THAILAND

COUNTRY REPORT

20th Term ASEAN Federation of Plastic Industries & 33rd Asia Plastics Forum

สถาบันพลาสติก
Plastics Institute of Thailand

FTI

Thailand's Plastics Industry Situation:

Plastics Industry Economic Contribution and Manufacturing Situation

Thailand Plastics Industry Profile 2021

- 2021 Manufacturers Profile -

PLASTICS MANUFACTURER
3,262* COMPANIES
*SURVEY FROM PLASTICS INTELLIGENCE UNIT

88% are SMEs

80% LOCATED IN CENTRAL

65% are PLASTICS CONVERTOR
(2,255 FACTORIES)

- Rank 1 — **52%** are PACKAGING COMPANIES (1,318 COMPANIES)
- Rank 2 — **12%** are HOUSEWARES COMPANIES (314 COMPANIES)
- Rank 3 — **9%** are CONSTRUCTION COMPANIES (222 COMPANIES)
- **27%** is OTHER CONVERTOR (AUTO PART, E&E, MEDICAL, SPORT TOOLS, e.g.) (691 FACTORIES)

Source: PLASTICS INTELLIGENCE UNIT

- 2021 Production & Conversion -

2.0 RESIN IMPORTATION MILLION TONS

9.5 RESIN PRODUCTION MILLION TONS
- **83%** COMMODITY REINS
- **17%** SPECIALTY REINS

5.9 RESIN CONSUMPTION MILLION TONS

884 CONVERSION VALUE BILLION BAHT

SOURCE: PETROLEUM INSTITUTE OF THAILAND

- 2022 Trading Status -

Plastics Resin HS Code: 3901 -3915 | Plastics Product HS Code: 3916 -3926

	Import	Export
RESIN	**194** RESIN IMPORT BILLION BAHT	**368** RESIN EXPORT BILLION BAHT
PRODUCT	**187** PRODUCT IMPORT BILLION BAHT	**158** PRODUCT EXPORT BILLION BAHT

SOURCE: THAI CUSTOM

Value Shanking Along Value Chain

With Global Economic Decrease, Regional Demand Subdue that Limiting Thailand Plastics Export

Export Resin
- 305,891.4 MB (-17.0%)
- 5,648 KTA (+3.6%)

Import Resin
- 164,368.6 MB (-15.5%)
- 2,496 KTA (+15.2%)

Domestic Resin Production
- 437,530.3 MB (-26.6%)
- 8,823 KTA (-2.4%)

Domestic Resin Consumption
- 296,007.5 MB (-10.8%)
- 5,769.5 KTA (-0.3%)

Convert to Plastics product
- 970,041.3 MB (-4.3%)
- 5,769.5 KTA (-0.3%)

Import Plastics product
- 286,638.3 MB (-25.3%)

Domestic Plastics Product Consumption
- 1,023,433.2 MB (-8.2%)

Export Plastics product
- 233,246.4 MB (-17.6%)

Thailand Values Plastics Industry
- 1,275,932.7 MB
- 6.70% of Thailand GDP

Domestics Conversion Value also Decline

Sluggish of Consumer Demand to Drag Packaging Conversion Value as well as the Slowdown in Domestics Production of E&E Appliances and Automotive Sectors to Pressure Overall Conversion Value in 2023, Construction Sector still Growing with Private Investment

2023 Convert to Plastics product

Values: 970,041.3 MB (-4.3% YoY)
Volume: 5,769.5 KTA (-0.3% YoY)

1 Packaging
- 213,276.5 MB (22.0%) -11.5% YoY
- 2,174.7 KTA (37.7%) -8.0% YoY

2 E&E Appliances
- 210,575.9 MB (21.7%) -6.7% YoY
- 917.9 KTA (15.9%) +2.0% YoY

3 Construction
- 137,578.9 MB (14.2%) +8.2% YoY
- 953.7 KTA (16.5%) +12.0% YoY

4 Auto-part
- 104,648.5 MB (10.8%) -5.1% YoY
- 397.5 KTA (6.9%) +11.8% YoY

5 Safety & Security
- 83,712.0 MB (8.6%) +18.6% YoY
- 170.8 KTA (3.0%) +12.1% YoY

6 Medical devices
- 65,655.1 MB (6.8%) +30.9% YoY
- 143.5 KTA (2.5%) +30.8% YoY

7 Housewares
- 43,171.6 MB (4.5%) +11.3% YoY
- 212.1 KTA (3.7%) +8.6% YoY

8 Footwears
- 33,198.5 MB (3.4%) -31.1% YoY
- 85.4 KTA (1.5%) -19.9% YoY

9 Recreation & Leisure
- 25,661.7 MB (2.6%) -32.7%YoY
- 101.1 KTA (1.8%) -23.9% YoY

10 Filament(Non-Textile)
- 22,144.3 MB (2.3%) -12.6% YoY
- 366.0 KTA (6.3%) +2.2% YoY

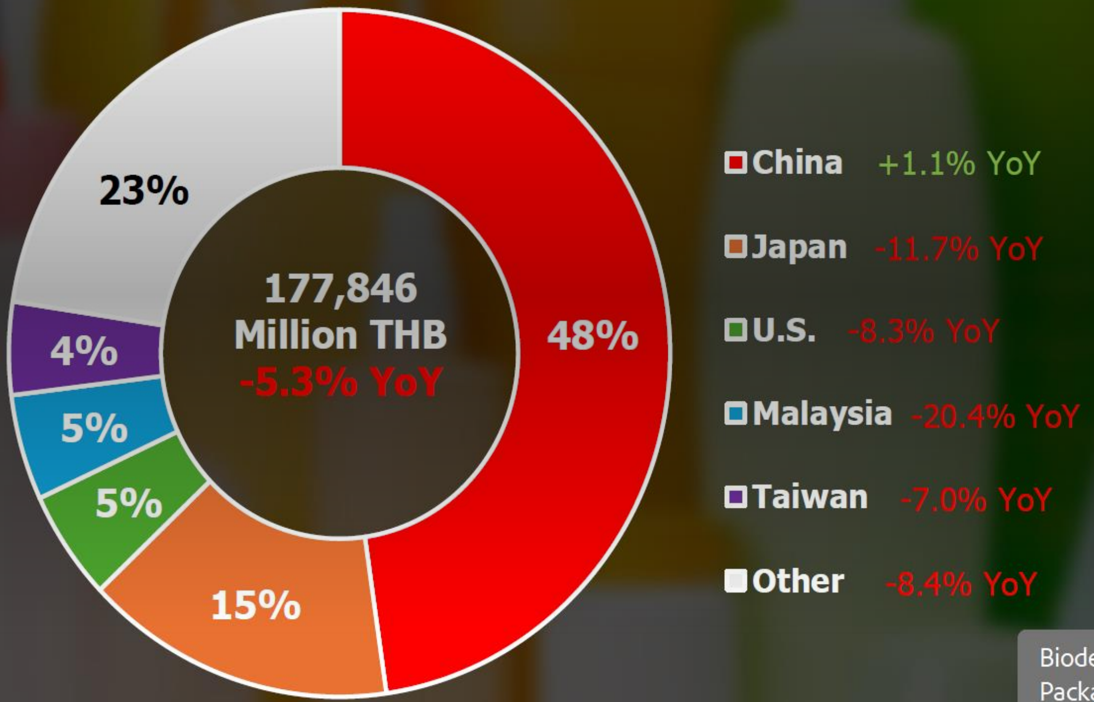
11 Agriculture
- 18,976.0 MB (2.0%) +2.4% YoY
- 158.5 KTA (2.7%) -8.1% YoY

12 Others
- 11,442.3 MB (1.2%) -43.4% YoY
- 88.2 KTA (1.5%) +1.9% YoY

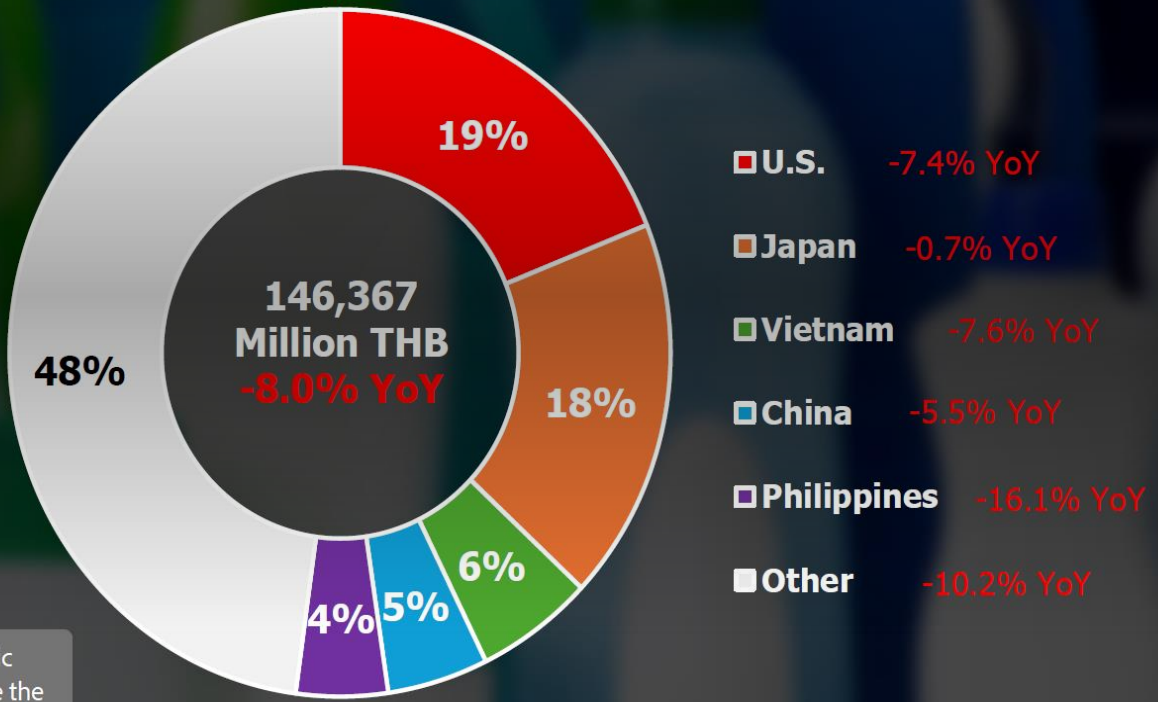
Import from China Growing Contrary to the Others

Mostly Shrinking in All Market Partner in Plastics Products due to Economic Circumstances but China Import Plastics Product still Growing by FDI in E&E and Automotive Sectors to Support EV Investment in Thailand

2023 Thailand's Plastic Product Import



2023 Thailand's Plastic Product Export



Biodegradable" Plastic Packaging Won't Save the Beauty Industry | Allure

Thailand's

Plastics Waste Management Policy and Collaboration

Action Plans

related to waste and plastic waste management

National Action Plan on Waste Management (2022 - 2027)

Measure 1 Waste Management at Source
- Eco Design
- Extended Producer Responsibility. (EPR)
- Behavior and lifestyle changed
- Encourages people to separate waste at sources

Measure 2 Increase efficiency on waste disposal system
- Promote and upgrade waste disposal sites
- Encourage the private sector to invest in waste management
- Strict control on waste disposal operations including industrial waste disposal operations
- Determine guidelines for new emerging waste management

Measure 3 Development of Waste Management tools
- Development of related laws promoting circular economy, especially EPR law.
- Driving legislation on management of electronic waste.
- Encourage all local governments to issue local ordinances for segregation at sources.
- R&D to support waste management

Action Plan on Plastic Waste Management phase II (2023 - 2027)

Measure 1 Production of environmentally friendly products
- Grouping and defining types of plastic products for properly recycling
- Setting up standards
- Supporting manufacturers
- R&D/Enact Law and Regulation

Measure 2 Reduction the use of single-use plastic at consumption process
- Shopping malls, convenience stores
- Restaurant and cafe
- Local market
- Government office
- Consumers

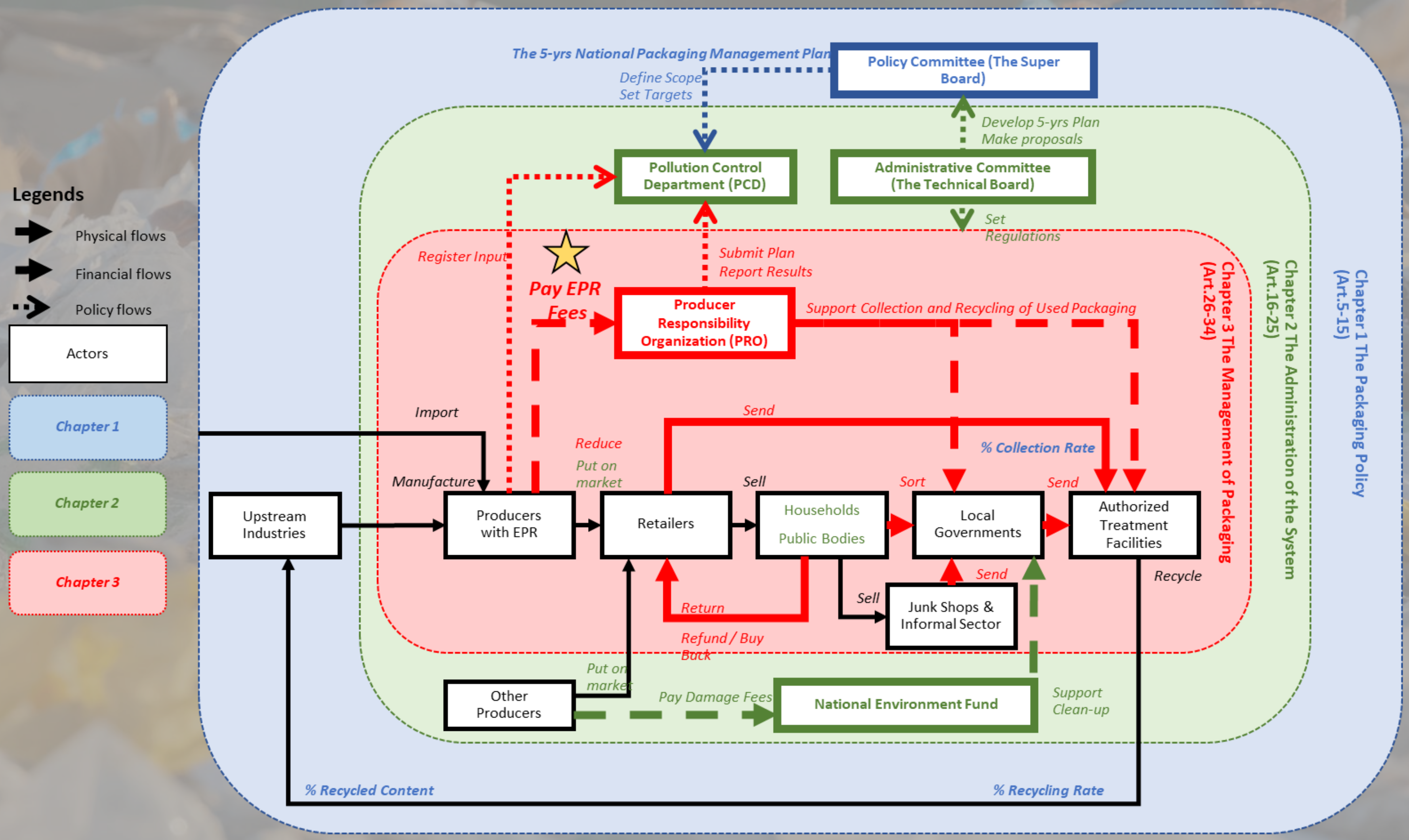
Measure 3 Post-consumption plastic waste management
- Establishing waste separation and collection system based on final treatment

Measure 4 Marine litter management
- Land-based and sea-based activities


Target 1
Reduce and stop using single - use plastic targets by replacing with environmental friendly products
Target 2
100% of target plastic waste to Circular Economy
SDGs
• Summary of implementation in according to SDGs
2030
2028 2029
• Continuously working to meet the target of Roadmap
2027
Phase 3
100% of target plastic wastes will be recycled by applying Circular Economy Principle
PLASTIC
2023 2026
• Reducing and stop using other single-use plastics
2022
Phase 2
• Law enforcement on plastic waste management
2021
Stop using in 2022
- Plastic bag < 36 micron
- Foam food container
- Plastic cup < 100 micron
- Plastic straw
• Monitoring, evaluation and review Roadmap and Action Plan
• Develop recycling plastic waste system through circular economy
2020
• Develop guidelines/ requirements/ standard for environmental friendly plastic products
Phase 1
Oxo
Microbead
Cap seal
2019
• Adopted "Bangkok 3R Declaration towards Prevention of Plastic Waste Pollution through 3R and Circular Economy"
• Adopted "Bangkok 3R Declaration on Combating Marine Debris in Asean Region"
• Develop plastic waste recycling system through circular economy
Stop using in 2019
• Cap seal
• Oxo
• Microbead
2018
• Establish Subcommittee/Working groups
• Develop Roadmap for Plastic Waste Management 2018 – 2030
0.5 million tons utilization
2 million tons or 12 % of the total waste generation
1.5 million tons disposed by landfill or incinerator
Partially remain in Environment
Problems of Plastic Waste in Thailand

Flow Diagram of Packaging Management under

Draft of Sustainable Packaging Management Act, B.E. ….



Obligation

- Data Structure
- Data Provider
- Informal Sector

PCR Standard

Certification of PCR resin in raw materials or products

Scope

- **Raw Material: PCR Resin Pellet**
- **Plastics Products: PCR content**
- **Mechanical Recycle only not included chemical Recycle**
- **Exclude PIR**

Private Sectors Collaboration

Waste Management Model

- Khlong Toei Model
- Rayong Model
- Pathumwan Model
- Magic hand project

Data and Information Support

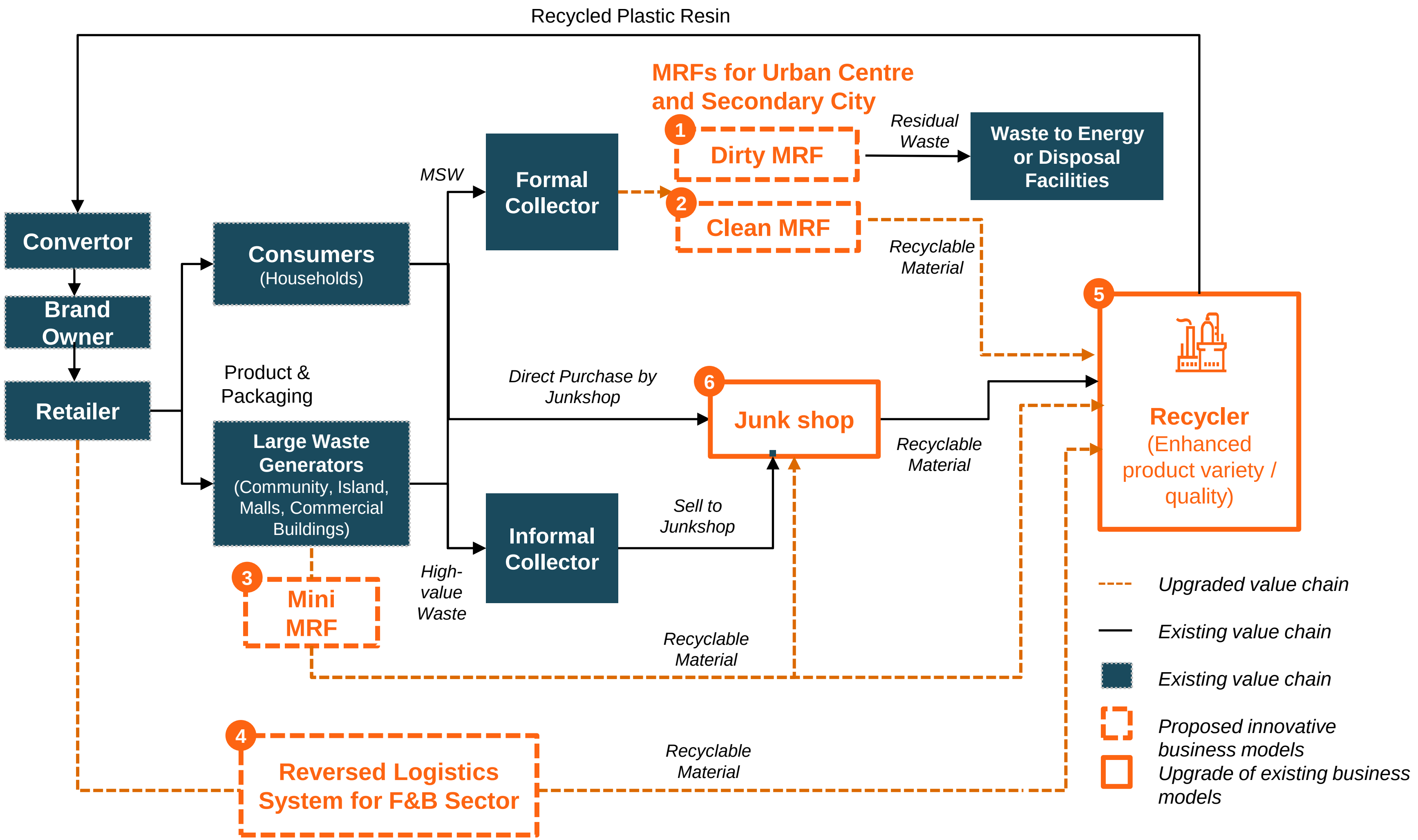
- Plastics Waste Database
- Circular Economy Curriculum
- Knowledge Sharing

Infrastructure

- BMA Waste Management
- Plastics Road Project

Flagship Project: Thailand Smart Recycling Hub

To optimize plastic waste recovery and upgrade the recycled plastic value chain, the potentials for new innovative business models along the value chain have been identified



Potential Innovative Business Models in the Value Chain

1. **Dirty MRFs for Urban Centre and Secondary City.** LAOs could establish MRFs to increase sorting rate after waste is collected to recover recyclable materials that are still mixed in MSW.
2. **Clean MRFs for Urban Centre.** LAOs could implement dry waste sorting and establish MRFs for clean waste to recover materials efficiently.
3. **Mini MRF at source.** Another business model is to establish Mini MRF at shopping mall or big area of waste generator to recover recyclable materials at source before collected by LAOs.
4. **Reversed logistics for F&B sector.** A potential business model in the F&B industry involves implementing a reverse logistics system in cooperation with retailers to enhance sorting activities.
5. **Upgraded recyclers.** it is necessary to upgrade the entire ecosystem of plastic recycling including recycler who produce recycled plastic resin.
6. **Upgraded junk shops.** Junk shops could be upgraded to use proper systems that can connect the informal and formal sectors together.

THANK YOU

สถาบันพลาสติก
Plastics Institute of Thailand

Plastics Institute of Thailand

Tel. 02 391 5340 – 43

Email: info@thaiplastics.org