



The Contribution of
Private Sector in
Community and success
cases sharing

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Southeast Asia Corporate Affairs Director

Dow Thailand

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Founded in 1897 by a chemist and innovator, Herbert Henry Dow.

Dow is the world's leading material sciences company with a purpose to use our expertise in collaboration with our partners to help deliver a sustainable future.

Our ambition to be the most **innovative**, customer-centric, inclusive and sustainable materials science company.

Dow's portfolio delivers a broad range of differentiated science-based solutions for high-growth markets.











Infrastructure

**Packaging** 

**Mobility** 

Consumer Care

Industrial Solutions



2022 NET SALES

**INNOVATION CENTERS** 

MANUFACTURING SITES



**GLOBAL REACH** 

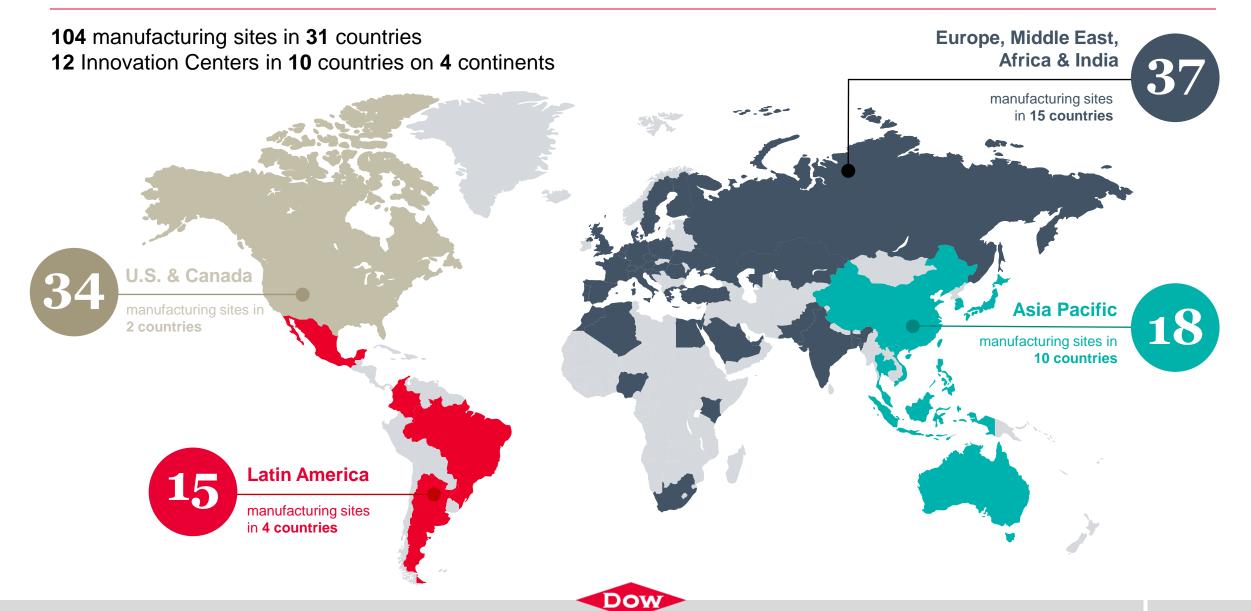
>100 sites

>150 countries

In 10 countries on 4 continents

In > 30 countries

#### Global Scale, Local Reach and Collaborative Innovation



**General Business** 

#### **ABOUT DOW THAILAND GROUP**

Dow started its business in Thailand in 1967, then expanded through a joint venture with SCG Chemicals in 1987.

Today, Thailand is the largest manufacturing hub of Dow in Asia Pacific, with 13 plants in 3 industrial estates in Rayong province, namely

- Map Ta Phut Industrial Estate
- Asia Industrial Estate
- WHA Eastern Industrial Estate (Map Ta Phut).





## Dow's Sustainability Journey: Increasing Value Over Time

# Dow

#### **Footprint**

Reducing costs, waste and risk

2005 EH&S Goals 2015
Sustainability
Goals

#### Handprint

Redesigning products and processes for customers

#### **Blueprint Thinking**

Rethinking business models and collaborating to grow impact



2030 and Beyond

# Climate Protection, Circular Economy and Safer Materials

Increasing our commitments to achieve zero-carbon emissions and advance circularity while helping meet rising demand for safer and more sustainably produced materials for our customers and society



#### **Industry Leader in Environmental Sustainability**



#### PROTECT THE CLIMATE

By 2030, Dow will reduce its net annual carbon emissions by 5 million metric tons vs. its 2020 baseline<sup>1</sup> (15% reduction). By 2050, Dow aspires to be carbon neutral (Scope 1 + 2 + 3 plus product benefits).

Clear path to reduce carbon emissions 30% by 2030, from 2005 levels

Advanced plans to build the world's first netzero<sup>2</sup> carbon emissions, integrated ethylene cracker and derivatives site in Fort Saskatchewan, Alberta

Announced a project with X-energy to **install advanced nuclear technology** at our Seadrift, Texas, site to provide safe, reliable low-carbon power and steam

Developed Scope 1 and 2 carbon emissions reduction plans for Dow's 25 highest-emitting sites



#### TRANSFORM THE WASTE

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

We are collaborating to invest in key technologies and infrastructure to significantly increase global recycling























#### CLOSE THE LOOP

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

>80% of Dow products sold into packaging applications are reusable or recyclable

**Post-consumer recycled resins:** REVOLOOP™ sales and supply partnerships in every geography

Developing advanced recycling feedstocks







Introduced one of first bio-based, high-performance polyolefin elastomers



- 1 The value of the baseline equals 34.7 million metric tons of carbon dioxide emissions.
- 2 In regard to Scope 1 and 2 emissions.



## **Banchang Material Recovery Facility (MRF)**









Economy





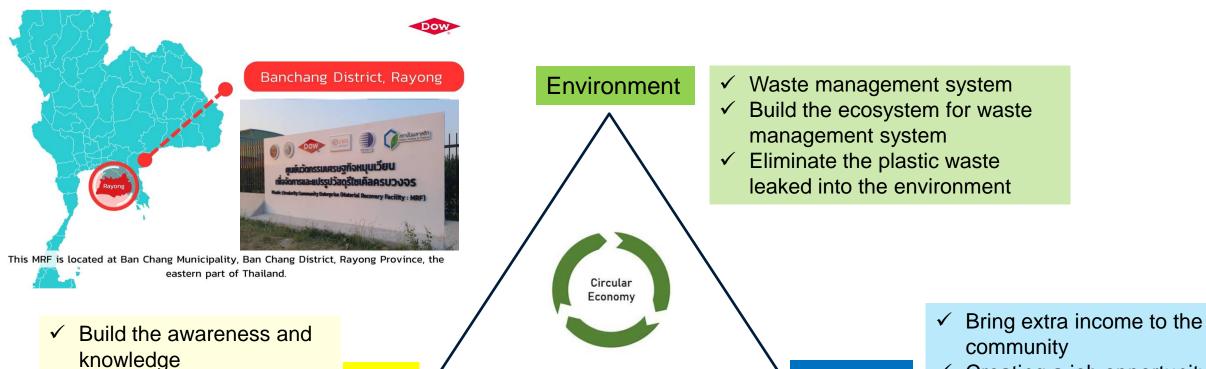




- Co-funding between government and private sector
- 1st Plastic Circularity Community Enterprise in Thailand
- Established through strong commitment with the effective collaborative partnership

Socia

**Local and Affordable Technology and Innovation** 



- ✓ Creating a job opportunity
- for community residences

- ✓ Community engagement
- ✓ Develop to be Innovation Learning Center for recyclable materials

#### **Banchang Material Recovery Facility (MRF)**



Operated in Q4, 2023 onwards



4 jobs created



7 tons of recyclable materials collected



500 members



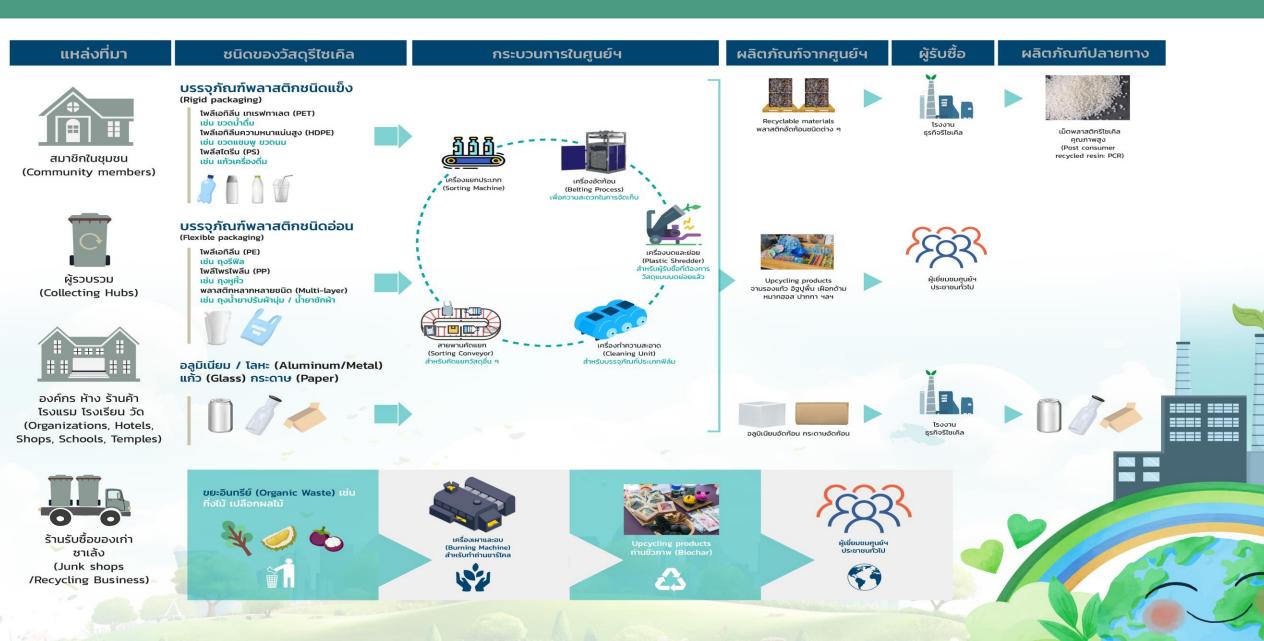




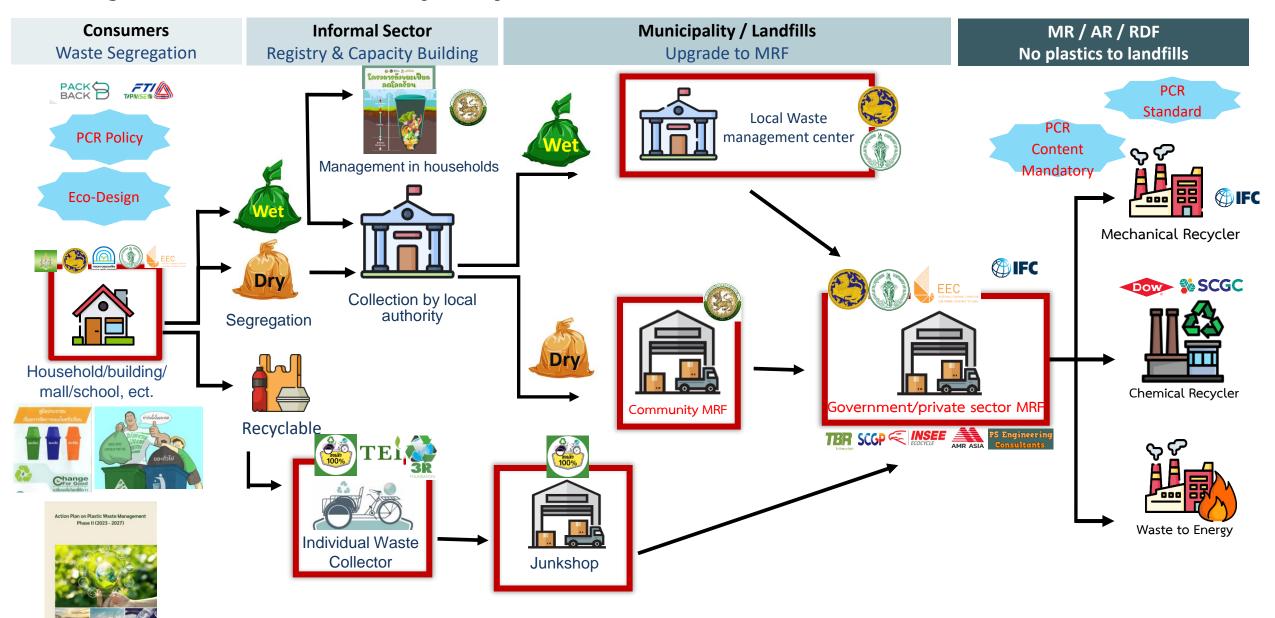




# **Banchang Material Recovery Facility (MRF) – Process Flow**



#### **Building Thailand Plastic Circularity Ecosystem**































# SMART RECYCLING HUB: BUILDING PLASTIC CIRCULARITY ECOSYSTEM





# **Building Plastic Circularity Ecosystem**

# **PPP Plastics Implementation Partners**

#### **Civil Society Organization**





















#### **Private Sector**

COLGATE-PALMOLIVE COMPANY



IVIC



















#### **Government Organization**















**International Organization** 







**MARS** 



Mitsubishi Company (Thailand) Ltd.

















#### **PPP Plastics**



**IRPC** 

**Network Partners** 

#### **Educational Institution**









# Smart Recycling Hub





















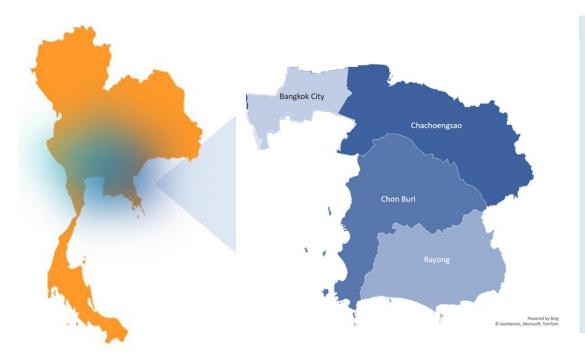






# **AEPW Smart Recycling Hub**

Target: Bangkok and 3 EEC provinces to recover high-quality plastic feedstock of at least <u>50,000 tons/ year by 2026</u>



- Feasibility Study (6 months in Nong Khaem, 12 months in other BMA and EEC)
- > Infrastructure development
  - BMA Nong Kham→ 1 MRF Unit (40 tons/day)
  - Other BMA and EEC 

    5-10 units

