the Asia Pacific region has led to an opening of the second plant that is highly integrated with the first one. The new plant uses state-of-the-art process automation system, containing software developed by Dow that allows us to provide broader product coverage and faster responses to customer needs. High-quality products under this group become materials for food and consumables packaging to guarantee freshness and safety before reaching consumer's hands. Not only polyethylene is a material for packaging of dry and liquid foods, meat and cheese but also medical supplies and animal feeds. In addition, this substance can be turned into stretch cling film, durable furniture, artificial grass and outdoor furniture.
- Elastomers** – As a result of the world's most sophisticated elastomers manufacturing technology to meet rapidly-growing demands within the region, highly-flexible but durable plastic pellets are mostly used in the automotive industry especially for interior work. Elastomers can be turned into console covering, interior door panels and instrument panel components. Elastomers is also applied to exterior vehicle surface of, for example, front and back bumpers thanks to its lightness and durability that improves vehicle energy efficient and durable. Moreover, this substance can be used as a raw material for lightweight, highly flexible and high-resistant shoes. Elastomers also involves in a construction materials industry when it is used as part of roof and water-resistant materials.





- **Polyurethanes** – Being the world's leader in polyurethanes, Dow runs factories in the entire chain from upstream to downstream including propylene oxide, propylene glycol, polyol and formulated polyol as well as polyether polyol. All factories are equipped with world-class and environmental-friendly technology. Dow Thailand Group's polyurethanes business consists of the Polyurethanes Foam and the Propylene Glycol group. Flexible and rigid polyurethanes foam are used in the bedding and furniture industry where it's turned into mattresses & pillows, bath sponges as well as couch and sofa cushions. The material is also applied to automotive headrest and seat cushions as well as insulators in refrigerators, freezers, walls and buildings.

Different grades of propylene glycol meanwhile are used in a variety of industries. Food-graded materials are used as chemicals in pharmaceutical industry. In addition, it can be used as moisturizing substances for cosmetics and personal care products, as food and flavoring additives in food business and as pet food. Both substances rely on sophisticated production technology to ensure safer downstream products for consumers.



- **Coatings** – The coating business aims to design innovative products that answer to customer needs through Dow's global leadership in product research and development. The business consists of factories producing synthetic latex, acrylic emulsion and poly-acrylic acid solutions. Coating materials are used as binder for both interior and exterior water-based emulsion paint. Its resistance to pollution enables the production of paint with faint odor by reducing formaldehyde level. This unique properties help reduce costs of production while making a product more users and environmental friendly.



- **Polystyrene** – Being Dow Thailand Group's first factory built in Phra Pradaeng in 1978 before being relocated to Map Ta Phut in 1995, the polystyrene plant got raw materials from one of the Group's subsidiaries – Siam Styrene Monomer Co., Ltd., to produce multi-purpose high-quality plastic products found in a wide range of every day's item. This refers to hard, clear, high-quality plastic pellets for use in making packaging, TVs, and refrigerators, and toys as a result of its durability and safety for consumption.



Dow and SCG have jointly invested in two ethylene cracker factories and storage and port facilities service provider in Rayong province. We have also jointly invested with Solvay, the world's leading manufacturer of chemicals and special materials, to produce hydrogen peroxide, a raw material for propylene oxide. In addition, we own and operate a top-notch analytical laboratory that can analyze highly complex data and solve production-related problems to enhance our production process.



2. Dow's products imported and distributed in Thailand are classified into four categories as follows.

- **Agricultural Sciences**

Chemicals for agriculture and pest management products are under this category. The product will enhance farming productivity and can be easily dissolved. Users' safety is also our main priority. We have teams to regularly educate farmers to use agrichemical products safely. In addition, Dow Thailand Group also runs a regular health check-up program for farmers.

- **Consumer Solutions**

This refers to moisturizing substances in skincare products, thickening agents to prevent backflow, child-friendly formula shampoos and flavoring additives. Our products are safe for consumption as they are extracted or synthesized from natural raw materials such as cotton and plant fibers.

- **Infrastructure Solutions**

Products under this group are diverse. Majority of them are used in constructions or infrastructure. They will add strength and durability while remains energy-efficiency. They can be used as building insulator using in various industries (including energy industry). In addition, our high efficiency reverse osmosis water filtration system is counted under this group. This filtration system not only helps reduce energy usage but also less wastewater emission.

- **Performance Materials & Chemicals**

Solvents, Amines, Surfactants and other industrial chemicals are high-quality products under this group geared for industrial use. The business supports industrial manufacturers associated with virtually all end markets, notably electronics, agricultural chemicals, engine/heavy equipment, coatings, adhesives and inks, and detergents and cleaners.

- **Performance Plastics**

Products under this group include Elastomers and Performance Packaging, i.e. Polyethylene, Plastic adhesive, which are not produced in Thailand.

Location of organization's headquarters

SR
G4-5

Bangkok, Thailand

Countries of operation

SR
G4-6

Dow Thailand Group operates 15 plants in Map Ta Phut Industrial Estate, Asia Industrial Estate; and Hemeraj Eastern Industrial Estate in Rayong province, Thailand.

Nature of ownership and legal form

SR
G4-7

Dow Thailand Group is considered the largest manufacturing base of Dow Chemical in the Asia-Pacific region, which consists of 15 companies under two main organization structures:

1. Group of Dow Chemical Thailand

Group of Dow Chemical Thailand is a group of Dow wholly owned subsidiaries held by Dow Group in US at 99.99 percent of the shares, consisting of four companies as follows:

- Dow Chemical Thailand Ltd.
- Carbide Chemical (Thailand) Ltd.
- Rohm and Haas Chemical (Thailand) Ltd.
- Dow AgroSciences (Thailand) Ltd.

2. Group of Joint Ventures

2.1 SCG-Dow Group

SCG-Dow Group is a joint venture of equal equity between SCG Chemicals Co., Ltd. and Dow Chemical of 49.99 percent each, which forms a close-knit collaboration in five core businesses under operations by five companies and two holding companies. These seven companies under SCG-DOW Group are operated and managed by Dow Chemical as follows:

- Siam Polyethylene Co., Ltd.
- Siam Styrene Monomer Co., Ltd.
- Siam Polystyrene Co., Ltd.
- Siam Synthetic Latex Co., Ltd.
- MTP HPPO Manufacturing Co., Ltd.
- SD Group Service Co., Ltd.
- Banchang HPPO Co., Ltd.

Furthermore, Dow Chemical and SCG established a joint venture in a cracker business under the operation and management of SCG, in the form of two limited companies: Rayong Olefins Co., Ltd. and Map Ta Phut Olefins Co., Ltd., and jointly operate a storage and export facility service business under Rayong Terminal Co., Ltd.

2.2 MTP HP JV (Thailand) Ltd.

MTP HP JV (Thailand) Ltd. is a joint venture of equal equity between Solvay and Dow Chemical, which forms a close-knit collaboration under the operation and management of Solvay.

Markets served

SR G4-8



Foreseeing market trends of our products on the basis of demographic information, today's lifestyle and the world's existing natural resources, we anticipate more needs from consumers for comfort and convenience as well as faster and convergent communications. At the other end, increasing population also means higher demands for food and water resources. With this picture in mind, we focus our business in research and development that will result in innovation and technology to answer to these demands. Our products are a variety of items featuring in people's daily life to make their livelihood better, which include those that allow more people to get access to food and clean drinking water through higher agricultural productivity and more sophisticated water filtration technology.

Being Dow's largest production base in Asia Pacific, Dow Thailand Group is able to accommodate eclectic demands of local and international customers. Of our production, 15 percent are sold in Thailand while the remaining 85 percent are exported overseas.

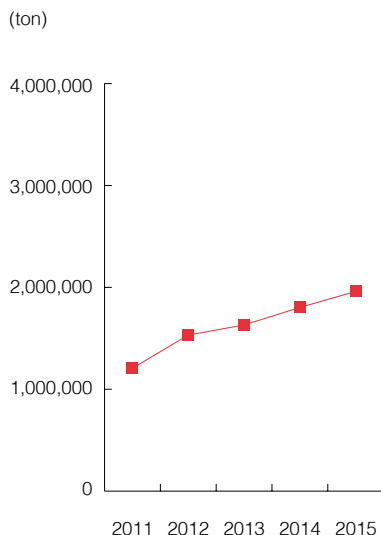
Customers that are most important are those eyeing for high-quality, high-tech and innovative products as well as those looking for business partners to enhance product development. We can find them in various industries ranging from consumer products to electronic devices and from large industries such as infrastructure, construction to energy.

Scale of reporting organization

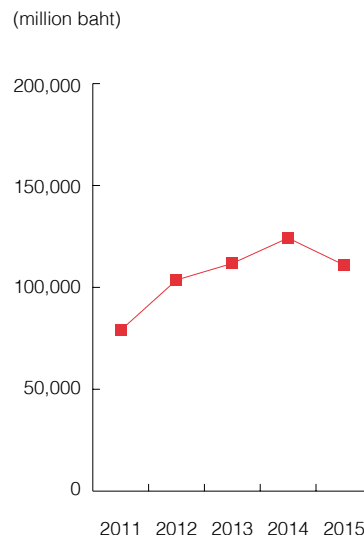
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Number of Dow Thailand employees as of December 31, 2015 is 937 people. Currently, there are a total of 15 manufacturing facilities in Map Ta Phut Industrial Estate, Asia Industrial Estate and Hemaraj Industrial Estate. Thailand is the largest manufacturing base of Dow in Asia Pacific. Thailand has around 7 percent of Dow's asset base worldwide.

Total production of Dow Thailand Group in past 5 years



Net sales of Dow Thailand Group in past 5 years



Remarks:
Net sale of Thailand entities is unaudited.

Total workforce

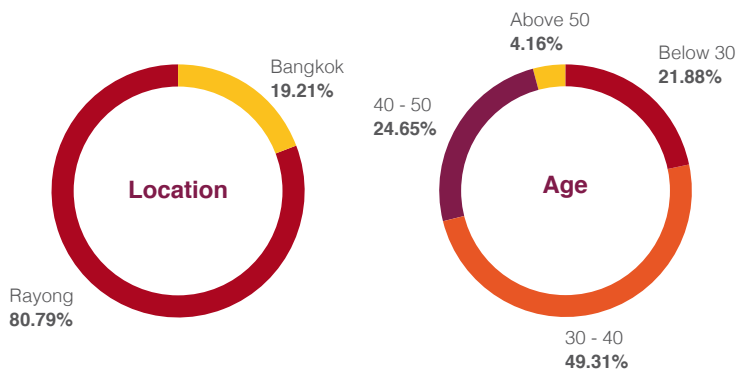
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Total number of employees by gender and location

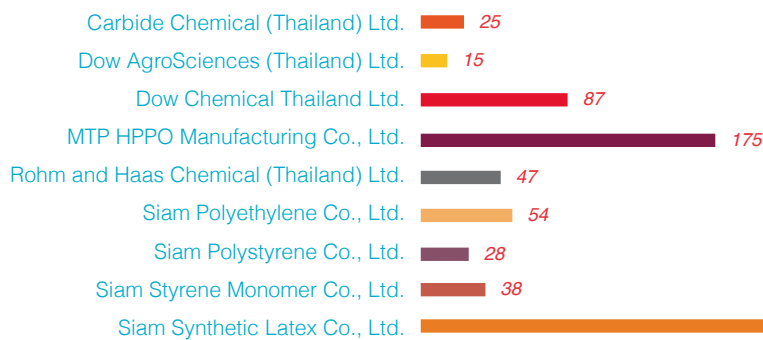
Location/ Gender	Female		Male		Number of employees	
	Persons	%	Persons	%	Persons	%
Bangkok	113	12.06	67	7.15	180	19.21
Rayong	191	20.38	566	60.41	757	80.79
Grand total	304	32.44	633	67.56	937	100.00

Total number of employees by age and gender

Age/ Gender	Female		Male		Number of employees	
	Persons	%	Persons	%	Persons	%
Below 30	65	6.94	140	14.94	205	21.88
30 - 40	163	17.40	299	31.91	462	49.31
40 - 50	64	6.83	167	17.82	231	24.65
Above 50	12	1.28	27	2.88	39	4.16
Grand total	304	32.44	633	67.56	937	100.00



Total number of employees by Company



Percentage of total employees covered by collective bargaining agreements

SR
G4-11

Dow Thailand Group does not have employees under collective bargaining agreements.

Dow Thailand Group's supply chain

SR
G4-12

Dow Thailand Group operates in an integrated manufacturing environment. Basic raw materials are processed through many stages to produce a number of products that are sold as finished goods at various points in those processes. The two major raw material streams that feed the integrated production of the Company's finished goods are ethylene-based and propylene-based raw materials.

These raw materials were fully intergraded back to crackers which we also have shared in them. Connection is via pipeline. Dow Thailand has annual non-hydrocarbon procurement. The Group purchases co-monomer raw materials including Octene, Hexene and Butene on both short and long-term contracts.

Our diverse, industry-leading portfolio of businesses offers a broad range of technology-based products and solutions and distributed to customers in Thailand and across Asia Pacific region. Products are distributed to domestic customers via pipeline, bulk truck, container truck, and to export customers via bulk marine vessel, dry cargo container, and ISO tank.



Distribution warehouse at Laem Chabang

Thailand Purchasing supports the value and growth initiatives of Dow Thailand Group through purchases of goods and services that deliver competitive advantage and value enhancement. Purchasing accomplishes this by working closely with the Dow Sourcing Organization to ensure the effective leverage and implementation of global sourcing strategies and agreements and developing local strategies and suppliers to meet client needs. The Purchasing function follows Dow Global Purchasing Policy and Procedures as guiding principles, and defining Thailand specific procedures as required.

Procurement Services below are in scope if sourced from third party supplier:

- Raw materials and packaging including external manufacturing
- Maintenance/Repair/Operation (MRO) and Capital projects procurement
- Logistics
- Corporate services

Supplier management process

Supplier Qualification is multi-functional coordination in various activities in order to qualify new material or new supplier and ensure that each responsible function approved and documented supplier's details in Approved Vendor List (AVL). We perform Supplier Section by negotiating an agreement/contract based upon supply and competitive price from supplier in Approved Vendor List (AVL). We monitor and evaluate Supplier Performance Evaluation via the tool called Quality Message (QM) where each of the stakeholders is able to address issues and concerns about supplier performance related to quality, product, service and performance in order for us to work closely with supplier on Root Cause Investigation (RCI) and define Corrective Action and Preventive Action (CAPA) to solve the issue. We manage approximately 1,400 suppliers in all procurement services.

Supplier's Code of Conduct

Both new and existing suppliers are selected and evaluated not only on the basis of economic criteria, but also with respect to environmental, social and corporate governance standards. Our Supplier's Code of Conduct is Dow's global guidelines, such as the principles of Human Rights and Labor including Child Labor Law, Environment, Health and Safety as well as Ethics and Legal requirements including anti-corruption policies under US Foreign Corruption Practices Act (FCPA), UK Bribery Act and Local national anti-corruption legislation.

Thailand Purchasing aims to:

- Deliver competitive advantage
- Collaborate with supplier to help our business meet their objectives for profitability, growth, innovation, diversity and sustainability
- Work with local supplier where it is possible in order to reduce lead time, inventory and transportation cost
- Maximize cash flow by improving payment terms and working closely with user to minimize material inventory

Significant changes during the reporting period

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G4-13

Since April 2015, Dow Thailand Group has started up the new Polyether Polyol plant in Asia Industrial Estate, Rayong province. This is the largest Polyol plant in the world using DMC technology. Equipped with the latest production technology in its production process, the continual-production plant is able to reduce energy use from production by up to 50 - 75 percent with zero production waste. The plant's annual capacity is up to 200 kilotons. Polyol is processed by the downstream industry into polyurethanes, which are in turn used to produce mattresses and beds, furniture and automobile cushions, coating and sealants.

The successful start-up of the new polyol plant in 2015 has yielded substantial results in the company logistics activities including product loading, trucking, terminal operation at Rayong Terminal Center, tanks and truck loading, warehouse and container yard management, drumming business, ISO tank operation and bulk truck transportation. These impacts have generated employments in logistic industry in Rayong and Chon Buri provinces.



Whether and how the precautionary approach or principle is addressed by the organization

SR
G4-14

Dow Thailand Group regularly reviews its strategy to manage risk exposures while monitoring markets developments. Various hedging instruments have been utilized to mitigate the adverse effects of market risks, pursuant to established guidelines, policies and strategies.

Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses

SR G4-15

Dow Thailand Group has taken part in projects, standards or activities initiated by government agencies or non-governmental organizations to reflect our commitment in sustainability. Here is a list of some activities or projects we have joined.

Project/Criteria	Description	Certifying Institute
Eco Factory	Business focusing at improving production process and environmental management on the basis of social responsibility internally and externally through the entire supply chain in a continuous and sustainable manner	The Industrial Environment Institute, Federation of Thai Industries
Green Industry	<p>Business with environmentally-friendly operation that strives to be a green industry in five levels as follows.</p> <p>Level 1: Green Commitment, which refers to having an intention to reduce environmental impacts and the commitment has been communicated internally.</p> <p>Level 2: Green Activity, which means activities designed to reduce environmental impacts are implemented.</p> <p>Level 3: Green System where systematic environmental management has been put in place and constantly reviewed for improvement. Corporate may be recognized, at this point, by receiving environmental awards and accreditation.</p> <p>Level 4: Green Culture where environmentally-friendly operation becomes a corporate DNA for everyone working at the organization.</p> <p>Level 5: Green Network, referring to the expansion of this attempt to cover the entire green supply chain where suppliers and partners are encouraged to be part of the green industry accreditation process.</p>	Ministry of Industry and network institutes
Good Governance for Excellent Environmental Management and Social Responsibility Awards (Gold Star/Green Star Awards)	Commitment to enhance environmental management capacity, safety and CSR activities of factories within an industrial estate. The working team consisting of I-EA-T, community representatives, local authorities and local media will jointly evaluate factory through participation by the civil society.	Industrial Estate Authority of Thailand

Project/Criteria	Description	Certifying Institute
Corporate Social Responsibility, Department of Industrial Works (CSR-DIW)	This refers to business under the CSR-DIW requirements which have been improved/developed from ISO 26000 accreditation. CSR-DIW criteria cover seven major topics of organizational management, human rights, labor practices, environmental consciousness, fair operating practices, consumer issues, and community involvement and development.	Department of Industrial Works, Ministry of Industry
Green Meeting	Business applying green meeting practices in a constructive way. This means maximizing resources and minimizing environmental impacts when organizing corporate meetings, seminars and training.	Thailand Business Council for Sustainable Development (TBCSD)
Zero Accident Campaign	Businesses with workplace safety practices in accordance with the Ministerial Regulation on Safety Management, Occupational Health and Workplace Environment, B.E. 2549 (2006) and B.E. 2553 (2010) (No. 2)	Ministry of Labour

Memberships in associations and/or advocacy organizations

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G4-16

Dow Thailand Group takes an active role in many trade, business and industry associations in Thailand. Engagement with trade and business associations, whose purpose is to promote common business interests, assists us in managing priorities relevant to Dow Thailand and the chemical industry. Working through industry associations enables us to improve its own Environment, Health and Safety (EH&S) programs, as well as share its knowledge and expertise to improve the EH&S programs of other manufacturers. Dow has also developed partnerships with civic leagues and social welfare organizations that play an important role in public policy debates. These nongovernmental organizations sometimes engage in advocacy related activities, as well.

All proposed memberships in trade associations and civic organizations are reviewed by Public Affairs Department and Government Affairs Department. Examples of trade, business associations and alliances where Dow Thailand Group is an active member are shown below.

- The American Chamber of Commerce in Thailand: Member of Energy and Environmental Committee
- Thailand Business Council For Sustainable Development: Council Member, Associates Member and Public Relation Member
- The Federation of Thai Industries: Vice Chairman of Petrochemical Industry Club, Member of Board Director of Industrial Environment Institute, Member of Board Director of Chemical Industry Club, Director of Free Trade Committee and Director of Town-plan & Industrial Estate Committee

- Petroleum Institute of Thailand: Member of Council of Trustees and Chairman of the Standing Committee on Petrochemical and Refining
- Community Partnership Association: Founder Member, Steering Committee Member, Representatives in Operation Taskforce, CSR Taskforce and Communications Taskforce
- US-ASEAN Business Council: Vice Chairman of Thailand Committee
- The Strategy Committee on the Management of Dow Chemical for Sustainable Industry assigned by Ministry of Industry's Department of Industrial Promotion
- Community Advisory Panel (CAP) at the Asia Industrial Estate and the Map Ta Phut Industrial Estate

Entities included in the organization's consolidated financial statements

Entities included in financial results are as follows:

SR G4-17

Entities	Businesses
Dow Chemical Thailand Ltd.	Manufacturing and selling of Polyol, Polyether Polyol, Polyolefin Encapsulant films, and trading business
Carbide Chemical (Thailand) Ltd.	Manufacturing and selling of Synthetic Latex
Rohm and Haas (Thailand) Ltd.	Manufacturing and selling of Acrylic Emulsion, Poly-Acrylic Acid Solution
Dow AgroSciences (Thailand) Ltd.	Trading of agriculture and pest management products
Siam Synthetic Latex Co., Ltd.	Manufacturing and selling of Styrene-Butadiene Latex and Specialty Elastomers
Siam Polyethylene Co., Ltd.	Manufacturing and selling of Polyethylene
Siam Styrene Monomer Co., Ltd.	Manufacturing and selling of Styrene Monomer
Siam Polystyrene Co., Ltd.	Manufacturing and selling of Polystyrene
MTP HPPO Manufacturing Co., Ltd.	Manufacturing and selling of Propylene Oxide

Process for determining report content

Material aspects identified Dow Thailand Group to present in this report reflect our impacts to economic, environmental and social conditions and expectations from various groups of stakeholders that affect corporate sustainability. The report contents are determined by the following.

SR G4-18

1. Dow's Sustainability Goals

Dow is committed to minimizing our own footprint and to delivering solutions that help our customers and the rest of society do the same. We have made significant advancements in our sustainability journey since launching our first set of decade-long sustainability goals in 1995.

For more information about Dow's sustainability commitments, please go to www.dow.com/sustainability.

2. Surveys of corporate reputation and image

In late 2015, Dow Thailand Group hired a recognized third-party research company to conduct a survey of 1,100 samples representing diverse groups of major stakeholders. The survey interviewed samples either as a one-on-one individual session or by phone calls. We use the survey's result to determine report contents together with other factors.

3. Activities with groups of major stakeholders held through the following channels:

- Community Advisory Panel (CAP) meetings providing an important outside-in perspective on the environment, health and safety issues, as well as sustainability, for the company are organized through two committees, each of which at Asia Industrial Estate and Map Ta Phut Industrial Estate, respectively. In 2015, 8 meetings were convened.
- A community meeting (San Sum Phan) provides a forum for communities to discuss the Dow Thailand Group's operations and for us to listen to their concerns and suggestions; in 2015, 10 meetings were convened and cover 43 communities around the operation locations.
- Conducting Global Employee Opinion Action Survey (GEOAS) to measure employee's participation, commitments and satisfaction, as well as the Leadership Effectiveness Survey (LES) to assess what and how leadership could be improved as well as to create a plan to fulfill such improvement, both of which aimed to make Dow a happy workplace. Besides, an employee listening session was organized for staff to voice their concerns and propose solutions, which led to a better understanding and precise resolutions by the company that subsequently reduced stress among employees and made the workplace a happier one.



San Sum Phan meeting with communities around the operation location



Community Advisory Panel meetings at Map Ta Phut Industrial Estate



Dow opens house to welcome community representatives in Rayong



"A New Paradigm for Thai Industries in the AEC Landscape Seminar" under the Dow Chemical for Sustainable Industry project.

4. Sharing the best practices

Dow Thailand Group is a key member of the Responsible Care Club in Thailand and the Federation of Thai Industry to share its best practices on sustainable operation.

During the past several years, we welcomed a huge number of visitors from private sector to those in manufacturing factories and industrial partners who visited our factories and met our executives. Visitors learnt the best practices in Environmental, Health, and Safety (EH&S) management and community success programs delivered by Dow.

We collaborated with leading industries under the "Community Partnership Association (CPA)" to share the best industrial practices with other peers in the industry for their benefit and for the benefit of communities.

A seminar entitled "A New Paradigm for Thai Industries in the AEC Landscape" under the "Dow Chemical for Sustainable Industry" project, Year IV, was held with expert speakers sharing insights on marketing systems under the AEC framework. Participants were shown the importance of linkage between business sectors, the environment and the society for sustainable success. Dow's senior executive took part in the seminar to share his experiences under the topic of "Changing Organization for Borderless Business Development."

Materiality map

Materiality map

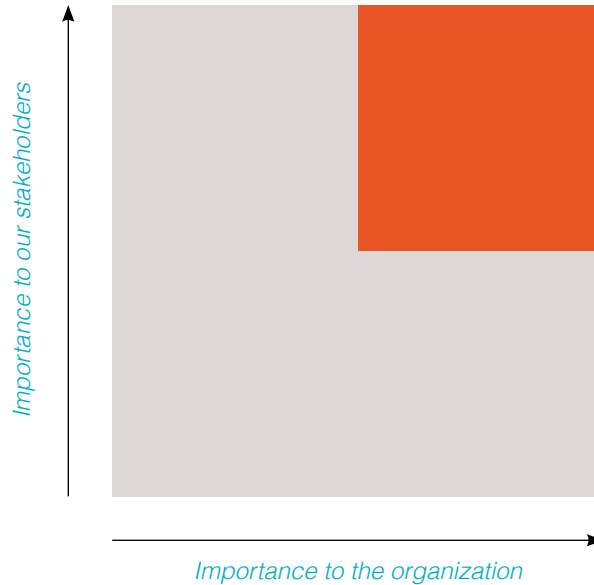
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Aspect boundary within the organization

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Aspect boundary outside the organization

SR G4-21



Having conducted the materiality assessment using GRI G4's guidelines, the assessment considered two factors which are importance to the organization and to our stakeholders. The aspects identified as very important to both Dow Thailand Group and our stakeholders were identified as Material Aspects and then disclosed in the sustainability report on the basis of In Accordance – Core option, which means at least one indicator related to each material aspect is reported. As for significant issues to be reported under Dow Thailand Group's sustainable development framework, four areas of Contribution to Thai Economy, Responsible Operations, A Great Place to Work and Corporate Citizenship have been identified. Details are as follows:

Areas	Category	Material Aspect
Contribution to Thai Economy	Economy	Indirect Economic Impacts
Responsible Operations	Environment	Effluents and Waste
	Social – Labor Practices and Work of Value Aspect	Occupational Health and Safety
A Great Place to Work	Social – Labor Practices and Decent Work	Employment
Corporate Citizenship	Social – Society	Local Communities

Aspect boundary

This report features results of sustainable operations carried out by businesses under Dow Thailand Group; namely, companies under Dow Chemical Thailand and SCG-Dow Group. All contents disclosed in this report cover both internal and external stakeholders especially employees, communities in Rayong province and the society.

Explanation of any re-statements of information provided in earlier reports

None identified.

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Significant changes from previous reporting

None identified.

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Our groups of major stakeholders are:

List of stakeholder groups engaged by the organization

SR
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Basis for identification and selection of stakeholders with whom to engage

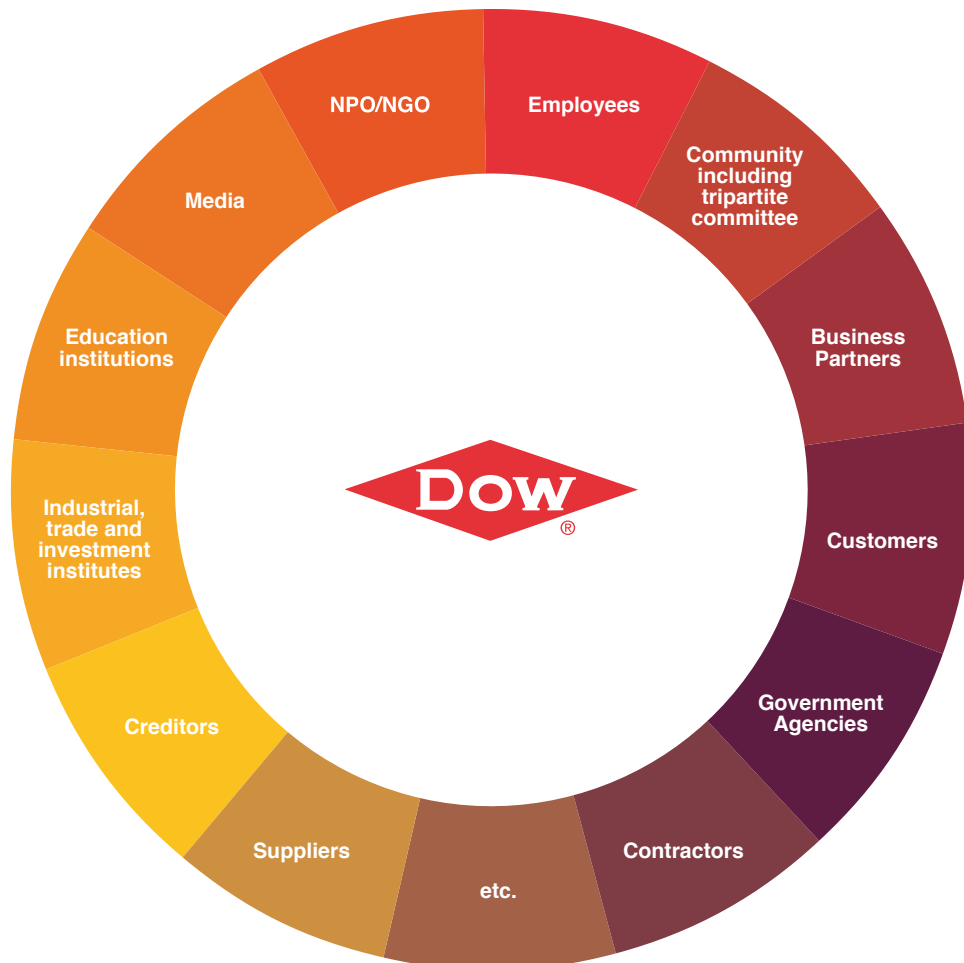
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Approaches to stakeholder engagement

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Key topics and concerns raised through stakeholder engagement and how the organization has responded to those key topics and concerns






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Throughout 2015, Dow Thailand Group established various channels to enable participation from different stakeholder groups. The idea is to listen to concerns and provide a forum for those wishing to express their ideas and recommendations to us for further adjustment in our planning and operation so that we better respond to their needs while pursuing a corporate sustainable development path. Examples of channels where Dow Thailand Group depend upon to listen to ideas and opinions are under topic G4-18.

This following table presents ideas and issues expressed by different groups of stakeholders:

Groups of Stakeholders	Topics	Engagements
Employees 	<ul style="list-style-type: none"> • Performance-based remunerations • Work-related concerns • Safety workplace 	<ul style="list-style-type: none"> • Developing a remuneration system to stay competitive with the companies we compete for talents • Conducting a survey and organize the employee listening session • Committed to Environment, Health and Safety (EH&S) Policy and best practices • Personal consultation session with guaranteed confidentiality
Community 	<ul style="list-style-type: none"> • Environment, Health and Safety (EH&S) issues especially preventive measures against impacts from waste and water quality • Community engagement 	<ul style="list-style-type: none"> • Organizing Community Advisory Panel (CAP) meetings an important outside-in perspective on EH&S issues, as well as sustainability, for the company through two committees, each of which at Asia Industrial Estate and at Map Ta Phut Industrial Estate. • Organizing an informal community meeting (San Sum Phan) to strengthen the company's relationship with communities by providing a forum for communities to discuss the company's operations and for Dow to listen to their concerns and suggestions. • Strengthening community's success with a focus at community engagement. • Corporate reputation survey
Business partners 	<ul style="list-style-type: none"> • Fair returns from investment for both parties • Strict compliance to contractual obligations 	<ul style="list-style-type: none"> • Holding Board of Directors' meetings at subsidiaries and affiliated companies where business partners can express their views and exercise their rights.

Groups of Stakeholders	Topics	Engagements
<p>Customers</p> 	<ul style="list-style-type: none"> • On-time delivery of required quantity and quality 	<ul style="list-style-type: none"> • Conducting customer satisfaction survey • Setting up a process that allows customers to file complaint on quality, volume, safety and services • Visiting customers; organizing activities to strengthen customer relationship • Offering technical supports • Responding to requests for information disclosure • Collaborating on initiations relating to environment and social responsibility
<p>Government Agencies</p> 	<ul style="list-style-type: none"> • Compliance with regulations • Environment awareness • Hiring of local labor • Stability and appropriate timeframe to issue regulations • Fairness in implemented policies 	<ul style="list-style-type: none"> • Strict legal compliance and reporting • Paying taxes and other expenses required by the government's regulations • Conducting government visits • Pursuing social projects with participation from the company, community leaders and public sector
<p>Contractors</p> 	<ul style="list-style-type: none"> • Equal and fair opportunity in a selection process • Appropriate returns in relation to economic and social conditions • Safety work environment • Fair business agreement for both parties 	<ul style="list-style-type: none"> • Setting up a transparent and accountable selection and evaluation process of contractors • Organizing internal meetings between Dow Thailand and contractors for monitoring, enhancing productivity and taking care of safety and environmental issues
<p>Suppliers</p> 	<ul style="list-style-type: none"> • Equal and fair opportunity in a procurement process • Fair returns • Fair agreement for both parties • Strict compliance with contractual obligations 	<ul style="list-style-type: none"> • Setting up a transparent and accountable procurement process • Implementing an on-time payment policy
<p>Creditors</p> 	<ul style="list-style-type: none"> • Returns from loans and fees • Ability of debt payment and punctuality • Strict compliance with contractual commitment 	<ul style="list-style-type: none"> • Organizing meetings when appropriate

Groups of Stakeholders	Topics	Engagements
Media 	<ul style="list-style-type: none"> • More business information of Dow Thailand Group • Press conference on Dow's annual performance • More press meetings with Dow's executives • Invitation to attend corporate activities when appropriate 	<ul style="list-style-type: none"> • Conducting poll to survey media's attitude towards Dow Thailand Group • Organizing media plant visit at Asia Industrial Estate • Media participation in corporate CSR activities
NPO/NGO 	<ul style="list-style-type: none"> • Interest in Dow's natural resource and environmental management 	<ul style="list-style-type: none"> • Organizing plant visit • Providing environmental management information whenever appropriate • Partnering with NPOs to conduct CSR projects

Reporting period

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Based on 2015 corporate data for the year ended December 31, 2015.

Date of most recent previous report

SR G4-29

This is Dow Thailand Group's first GRI-G4 Sustainability Report. The previous report is 2014 Dow Thailand Public Report which can be found on our <http://www.dow.com/thailand/publications/>

Reporting cycle

SR G4-30

Annual

**Contact for questions
regarding the report or
its content**

Public Affairs Department
Tel. +66 2365 7000
Fax +66 2381 1249

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**Table identifying the location
of the Standard Disclosures
in the report**

This is the first year that Dow Thailand Group uses the GRI 4 Guidelines for report development.

For ease of navigation, see the Content Index available at the end of this report. We are determined to continually improve the quality of the report by enhancing information disclosure and its credibility by having an assessment from the third party in the future.

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**Policy and practice with
regard to external assurance
for the report**

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**Governance structure of
the organization**

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Dow Thailand Group carries on businesses with transparency under the principles of good corporate governance. The board of directors of each company is appointed and subject to the powers and duties prescribed by the general meeting of shareholders. The board of directors of Dow Chemical Thailand consists of all senior executives nominated by the parent company. The boards of directors of the joint ventures consist of senior executives nominated by Dow Chemical and the joint-venture partners in an equal proportion based on shareholding.

Dow adheres to the principles of good corporate governance, as well as honesty and the maximum ethical standards. The company's directors and officers represent a good example for compliance with the maximum ethical standards. Our long-term sustainable development depends on these ideologies. Our shareholders, board of directors, officers, customers, and community also expect high standards from us.

Describe the organization's values, principles, standards, and norms of behavior such as codes of conduct and codes of ethics

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Taken together, Dow's essential elements of mission, vision, values, and strategy describe why the company exists, who we are, what we intend to do, and how we intend to do it. These essential elements provide insight, offer motivation, and point the way forward as we seek to grow and achieve our goals.

Mission:

To passionately create innovation for our stakeholders at the intersection of chemistry, biology and physics

Vision:

Maximize long-term value per share by being the most valuable and respected science company in the world

Values:

Integrity

Respect
for People

Protecting
Our Planet

Dow's Code of Business Conduct

The Diamond Standard – Living Our Values Every Day

At Dow, we are passionate about chemistry. We believe in the potential of chemistry to change the face of humanity for the better. The great promise of our industry is to deliver solutions that will make the world a better place – directly through our products, and indirectly by our conduct, by providing jobs, and by fueling the economy and improving the standard of living. We are fiercely focused on these goals. And we are equally focused on “how” we accomplish them. Our Values of Integrity, Respect for People and Protecting Our Planet are evident in our corporate culture and connect each of us around the world.

The Diamond Standard, Dow's Code of Business Conduct, puts a framework around these Values that is multifaceted and clear, setting expectations and guiding our behavior. Our intent, of course, is to enable ethical, lawful decision-making and to create an environment of respect, but that's not all. We believe it is also our responsibility as a corporate citizen to extend these Values well beyond our Company walls. The Diamond Standard applies to all employees, our subsidiaries, and group companies of Dow Chemical, including joint ventures that adopt this code of conduct.

Dow cultivates the Diamond Standard in every officer and employee in the organization from the first day they join the company, and continuously provides training on principles and compliance with the Diamond Standard.

Dow's Values set the foundation for everything we do. They drive us to conduct business fairly and with appropriate sense of responsibility to each other and the broader community. The Code of Business Conduct provides a framework to make good choices: to abide by the law and be highly principled and socially responsible in all of our business practices.





CONTRIBUTION TO THAILAND ECONOMY

Economy summary

SR
G4-DMA

Economic impacts

Thanks to Thailand's market strength, competent human resources and supporting government agencies, Dow Thailand Group has operated our business in this country for nearly half a century. With our long presence in the market, we have witnessed and well understood market situations and its mechanisms. We also see opportunities to respond to market needs through our evolving innovations and solutions.

Major milestones in 2015

With our well plan, implementation flexibility and dedication from our staff, Dow Thailand Group's performance was outstanding in several areas including financial results that were better than estimated and higher than the previous year.

In terms of production, Dow Thailand Group was able to meet its target without much difficulty. We achieved an outstanding rate of product supply reliability, which, at 96.3 percent in 2015, was better than 94 percent done a year ago. Our operational hub is one of the global top quartile performers on site reliability rate. In addition, more than half of our plants managed to break their annual production records in 2015.



2015 also marked as an important milestone when the construction of our new Polyether Polyol plant in Asia Industrial Estate was completed, paving the way for its commercial operation to start in first quarter. The plant's annual capacity is up to 200 kilotons. Equipped with the latest production technology in its production process, the plant is able to reduce energy use from production by up to 50 - 70 percent with zero production waste. Polyol is processed by the downstream industry into polyurethanes, which are in turn used to produce mattresses and beds, furniture and automobile cushions, coating and sealants.

Sustainability - Meaningful power to drive the business

As the world's leader in science and technology, Dow has been able to make things better through our R&D activities and innovations to resolve challenges with a goal to advance our wellbeing in a sustainable manner while simultaneously growing our business. By tying our business strategy and corporate management with the sustainability goal, Dow Thailand Group manages to effectively use our resources, increase our productivity and expand our business in a sustainable way.

Direct economic impacts

Creating jobs and developing skills and expertise for Thai people

Dow Thailand Group gives priority to human resource development and skill enhancement. From only 700 employees in 2009, the number of our workforce increased to more than 930 in 2015 to support our plant expansion. We also hired more than 10,000 contracted staff during the construction phase to ensure that our work could be achieved.

To enhance the capacity of our human resources, we dispatch staff in key positions to overseas training in Canada, Belgium and the US. Employees are exposed to sophisticated technology, career advancement and an opportunity to work at the international level. We also provide training to our subcontractors.

Supporting community economy

For nearly five decades of our presence in Thailand, Dow Thailand Group has actively supported economic and social activities of local communities, e.g., local tax payment, financial support to Energy and Power Funds, and funds for community and social development projects.

Dow Thailand Group has purchased products and services from neighboring communities, which is aligned to our policy to support communities. In 2015, we spent more than 65 million baht buying products and services from communities in Map Ta Phut district and Ban Chang district. These activities helped stimulating cash flow within the local economy. We also spent more than 20 million baht to support several community and social development projects in Thailand.

Significant indirect economic impacts, including the extent of impacts

SR
G4-EC8



Indirect economic impacts

Dow Thailand Group underlines the importance of growth of both our business and surrounding communities. The growth of our business especially through our plant expansion not only creates job directly within the local community but also has indirect impacts to technology and know-how transfer, labor skill development and related job expansion in the local economy.

Dow Thailand Group's indirect economic impacts are as follows.

Adding values to the Thai industries

Dow is committed to research and development for future innovations by combining the elements of science and the human element. As a business partner, we focus on mutual sustainability with customers. Dow's innovative products and technology are proven beneficial to end consumers as well as various industries in Thailand such as paint, food & food processing, home appliances and electronics, packaging and pharmaceutical industry. By adding values to both the goods and the business through our products which effectively answer to eclectic needs of enthusiastic consumers, we are able to contribute to the advancement of Thailand's industries.

Technology and know-how transfer

When building a factory, Dow is committed to the most sophisticated technology available at the time as well as the stringent environmental standards. With advanced technology in place in Thailand, Thai engineers and workforce have been given numerous chances to work with experts from all over the world, resulting in dynamic and constant technology and know-how transfer to our local staff. Aside from internal technology transfer, Dow Thailand Group also underlines the sharing of knowledge of, for example, technology management; safety, occupational health, environment practices; and energy management to public and private sectors.

Knowledge sharing

During the past five years, Dow Thailand Group has established the "Dow Chemical for Sustainable Industry" project by developing the lean management for environment method to help small and medium entrepreneurs and manufacturers to improve their environmental and safety standards in their operations. The project doesn't only improve industrial standards of small- and medium-sized manufacturers but also contribute to the great economic and social impacts to their companies, employees and society as a whole. For more information of the project, please go to "Corporate Citizenship" pages.



Promoting local economy

Dow Thailand Group's success helps expanding other local business especially those in Rayong province where we base our production. Our business has created countless business opportunities for suppliers of goods and raw materials, contractual parties and residents in nearby communities.

Boosting the car-rental business

Every vehicle used by Dow Thailand Group for its operations in Rayong is registered in Rayong province.

Enlarging the logistic industry

Our plant expansion during the past several years has resulted in positive impacts to the logistics business in Rayong and Chon Buri provinces. Our business expansion has led to the growth of the general and food-grade ISO tank businesses, the transportation business, and the drumming business for the food-grade and non food-grade industries, and subsequently increased local employments. In addition, by renting warehouse in Laem Chabang as our new depot, we effectively manage the transportation between Map Ta Phut and Laem Chabang, which helps reduce heavy traffic flows between the two areas. Apart from that, Dow Thailand Group has not only trained external logistic personnel in the fields of logistics management, safety standards, and quality management specifically for food industry but also collaborated with cargo carriers to develop the Truck Management System (TMS). These knowledge transfers help improve efficiency and competitiveness of the Thai logistics industry.

Dow Thailand Group's opening of our new Polyol plant in 2015 also propelled the growth and added values to Thailand's logistics management especially in the areas of ISO tank operation, container yard, warehousing, terminal and drumming while increasing employment in the business.

According to significant increase in export volume via Laem Chabang, Dow Thailand Group has collaborated with a working committee under the Federation of Thai Industries (FTI) to advise the port authorities as well as Ministry of Transportation to improve port congestion. Our goal is to increase the competitiveness of Thailand's export industry.

We also underline the importance of maintaining high standard of cargo transportation and logistics. In doing so, we have organized trainings on safety and occupational health management for logistics businesses, measured truck speed, installed the GPS system to monitor the routing and conducted a regular system check-up. Recently, we started a trial period by installing CCTV inside our trucks to reduce accident and minimize transportation risk.



Drumming warehouse at Laem Chabang



Drumming operation of food-grade product



Installed CCTV in truck.





RESPONSIBLE OPERATIONS

Environment, Occupational Health and Safety summary

SR
G4-DMA



Responsible Care® is Dow's commitment in our manufacturing and management of chemical products worldwide. Since inception, we believe that environment, health and safety (EH&S) is our way of life. By declaring Responsible Care, Dow assures that our operations regardless where they are will be beneficial not only to us but also to neighboring communities and that it becomes a model for other businesses.

Environmental, Health, and Safety Policy

At Dow, protecting people and the environment will be a part of everything we do and every decision we make. Each employee has a responsibility in ensuring that our products and operations meet applicable government or Dow standards, whichever is more stringent. Our goal is to eliminate all injuries, prevent adverse environmental and health impacts, reduce wastes and emissions, and promote resource conservation at every stage of the life cycle of our products. We will report our progress and be responsive to the public.

Dow has implemented the most effective technology and operating discipline practices both internally and externally. EH&S requirements are among the most important drivers to continue improving reliability, productivity and quality of our process. It also induces collaboration between experts from Dow's operations and business functions, a move that should enhance Dow's operation efficiency and sustainable growth.

We are committed to the elimination of injuries, prevention of adverse environmental and health impacts, reduction of waste and emissions, and promotion of resource conservation throughout our manufacturing-specific safety processes and emergency response procedures to environmental practice programs such as Waste Reduction Always Pays (WRAP) and safety performance campaign such as Safe a Life Program.



Health and safety operations

Dow Thailand Group is confident that its safety efforts are second to none across Dow's operations worldwide and ensure that safety is the responsibility of all employees. We believe in zero accidents, and each employee must therefore strictly and continuously observe Dow's safety policies and the Vision of Zero.

Environmental stewardship

Since one of our core values recognized by Dow worldwide each time we do our business anywhere is "protecting our planet," we underline the importance of care and attention given to the environment especially at places we have our business. Dow intends to reduce waste at every production process, maximize the use of resources and minimize impacts to the environment and communities.

Reduce, reuse and recycle

Dow Thailand Group closely monitors and controls waste discharge throughout processing cycles using high technology to ensure minimized impact to both the environment and surrounding communities on the principles of 3Rs of reduce, reuse and recycle. Simultaneously, we also encourage maximized use of waste to reduce the landfilling. In addition, Dow implements strict measures to surveillance waste treatment service providers by requiring them to install a Global Positioning System (GPS) in their transporting trucks to ensure that the vehicles handle the waste in a proper and safe manner. We periodically conduct random sampling by following trucks carrying waste from companies within our group to waste treatment service providers to make sure that the carriers strictly comply with the regulations.

Dow strives to reduce waste, wastewater and discharge by monitoring water quality and by putting in place a surveillance system so that water discharge will not cause environment impact. Through our care of the environment at every production stage, Dow Thailand Group has achieved ISO 14001 standard, received green industry certificates, awarded Good Governance for Excellent Environmental Management and Eco Factory Certification.

Continuous Emissions Monitoring System (CEMS)

Dow Thailand Group has adopted the Continuous Emissions Monitoring System (CEMS), a 24-hour online data analysis system, to monitor air quality emitted from the combustion stack from our plants in Rayong province. The system's close inspection ensures that the emitted compounds are within the government's standards limits and do not harm the environment and surrounding communities. The CEMS is directly linked with Industrial Estate Authority of Thailand (I-EA-T)'s system for effective monitoring and proactive prevention as well as for transparently real-time reporting to the government agency.





Volatile Organic Compounds Controlling System

From the design stage, Dow Thailand Group has chosen the best technology to control Volatile Organic Compound (VOC) emissions in every process and to meet all applicable government or Dow standards, whichever is more stringent. Dow Thailand Group has applied a closed system technology to our chemical loading and unloading (vapor return line, dry-break coupling connection, etc.), seal-less or double mechanical seal pumps and a closed sampling system for hydrocarbon, and Continuous Emission Monitoring System (CEMS). We also install a monitoring system to detect minor leakages from pumps, valves and seals within our plants so that a quick fix can be done following the detection. We also encourage employees and contractors to be aware of this issue and report us for fast, safe and right action.

Efficiency in energy consumption and conservation



To achieve our goal of sustainable growth, Dow Thailand Group has committed to efficiency in energy consumption and conservation. Each plant has pursued activities to steadily reduce the use of energy per production unit. This includes, for example, enhancing the efficiency of our production process to reduce the use of fuel and electricity where the Variable Frequency Drive (VFD) is installed to reduce the motor's velocity, which subsequently lowers the electricity when demand for electricity is low. In addition, there are attempts to readjust production formulas, reduce the use of natural gas in the production process and the absorption process of contaminants in monomer and install efficient technology and devices at our offices and plants for energy-saving purpose.

In 2015, Dow Thailand Group's energy efficiency rate was shown in the table below.

Dow Thailand Group's manufacturing energy intensity

(Production Unit: BTU per Pound of Product)

Year	2011	2012	2013	2014	2015
Dow's manufacturing energy intensity at Map Ta Phut Industrial Estate	2,492	2,537	2,497	2,473	2,605
Dow's manufacturing energy intensity at Asia Industrial Estate	6,149	6,116	4,893	4,270	3,831
Total	3,038	3,719	3,448	3,225	3,146

Remarks:

- In 2012, Dow Thailand Group's manufacturing energy intensity at the Map Ta Phut Industrial Estate included the energy consumption of the Polyethylene plant (Train II), which came on stream in 2010. Each plant continues to trim its energy consumption.
- Dow Thailand Group's manufacturing energy intensity at the Asia Industrial Estate consists of data on commissioning and operations (including the energy consumption by the Specialty Elastomers plant, the Propylene Oxide plant, and the Power, Utilities & Infrastructure unit).
- The Specialty Elastomers plant came on stream in April 2011.
- The Propylene Oxide plant came on stream in October 2011.
- The Propylene Glycol plant came on stream in November 2012.
- The Polyether Polyol plant came on stream in March 2015.
- The Polystyrene and the Styrene Monomer and Ethyl benzene plants' turnarounds in 2015.



*Waste Water Treatment Plant (WWTP)
at the Asia Industrial Estate*

Environmentally friendly technologies

Regarded as crucial for Dow Thailand Group, plant design and the planning of each production process are based on the best available technologies to ensure the best environmental management possible. Our major achievements include the following.

- The construction of a world-scale Propylene Oxide plant at the Asia Industrial Estate (AIE) in Rayong affirms Dow's commitment to breakthrough environmental technologies. The facility's innovative technology was jointly developed by Dow and BASF to extract propylene oxide from hydrogen peroxide (HPPO). The innovative HPPO technology won a Presidential Green Chemistry Challenge Award from the US Environmental Protection Agency in 2010 and an Innovation and Excellence Award in Core Engineering from the Institution of Chemical Engineers in the UK in 2009. This innovation enables the following achievements:
 - » Reduction of waste water by 70 - 80 percent compared to the existing technology;
 - » Reduction of energy consumption by 35 percent compared to the existing technology;
 - » Reduction of infrastructure and physical footprint with simpler raw-material integration and avoidance of co-products, resulting in optimized use of resources and environmental friendliness.
- The Specialty Elastomers plant at the Asia Industrial Estate has adopted the most advanced technology to produce polyolefin plastomers and polyolefin elastomers in a more environmentally friendly manner than other conventional technologies. Our technologies feature the following:
 - » A closed system in which production process-derived vapor is accumulated for elimination at the flare
 - » No involvement of carcinogens and VOCs in the production processes, as required by the National Environment Board's announcement in 2007
 - » No sulfur oxide emission
 - » Utilization of Ultra-Low NO_x technology for burners and water heaters to lower the release of nitrogen oxide from production processes.

- Similarly, the new Polyether Polyol plant, which started production in 2015 with world-class technology, manages to reduce energy consumption and wastewater by 50 - 70 percent. The plant is able to completely reduce 100 percent of solid waste from its production.
- Leveraging the best available technology, our operations at the Asia Industrial Estate feature an advanced biological treatment at the Waste Water Treatment Plant (WWTP) to ensure that the effluent's quality meets regulations. An Odor Treatment Plant (OTP), involving OTP blowers and activated carbon filter units, minimizes odor in the WWTP, while all odorous areas, including the equalization tank, diversion tank, and bio-reactor basins, are covered. Air released from these processes is used as alternative air in the biological treatment unit, and excess air is treated by the activated carbon filter unit. Since the first start-up of the OTP, the WWTP has never faced any odor issue. In addition, the WWTP's online analysis system at the discharge point monitors the Chemical Oxygen Demand (COD). Data from the system are continually sent to the responsible unit at Industrial Estate Authority of Thailand.



Advanced analytical laboratory

In mid-2012, Dow Thailand Group set up an advanced analytical laboratory called the Map Ta Phut Non-Routine and Reactive Chemical Testing Laboratory, located at the Hemaraj Eastern Industrial Estate. Going beyond normal quality control, the laboratory supports the company's growth in Asia Pacific. The setup of the new laboratory focuses on using state-of-the-art technologies for the following objectives:

- To identify and analyze the proportions of chemical components in samples, a task beyond the current techniques' ability;
- To develop new analytical techniques for more effectiveness and for tests on substances that can disrupt production processes;
- To solve production problems, improve performance, and handle emergencies such as leaks and substance identification during emergencies.

For the past three years, the laboratory has played a critical role in enhancing production processes, which include the following:

- A method for analyzing glycol ether acid in waste water for a redesigned discharge system;
- A method for testing residual monomers in products for legal compliance;
- An analytical method for inspecting chemical components in production processes for the improvement of waste and energy management.



Life Critical Standards training



Process Safety and Containment Event and Injury workshop

Strengthening environmental, health, and safety standards

Dow Thailand Group puts tremendous efforts into the improvement of our environmental, health, and safety standards. This year, the company conducted the following programs:

Environmental, health, and safety standards

- Effective environmental, health, and safety management systems are strictly and continuously applied at all plants.
- Life Critical Standards are designed to improve safety awareness and behavior in a global effort to further boost our safety performance.
- The Return to Operation policy ensures our proper commissioning of process equipment returning to service to prevent Process Safety and Containment Event (PSCE).
- Management of Change ensures review by experts and proper communication together with training for all changes to ensure that changes have been effectively and smoothly implemented.
- The Injury and PSCE Prevention Workshop provides Dow Thailand Group's employees with an opportunity to review lessons and knowledge of EH&S experienced during year-round operations. At this workshop, employees brainstorm and share ideas on risks and measures to prevent incidents.
- Dow Thailand Group applies similar EH&S standards of Dow Chemical Company in the US to contractor management, with a stringent screening process designed to ensure effective training and the use of effective safety programs. All contractors are also subjected to our annual performance assessment.

Environmental, health, and safety training

- We provide intensive EH&S training to our employees and contractors to ensure their competence and sound safety awareness to safely and effectively perform their jobs.
- We build a strong culture of intervention for unsafe behavior or conditions (or both) through the Behavior-Based Performance (BBP) program, which introduces correct and safe operations, as well as site inspections (plant safety walkthroughs). This leads to a safe work culture.

Promoting environmental, health, and safety awareness

- Dow Thailand Group organized the 2015 Safety and Green Day under the theme of "Because Our Care²" at our plants in Rayong province to create awareness in safety and to underline that safety is and remains the first priority. The event was also hammering our commitment to "Drive to Zero" program. Main activities during the event were declaring our commitment to Responsible Care, sharing safety experiences, running a creativity contest and awarding those with outstanding EH&S performances. More than 900 employees and contractors attended the event now held annually.
- The 2015 Site Safety Challenge event was held to underline Dow's expectation of safety from employees and contractors. It's also an occasion to enhance understanding in risks, assessing safety situations at worksites and planting awareness in work-related threats.



2015 Safety and Green Day



Community Partnership Association (CPA)



Dow volunteers trained students of Watchaklukya School about safety at school.

Sharing best practices

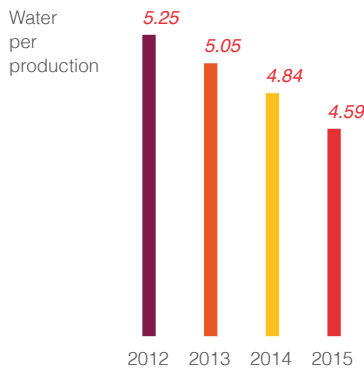
Responsible operations at Dow Thailand Group not only mean setting good examples, but also sharing our best practices with neighboring communities, partners, and society at large. Here are some of our major activities organized this year.

- Dow Thailand Group is a key member of the Responsible Care Club in Thailand and the Federation of Thai Industry. The memberships serve as a channel through which we publicize our good practices for sustainable development. Over the years, Dow Thailand Group has hosted many visits from private companies, manufacturers, and industrial allies by allowing them to tour our sites, meet with our EH&S management team, and learn about EH&S practices at Dow.
- Dow Thailand Group collaborated with other leading industrial companies in establishing the Community Partnership Association (CPA). As a founding member of CPA, we have had opportunities to share good practices for the benefit of the industry and the community.
- The company led a group of Dow volunteers to teach students at Watchaklukya School in Rayong about everyday safety while raising their awareness of safety at home and school and care for the environment. The activity was part of the annual Safety School project, initiated by Dow Thailand Group. Since 2008, the project has been implemented at 20 schools.

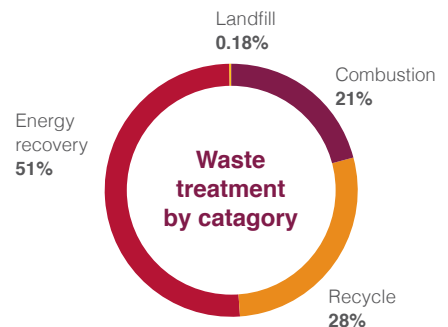
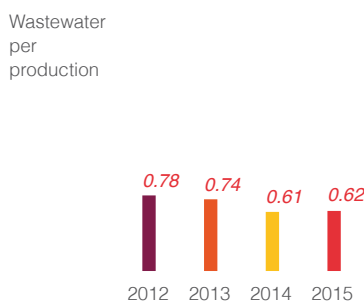
Total water discharge by quality and destination

SR G4-EN22

Water intensity



Wastewater intensity



In 2015, water intensity (the ratio of cubic meter per metric ton of production) was down 5 percent while wastewater intensity (the ratio of cubic meter per metric ton of production) was roughly the same as the previous year. Besides, Dow Thailand Group has strictly complied with the laws and regulations on waste treatment. Of the total waste, 51 percent became alternative energy or raw material for cement furnace; 21 percent was combusted; 28 percent was recycled by sorting and re-using and only 0.18 percent went to landfill. Through our policy, we continue to minimize waste destined for landfill.

Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs

SR
G4-LA5



Drive to Zero

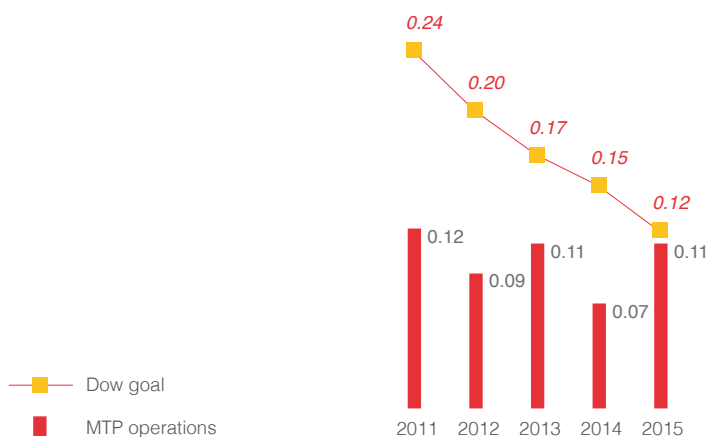
As part of the Vision of Zero, the Drive to Zero safety program was introduced in Thailand in 2006 to enhance the awareness of local employees and contractors of the importance of the Drive to Zero goal, which strive to see everyone return home safely every day. The program reflects our emphasis on safe behavior among our employees, contractors, and members of nearby communities. We expect our employees and contractors not only to act safely, but also to look out for the safety of their colleagues.

The Drive to Zero concept is applied to every activity. Its importance is reinforced in the mind of Dow employees and contractors through internal communications and safety promotion activities such as incident prevention workshops and pre-project risk assessments. All these efforts are designed to achieve its ultimate goal of getting everyone to return home safely every day.

Thanks to shared commitment and joint effort from all our employees and contractors, the Drive to Zero program in Thailand has continuously thrived. We have been highly successful in our safety operations.

Health and safety performance

Map Ta Phut operations personal safety rate (per 200,000 hr)



Recordable personal safety rate

In 2015, the annual recordable personal safety rate per 200,000 working hours was at 0.11, which was better than the target anticipated at 0.12.





GREAT PLACE TO WORK

Great Place to Work summary

SR
G4-DMA



At Dow, we believe that people are driving the organization to meet challenges and maintain competitiveness. Here, we value integrity, respect for people and protecting our planet – the three Dow's values which are strong fundamentals for our corporate culture and which define who we are.

Mutual respect each other is an important foundation to create an excellent workplace as it makes everyone feel inherently worthy and work to fulfill their potential. At Dow, diversity and inclusion does also matter. We believe in values of differences, whether they are in background, perspectives or experiences. As differences bring in fantastic innovations and creativity, that's why we are committed to a strong, diverse organization that is driven by competent staff where each individual is given a specific training as part of Dow's energetic and strong global community.

With a happy workplace in mind, Dow Thailand Group puts priority to employees and teamwork while relentlessly retaining those of high potential. Simultaneously, we nurture our organization to be the very best for our people here as part of our strategy to make our business strong and sustainable.

Employer of Choice

Dow Thailand Group commits to "Employer of Choice" workplace by offering attractive remunerations, merit-based awards and other incentives as well as a solid career path. We encourage everyone to express their leadership quality as we believe that everyone has potential for what they do and can strive to the top of who they are. We also nurture our pride to become a good corporate citizen by encouraging staff to take part in community and social development projects as a Dow volunteer by sharing their time and energy with the less unfortunate.

As we believe that happiness at workplace will enable employees to work efficiently, something that should be translated into a sustainable growth, Dow Thailand Group actively pursues activities to encourage employee's participation and commitments to create a happy workplace. This includes conducting a Global Employee Opinion Action Survey (GEOAS) to measure employee's engagement and satisfaction and to give employees opportunities to provide feedback and offers leaders with insights into how to improve Dow's work culture. Dow Thailand Group also conducts the Leadership Effective Survey (LES) to evaluate leadership and what leaders need to improve on. We also organize an employee listening session for employees to voice opinions over issues of their concern, which not only offers us a better understanding of the issue but also enables us to resolve things precisely, leading to lesser work stress and finally making employees happier.

**HAPPINESS
@DOW**



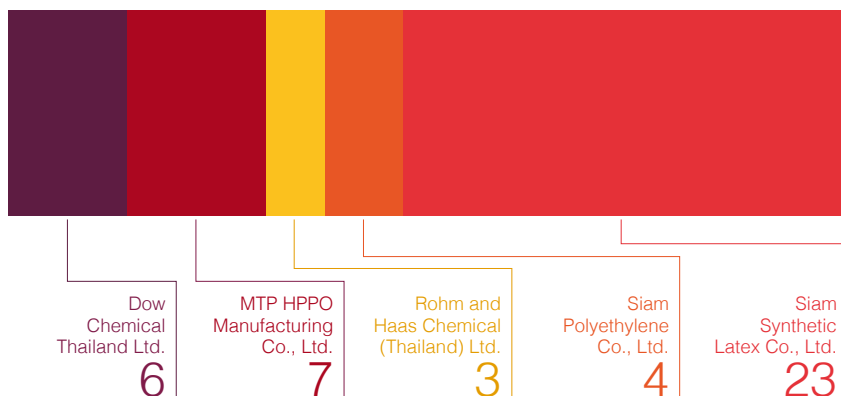
Employee success development

One of Dow Thailand Group's priorities is to offer opportunity to employees to advance along their career path. The ability to prosper professionally not only allows Dow to retain quality personnel but it also attracts those wishing to be part of this growing organization. We offer career opportunity through the so-called talent profile, which is an interface tool that allows employees to directly tell us his strength, work experiences and professional goals. The information is not only used when there are internal vacancies but also acts as a database for supervisors and HR personnel to look for and select qualified staff when required. The talent profile is also a foundation for Dow to understand staff's potential and to identify their future capacity-building. Dow worldwide currently offers a variety of learning and development centers for our staff where people can choose to learn online or attend both formal and informal career counseling, attend classroom workshops or be a part of a strong and enthusiastic employee network. All of this offers opportunities for employees to grow from their inner strength, personal interest and professional advancement.

Total number and rate of new employee hires and employee turnover by age group, gender, and region

SR G4-LA1

New hires by Company



Location/ Gender	Female		Male		Number of employees	
	Persons	%	Persons	%	Persons	%
Bangkok	8	18.60	3	6.98	11	25.58
Rayong	12	27.91	20	46.51	32	74.42
Grand total	20	46.51	23	53.49	43	100.00

Age/ Gender	Female		Male		Number of employees	
	Persons	%	Persons	%	Persons	%
Below 30	13	30.23	13	30.23	26	60.47
30 - 40	6	13.95	8	18.60	14	32.56
40 - 50	1	2.33	2	4.65	3	6.98
Grand total	20	46.51	23	53.49	43	100.00



The Human Element at Work

Employee attrition

In 2015, Thailand voluntary attrition rate was 5.07 percent. This includes retirements as well as employees separating for other reasons.

Year of service/ Gender	Female		Male		Number of employees	
	Persons	%	Persons	%	Persons	%
Below 5	9	17.31	16	30.77	25	48.08
5 - 10	6	11.54	12	23.08	18	34.62
10 - 15	0	0.00	2	3.85	2	3.85
Above 15	1	1.92	6	11.54	7	13.46
Grand total	16	30.77	36	69.23	52	100.00

Location/ Gender	Female		Male		Number of employees	
	Persons	%	Persons	%	Persons	%
Bangkok	10	19.23	3	5.77	13	25.00
Rayong	6	11.54	33	63.46	39	75.00
Grand total	16	30.77	36	69.23	52	100.00

Benefits provided to full-time employees that are not provided to temporary or part time employees, by major operations

SR
G4-LA2



Flexible Benefits

Dow Thailand Group believes it is important to care for our employees' wellbeing. That is why we offer various benefits to employees both traditional benefits and flexible benefits to enable them the convenience and flexibility to pick and choose a benefits package that suits their lifestyle.

- Competitive welfare and remuneration packages: They are offered to the employees based on their performance and contributions. The packages include several additional benefits and follow these principles:
 - » Competitive compensation programs benchmarked against the companies we compete for talents. This allows Dow Thailand Group to attract and retain the best talents.
 - » A superior remuneration policy compared to market standards when the employees and the company itself exceed goals and objectives.
- Flexible Benefits: Adopted in 2011, this initiative was a result of a two-year study to boost employees' professional satisfaction. While still retaining core benefits, it allows individuals to fulfill their diverse needs and demands and provides flexibility to pick and choose a benefit package that suits their lifestyles in each year and adjust their benefits every year if they wish. In 2015, a total of 915 employees, or an equivalent of 96 percent of total employees, participated in this program.



- Accelerate Great @ Dow: At Dow, we believe in showing appreciation to our employees who meet the job requirements, celebrate those who exceed expectations and go beyond what is required of them, and express gratitude towards those who support the company's activities or help out their colleagues in different ways. Both supervisors and employees can nominate and reward their co-workers for their outstanding efforts. The recognition ranges from a simple congratulation card to cash rewards of different values. To make it easy for the employees to say "Thank You" or show their appreciation for one another, Dow has established an internal web-based tool called Accelerate Great @ Dow.

Other key benefits include:



Medical plans – including In-patient, Out-patient, maternity and dental.



Retirement saving plans – Provident Fund



Life insurance



Disability protection



Accident insurance



Paid vacation, holiday and leave programs



Business travel accident insurance

Return to work and retention rates after parental leave, by gender

SR
G4-LA3

Dow offers employees, both male and female, the opportunity to take maternity and paternity leaves. In 2015, 46 employees took these leaves and all of them returned to work after their leave period.





CORPORATE CITIZENSHIP

Corporate Citizenship summary

SR
G4-DMA

Corporate Citizenship, in our definition, is to create values to the society and propose solutions that will liberate communities and the society from restrictions such as hunger, poverty, unemployment, lack of education, poor life quality and lack of basic human rights. We believe that we can ignite change for this planet. Since our inception in Thailand, Dow Thailand Group aims to be the society's good corporate citizen. This has long been our mission to do our business with integrity in order to enhance quality of life of communities around us and, together, become a sustainable society.

Dow Thailand Group has implemented activities for community success especially those relating to education, the environment conservation and community wellbeing. We also encourage our employees to participate in community activities to cultivate a sense of social responsibility, a move that has been warmly received by our staff, with a hope to create a society of our pride.

In 2015, Dow Thailand Group conducted national and community-level social activities as follows.

National-level social responsibility activities

1. Dow Chemical for Sustainable Industry

*The 2014 Asian CSR Award**

Since 2011, Dow Thailand Group together with Thailand Environment Institute Foundation; Department of Industrial Promotion, Ministry of Industry; and Thai-US Creative Partnership, have initiated a long-term project called "Dow Chemical for Sustainable Industry" in which the principle of lean management for environment is applied to enhance the industrial sector's capacity to improve its environmental and safety standards resulting in the increase of efficiency of its management, production and profitability.



* Remark: The Dow Chemical for Sustainable Industry project won the 2014 Asian CSR Award in Environmental Excellence, presented by the Asian Institute of Management-Ramon V. del Rosario, Sr., Center for Corporate Social Responsibility (AIM-RVR CSR Center), marking the first award in this category for Thailand.

Key achievements:

<p>2012:</p> <p>Lean Management for the Environment manuals for major industries, namely, pharmaceutical, textile, beverages, metal, ceramic and general industry</p> <p>Organizing the “Sustainable Environmental Management and Pollution Prevention” training.</p>	<p>2013:</p> <p>Organizing three trainings including</p> <ol style="list-style-type: none"> 1) Integrated Organizational Management Based on Lean Management for the Environment, 2) Development of Green Products for Environmental Sustainability, and 3) Green-Business Operations for Sustainable Development. 	<p>2014:</p> <p>In-depth coaching to 20 small and medium enterprises and non-governmental organizations with the principle of lean management for environment.</p>	<p>2015:</p> <p>Setting up a learning organization on the principle of lean management for environment to nurture environmental consultants through comprehensive and intensive trainings.</p>
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Following our relentless activities under the Dow Chemical for Sustainable Industry project throughout the years, here are some of the outcomes from the project:

- More than 3,500 people enjoy direct benefits from the project either in the form of seminars, trainings or in-depth coaching.
- A network of lean management for environment consisting of more than 1,000 people was created and this is now extended to other sectors. Knowledge acquired has now been transformed into good practice and the network works as a channel for information exchange in the long term.
- About 20 organizations that received in-depth coaching see their productivity improve on average by 30 percent, which is translated to more than 57 million baht of costs of production and energy being saved. In addition, pollution impacts are lowered by more than 10 percent and a better quality of life is extended to more than 8,000 employees. Additionally, environmental impacts to the community in a wider area have been minimized. (Source: Information from Thailand Environment Institute Foundation.)
- Three learning organizations out of winners of the Lean Management for Environment Award have been created, namely, (1) The Prostheses Foundation under the Patronage of the Princess Mother; (2) Cotco Metal Works Ltd. and (3) Bangkok Eagle Wings Co., Ltd.



In-depth coaching



Science & Technology Initiative and Sustainability Awards

2. Science & Technology Initiative and Sustainability Awards (STISA)

Dow Thailand Group together with SCG Chemicals, the Thai Institute of Chemical Engineering and Applied Chemistry (TIChE), the Thailand Research Fund and National Innovation Agency established the Science & Technology Initiative and Sustainability Awards (STISA) in 2009. The project encourages students to think out of the box and come up with innovations based on scientific and technological methods. The idea is to promote creativity collaboration, environmental responsibility as well as establish enthusiasm and responsibility among students and professors of participating universities. Being in its eighth consecutive year in 2015, the STISA received a total of 337 innovative projects submitted for competition by students from leading tertiary education institutes nationwide.

Support for community success & engagement

With our commitment of being a good corporate citizen, Dow Thailand Group has a mission to establish a better life quality and sustainable success to communities in Rayong province where we operate through various Corporate Social Responsibility (CSR) activities in education, environmental, community well-being and community relations areas.

Philanthropic Efforts

Aside from empowering the communities, in 2015, Dow Thailand Group provided social assistance in other areas as follows.

Supporting the Protheses Foundation for HRH Princess Mother

Dow Thailand Group has donated polyurethanes, a main raw material to produce prostheses, to the Protheses Foundation for HRH Princess Mother since 1996, which can be translated into more than 30,000 prosthetic legs. Besides, Dow has organized training on how to safely use chemicals and personal protective equipment (PPE), how to safely store the chemical and help the foundation's staff to draft safety plans. In 2014, a fund for safety, occupational health and environment was established. In 2015, Dow, its business partners and employees donated money and products worth 850,000 baht to the foundation.



Percentage of operations with implemented local community engagement, impact assessments, and development programs

SR
G4-SO1

In 2015, Dow Thailand Group pursued the following activities to contribute to community success and strengthen civil society engagement.

Education

Dow Thailand Group is active in promoting education activities especially science education at national and local levels. Realizing that science is the fundamental for national development and the fact that this idea aligns with Dow's policy of corporate citizenship, we have so far collaborated with leading education institutes to start up and develop education projects especially STEM education (Science, Technology, Engineering, and Mathematics) for sustainable benefit of the Thailand's educational system.



The winner teams from high school level of Creative Science Contest under Dow Chemistry Class 2015



Students are enjoying using the small-scale chemistry laboratory kit of Dow Chemistry Class project



A second series of training workshop sessions for science teachers



Dow volunteers educated students in Rayong province about safety at school.



Renovated science classroom under Adopt-A-School project

1. Dow Chemistry Class

Dow Thailand Group in collaboration with the Chemical Society of Thailand under the patronage of Professor Dr. HRH Princess Chulaborn Walailak has set up the "Dow Chemistry Class" project. The project focuses on science teaching and learning especially those relating to chemistry laboratory to enhance teachers' and students' capacity through Small-Scale Chemistry Laboratory (SSCL), a technique considered highly efficient and safe.

Recognized internationally and by UNESCO, the technique has been applied for the first time by a private corporation in the Thai education system. Main activities of the project include providing workshop training on small-scale chemistry laboratory techniques to high school science teachers; monitoring and evaluating their teaching, organizing a contest on how the SSCL technique is applied in classroom and, finally, training prototype teacher of Dow Chemistry Class. The main purpose is to develop trainers and teachers capable enough to disseminate this teaching technique in a wider scale. From its inception, 178 primary and secondary teachers from 58 schools attended the project and more than 15,000 students have benefited from the project.

2. Vocational Chemical Engineering Practice College Project (V-ChEPC)

This is our collaboration with Petroleum Institute of Thailand and the Petrochemical Club of the Federation of Thai Industries (FTI) in which technical students are taught through the "Learn How to Learn" and "Learning by Doing" concepts in a 2-year curriculum. Since 2009, Dow Thailand Group has supported 6 million baht to the project. At present, seven batches of technical students have been graduated and 15 of them have become our employees. Dow Thailand Group's staffs are guest lecturers to the project teaching factory operation from time to time.

3. Safety Schools

As safety is Dow's top priority, Dow volunteers have organized this project to raise safety awareness among school students and to improve basic infrastructure for schools in Dow's neighborhood to establish a safe learning environment. This annual event collaborated by more than 90 Dow volunteers has been held since 2008 during which 822 students in 20 schools have benefited from it.

4. Adopt-A-School

Dow Thailand Group has joined hands with the American Chamber of Commerce to adopt schools in Rayong province with a purpose to improve basic infrastructure and school environment as well as to provide education support to students. Since 2008, 11 schools have been renovated under this project, which benefits more than 6,500 students.

5. Fun with English and Science

In 2015, Dow Thailand Group's volunteers organized six Fun with English and Science activities in six schools of Chachoengsao and Phra Nakhon Si Ayutthaya provinces for more than 350 students to inspire them in English language and science study. The occasion also saw Dow people giving scholarships, sports equipment, stationery and learning media to those in need.



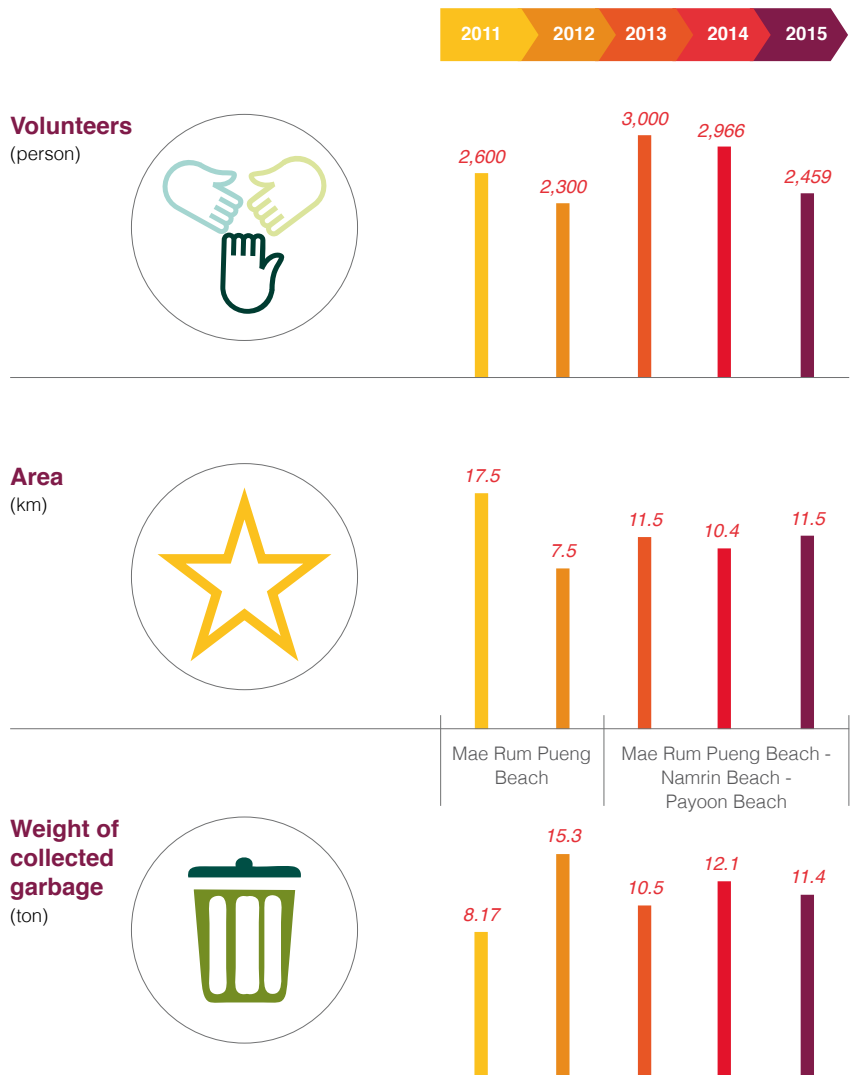
The environment

Protecting the planet and the environment remains Dow’s mission that we actively adhere to when doing our business. So far, Dow Thailand Group has initiated major environmental projects and activities as follows.

1. International Coastal Cleanup

Dow Thailand Group, Industrial Estate Authority of Thailand (I-EA-T), Tourism Authority of Thailand, communities in the neighborhood and local businesses have joined hands to organize the International Coastal Cleanup Day in Map Ta Phut area for 13 years. The activity not only helps save marine lives but also raise environmental awareness among community members to protect beaches and local coastline. The following is a table of the coastal cleanup activity during the past five years (2011 - 2015).

Statistics of International Coastal Cleanup program (2011 - 2015)

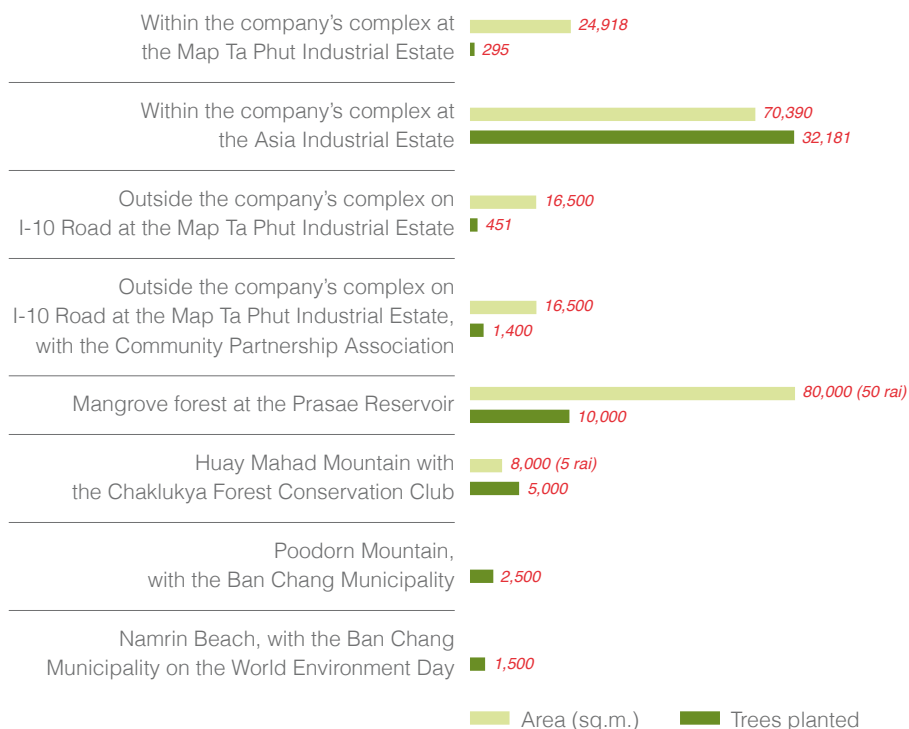




2. Tree planting and protection strips

Dow Thailand Group has actively support tree-planting activities in the community and around the neighborhood as the project not only improves living quality with more green areas being expanded and enlarged green protection strips being established but it also raises environmental awareness among Dow's people and local residents. During the past seven years, Dow has planted more than 53,000 trees. The planting activity is usually held on auspicious occasions such as on HRH the King's and the Queen's birthdays and on the World Environment Day.

Statistics of tree planting (2010 - 2015)



Community well-being

Dow Thailand Group strives to develop a project that addresses the communities' needs while supporting their sustainable development. The communities not only participate in our organized project but they are part of the project from development stage and in the continuation of the project for mutual and sustainable success.

1. Habitat for Humanity

Executives and staff of Dow Thailand Group has built homes with the US-based Habitat for Humanity International Foundation for those in need in Ban Chang, Map Ta Phut and Map Chalood communities in Rayong province. In 2015, Dow Thailand built two homes for impoverished families in Map Ta Phut Municipality and Samnak Ton Municipality. Since 2006, we have built 27 homes to people in need of shelter and drew participation from more than 1,000 volunteers.



2. Ban Chang Development Plan

Dow Thailand Group has supported Ban Chang district to formulate the “Ban Chang Development Plan” where residents in 22 villages of 3 sub-districts in Ban Chang district, Rayong province, take part in drafting the plan aimed to support sustainable empowerment of their communities. The plan identifies major projects critical to sustainable development. It also singles out details of project the community may pursue itself or collaborate with the public or private sector. Community members are also allowed to access to various resources. In 2013, Dow and communities in Ban Chang district completed the development plan, which was later submitted to community leaders and the district in June 2013. In 2015, Dow Thailand Group managed to do the following based on the Ban Chang Development Plan.



Dow Science Caravan



English Kids Fun



Community Partnership Association mobile clinic

- The “Dow Science Caravan” activity was held with the Ban Chang Development Plan Strategy Committee and National Science Museum to provide science education for children in Rayong province. More than 4,000 students from various schools in Rayong attended the caravan activity.
- The “English Kids Fun” project offering the kids between 9 - 12 years old English classes on weekends. The project, which has been up and running since 2014, is an answer to residents’ serious need. 600 kids have been passing through this activity.
- Eight pieces of outdoor exercise equipment worth 200,000 baht were given to a health park at Moo 2, Sumnaktorn sub-district. This is part of our activity to strengthen healthy community under the Ban Chang Development Plan. A workshop for senior citizens on how to make herbal inhalation products was also organized.

In addition, in 2015, Dow Thailand Group organized a workshop entitled “Participatory Development Plan of Ban Chang” to review and plan development work for Ban Chang in 2016. Short and long-term goals as well as operation and monitoring guidelines in four areas indicated in Ban Chang Development Plan are identified. The four focuses for Ban Chang are making Ban Chang a better place to live, a happy tourist destination, a safe place for farming and a systematic location for green industry. The operation team of the Ban Chang Development Plan consists of more than 50 people from public and private sectors and communities.

3. Community Partnership Association (CPA)

Dow Thailand Group is one of the founding members of the “Community Partnership Association” group, which is Thailand’s first collaboration among five companies; namely, Dow Thailand Group, PTT, SCG, BLCF and Glow, who commit to resolve common problems within the industry and to turn their businesses into an eco industry through knowledge transfer, experience sharing and self-monitoring. The group has upgraded its status to the Community Partnership Association with a total of 16 companies as its members now. The goal is to allow industries and communities to live side-by-side in a sustainable manner. Hopefully, more businesses will join the association in the future and create a strong network of sustainable environmental management to realize the ultimate goal of transforming Rayong province into an eco industrial town.



Dow's Wonderland



Lime Planting



Career Guidance



Exercise Rubber

In 2015, CPA organized the Friend-Helps-Friend project to elevate safety and environmental management standards of businesses within the Map Ta Phut complex. CPA also sent a mobile clinic to Map Ta Phut and Ban Chang communities on 23 occasions. It provided 27 scholarships to undergraduate students of Rayong province, ran tutorial camps and Rayong education expo and offered 40 nurse scholarships. Other activities included promoting community enterprises, creating an environmental surveillance network among factories of the association's members, organizing traditional Thai healthcare activities and conducting emergency trainings with local communities and schools.

4. Neighbor Care Project

Starting in 2014, Dow Thailand Group has established the socio-environmental project under the name of "Neighbor Care Project," which offers an opportunity for Dow staff to propose projects that will improve community wellbeing and nourishing a relationship with the communities. More than 400 Dow volunteers have participated in the project. In 2015 alone, four activities were held under the project as follows.

1. Dow's Wonderland

Dow volunteers improved landscape of Banpayoon School, Ban Chang sub-district, Ban Chang district, Rayong province. They repaired roof, hand washing area and the school library. They also organized recreational activities for students.

2. Lime Planting

Dow volunteers went to Wat Keereepawanaram School and nearby communities to share their knowledge on lime tree farming and nourishing. This activity allows the school to lower its costs of cooking lunch for students while residents and the school itself can earn extra incomes from growing lime trees.

3. Career Guidance

Dow volunteers joined hands to repair economics study room and provided bakery equipment to Wat Suwan Rangsan Community School to enable the school and students to generate more incomes from the cooking and to enhance students' cooking skills honed for their future work.

4. Homemade Resistance Exercise Rubber for Good Health & Happiness

Dow employees donated 200 resistance exercise rubbers they had made to the Senior People Gathering in Muang Ban Chang Municipality for use in their exercise activities as a means to promote better health in local communities.

5. Supporting community enterprises

Dow Thailand Group supports goods and services provided by community or community enterprise since this means supporting the local economy. Community products were usually on sale at our plants when we organized corporate event.



*Community Advisory Panel meeting
at Asia Industrial Estate*



*San Sum Phan meeting with
communities in Ban Chang
and Map Ta Phut areas*



*Dow opens house to welcome
community representatives in Rayong.*

Community engagement

Dow Thailand Group underlines the importance of establishing strong relations with community via various communication channels and forums throughout the year. We also join community events on major occasions such as on National Children's Day, Thai New Year Day, Buddhist Lent Day as well as at Kathin ceremony.

1. Community Advisory Panel (CAP)

Dow Thailand Group's Community Advisory Panel (CAP) provides an important outside-in perspective on the environment, health and safety issues, as well as sustainability, for the company. CAP members include local government officials, community leaders, the media, and other community representatives. Currently, Dow Thailand Group has two CAPs. The first one, formed in 2010, is at the Asia Industrial Estate, and the other, formed in 2011, is at the Map Ta Phut Industrial Estate. Since their inception, 40 meetings were convened. In 2015 alone, there were eight meetings.

2. San Sum Phan (Community Meetings)

This activity is an informal meeting held to strengthen relationship between Dow Thailand Group and the community and as a forum to discuss Dow's business operation as well as to listen to community advice. The activity was held with 52 communities in Ban Chang Sub-District Municipality, Muang Ban Chang Municipality, Pala Sub-District Municipality and Muang Map Ta Phut Municipality. In 2015, 10 relationship-strengthening activities were organized and attended by 693 community residents.

3. Other activities

We open our house to welcome visitors from government agencies, community representatives, local schools, university students and the media who wish to tour our plants and take a look at our products, safety and environmental management system as well as social activities and community engagement. Other visits include those by accredited agencies to measure environmental quality.

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