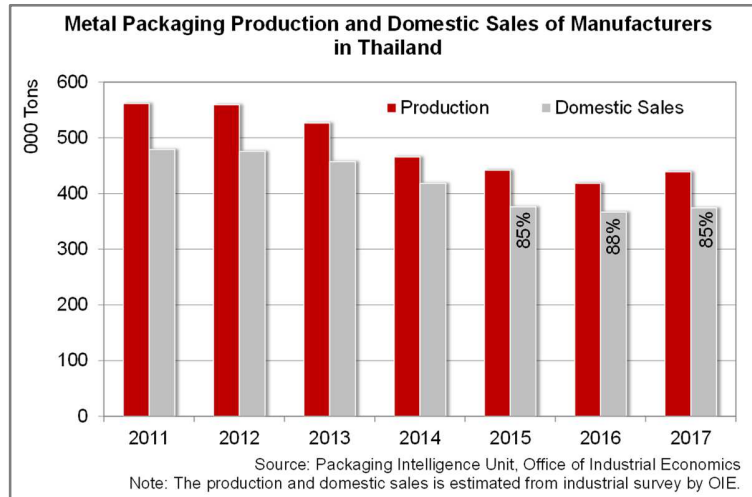


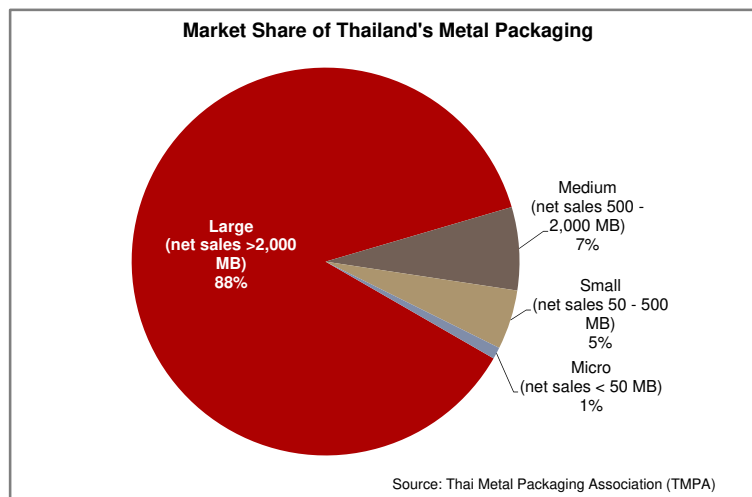
## Metal Packaging Industry in Thailand

### 1. Metal Packaging Industry Overview

- Main metal packages manufactured in Thailand are steel can and drum (tinplate and tin-free), aluminium can, and crown cap. **More than 80% of metal packagings are for domestic use.**
- The production of metal packaging was around 0.44 million tons in 2017 and grew by 5% from the previous year, thanks mainly to the growing export demand for canned foods.



- **There are 45 metal packaging manufacturers in Thailand with a 2016 market value<sup>(1)</sup> of around 60 billion baht.** More than 80% of the market share held by large manufacturers. According to TMPA, large companies' market share expanded from 85% in 2013 to 88% in 2016.



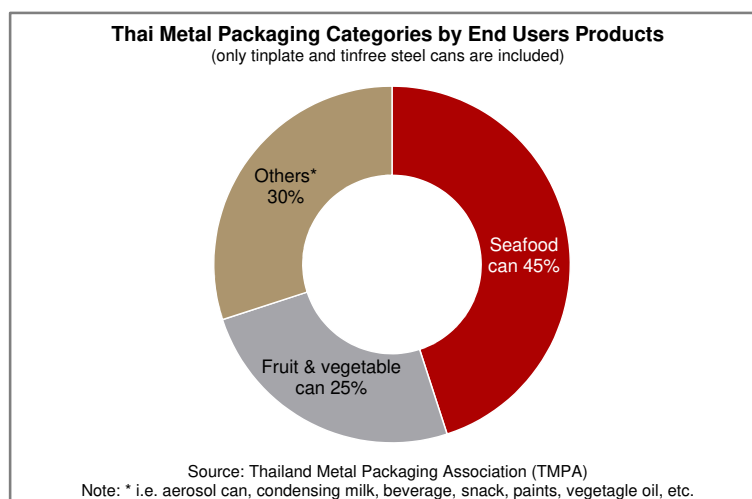
- Several foreign metal packaging manufacturers have continued to invest in Thailand. Joint-venture with local partners is the most popular form of foreign investment in this business.
- **Toyo Seikan, Takeuchi Press, Ball Corporation, and Crown Holdings Inc.** are the leading manufacturers in Thailand for more than decades. Lately, **Showa Denko** has just invested through a joint venture with a Thai beverage manufacturer in the 2<sup>nd</sup> half of 2017 and scheduled for commercial production by the 4<sup>th</sup> quarter of 2018.

### **Major Foreign Investment in Metal Package Manufacturing in Thailand**

Foreign manufacturers	Form of Investment	Local Partners / Their Businesses		Manufacturers in Thailand
		Company name	Business Types	
(1) Toyo Seikan Group	Joint venture	• Swan Industries (Thailand) Co., Ltd.	Metal can manufacturer	• Next Can Innovation Co., Ltd.
	Joint venture	• Boonrawd Brewery Co., Ltd. • Thai Namthip Co., Ltd. • Sermsuk Co., Ltd. • Green Spot Co., Ltd.	Beverage manufacturers	• Crown Seal Plc.
	Joint venture	• Crown Seal Plc.	Crown and bottle cap manufacturer	• Bangkok Can Manufacturing Co., Ltd.
(2) Takeuchi Press Industries	Joint venture	-	Thai individual partners	• Alucon Plc.
(3) Showa Denko Group	Joint venture	• Carabao Group	Energy drink manufacturer	• Asia Can Manufacturing Co., Ltd.
(4) Ball Corporation	Joint venture	• Berli Jucker Plc.	Trading and manufacturing conglomerate	• Thai Beverage Can Co., Ltd.
		• Standard Can Co., Ltd.	Can manufacturer	
(5) Crown Holdings Inc.	Wholly-owned	-	-	• Crown Food Packaging (Thailand) Plc.
	Wholly-owned	-	-	• Crown Bevcan and Closures (Thailand) Co., Ltd.
	Joint venture	• Chotiwat Manufacturing Co., Ltd.	Canned seafood and pet food manufacturer	• Crown Foodcan (Hat Yai) Co., Ltd.
	Joint venture	• Theppadungporn Coconut Co., Ltd.	Canned fruit and vegetable manufacturer	• Crown Foodcan (Nakhon Pathom) Co., Ltd.

Source: Gathered from the company's websites, Ministry of Commerce

- The country's metal packaging industry's continuous foreign investment resulted in higher competition in the market and further led to some industry's key movements. There is **an increasing trend of the large manufacturers' outward investment** to gain from the rapidly growing food and beverage market in CLMV. Meanwhile, **medium-sized manufacturers have diversified to produce plastic packaging<sup>(2)</sup>**.
- Canned food manufacturers purchase tinplate and tin-free steel cans, while local soft drink and beer manufacturers purchased the aluminium. According to the Thailand Metal Packaging Association's estimation, around 70% of steel cans in Thailand are food cans, only 30% are aerosol cans, beverage cans, paint containers, etc.

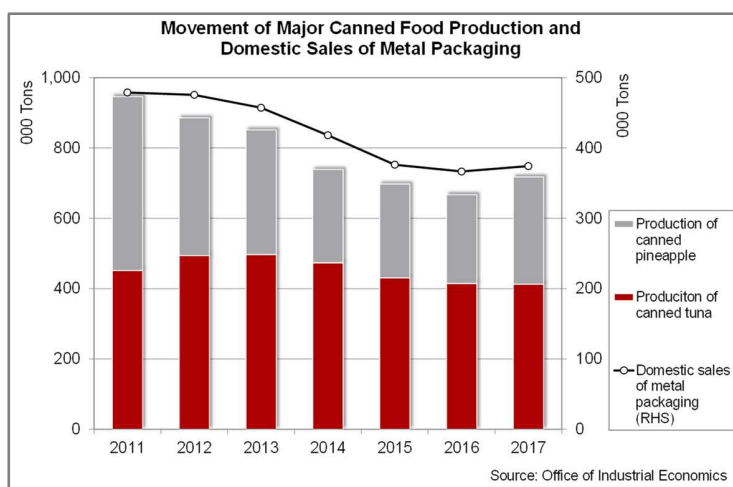


## 2. Metal Packaging Market Performance

### Domestic Market of Metal Packaging

#### (1) Food Can

- Being one of the world's leading canned food producers, **Thailand's metal packaging industry has mainly been influenced by canned food industry, especially canned tuna and canned pineapple.**
- The domestic sales of metal packaging, especially food can, dropped for five consecutive years before 2017 due mainly to the combination of shortage of pineapple and tuna supply to the canned food industry. Nevertheless, the metal packaging industry was recovered in 2017 thanks mainly to the increasing output of fresh pineapple.



- The global demand for fish and seafood is forecasted to increase<sup>(3)</sup> due to increased health awareness. The canned seafood in metal can is expected to gain from this trend as it offers convenience, low price, and longer shelf life than those chilled and frozen products.

#### (2) Beverage Can and Metal Closure

- The sizable markets of alcohol drinks, carbonated soft drinks, and energy drinks in Thailand contribute to the metal packaging industry in different aspects. The aluminium can are mainly used in beer and carbonated soft drinks. The metal closures, which include crown cap and aluminum lid, are mainly used accompany with the glass bottle for beer, spirit, and energy drinks.

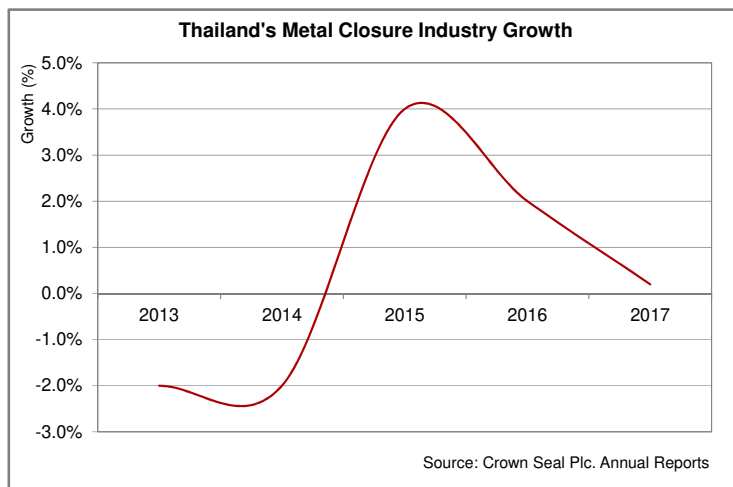
**Container Types Used in Major Beverages in Thai Market**

Beverages	Main type of containers		
	Glass bottle	Plastic bottle	Aluminum can
<b>Alcohol drinks</b>			
- Beer	✓	-	✓
- Spirit	✓	-	-
<b>Carbonated soft drinks</b>	✓*	✓	✓
<b>Energy drinks</b>	✓	-	-

Note: \* There is the decreasing trend in glass bottle used in carbonated soft drinks.

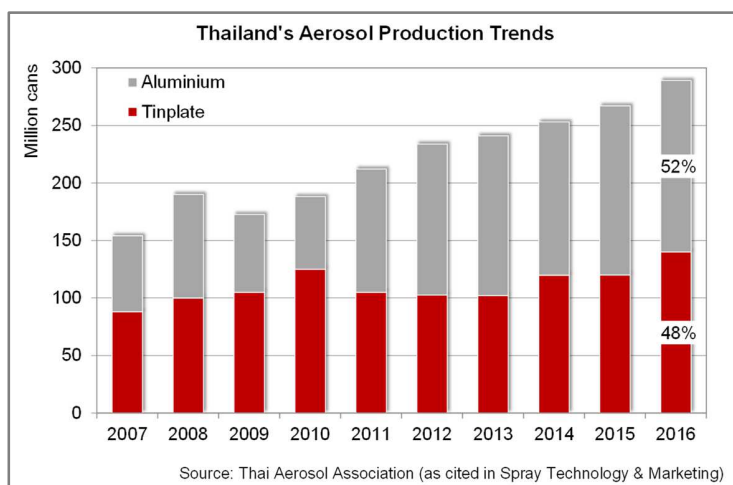
- Thailand's beverage market has been continuous expanding accompanying with the growing urbanization and the growing of middle class.** The beverage is increasingly available to the larger consumer base due to the growing number of modern retail stores nationwide<sup>(4)</sup>. In addition, the increasing middle class population offers greater opportunities for new variety of beverages. Thereafter, the sales expansion through modern trade channels result in more demand for aluminum can due to its advantage of lightweight and breakage resistance over the traditional glass container.

- **Growing tourist numbers have contributed, to some extent, to the growth of Thailand's aluminum can industry** as the can packaging, which is mainly served in the hotels and restaurants, offers travel-friendly and premium look.
- **The increase in middle income people in the neighboring countries, including Myanmar, Lao PDR, and Cambodia, are greatly contributed to the growth of Thailand's beverage industry,** especially beer and energy drinks. The demand for beer and energy drinks in such markets has increased continuously in recent years. The steady economic growth in such markets is expected to create a greater demand for aluminum can over the next several years.
- **On the contrary, the growing use of plastic bottle to replace glass bottle has becoming the key challenge of the metal closure industry.** During 2013-2014, the metal closure industry had severe impact from the termination of Pepsi Co's glass bottle. Furthermore, the industry experienced the slow growth in the last two years.



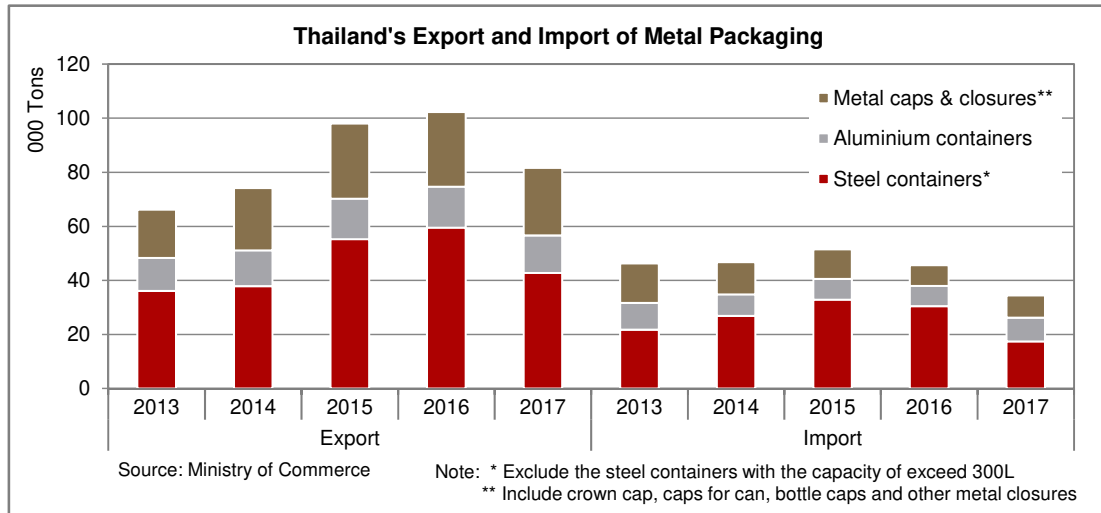
### (3) Aerosol Can

- There is an increasing trend of aerosol production in Thailand. According to the Thai Aerosol Association, 290 million aerosol cans were produced in Thailand in 2016, out of which 52% are aluminium.
- **The growing trend in using aerosol container in cosmetics and personal care products will be the key driver of the aerosol can industry in Thailand.**



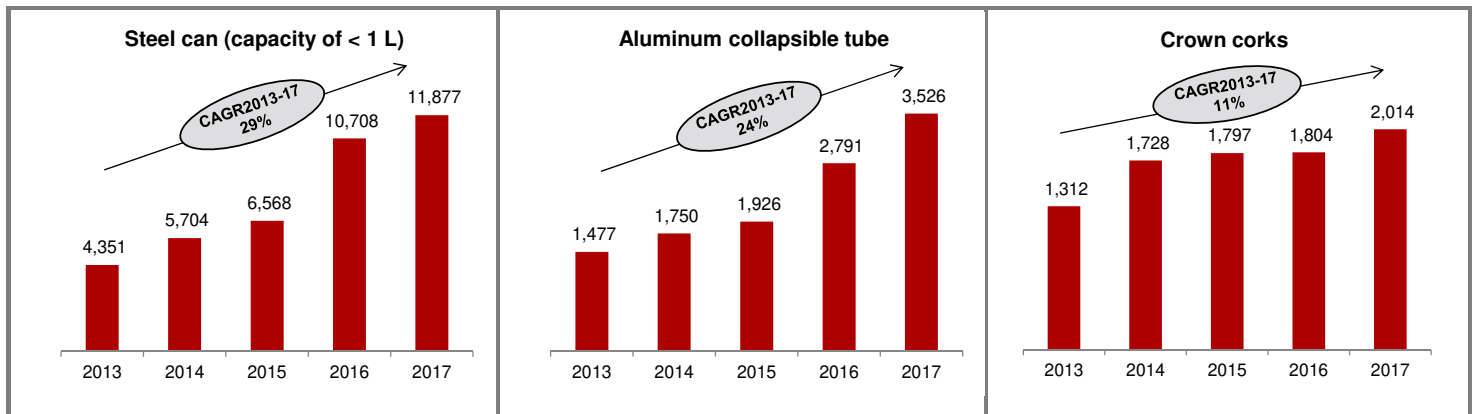
### Export Market of Metal Packaging

- Thailand is the net exporter of metal packaging. In 2017, around 80,000 tons of metal packaging were exported, as opposed to only 30,000 tons were imported.
- The export of metal packaging declined in 2016 and 2017 due to falling demand from CLMV. CLMV saw a massive increase in foreign investment to set up plants due to the growing demand and the cost-advantage for producing metal packaging domestically.



- Among the various packaging types, there is growth in the export of crown cap, aluminum collapsible tube, and small metal can.

### Export of the Fast-Growing Export Metal Containers



Source: Ministry of Commerce

### 3. Major Metal Package Manufacturing Companies in Thailand

- The metal package manufacturing companies in Thailand include various types of operators, i.e. independent can manufacturers, JV between can manufacturers, and JV between can manufacturers and food & beverage manufacturers.

#### Top Metal Packaging Manufacturing Companies in Thailand (by total revenue)

Company name	2016 Total Revenue (Million baht)	Major Shareholders	Company's metal packaging portfolio						
			Beverage can	Food can	General can (circle, rectangular)	Aerosol can	Non-food aluminum bottle	Aluminum tube	Metal closure for bottle
Lohakij Rung Charoen Sub Co., Ltd.	8,504	Thai individuals 100%	✓	✓					
Swan Industries (Thailand) Co., Ltd.	7,907	Thai individuals 100%	✓	✓	✓	✓			
Thai Beverage Can Co., Ltd.	6,492	<b>Thai:</b> Berli Jucker Plc., Standard Can Co., Ltd. <b>US:</b> Ball Corp.	✓						
Alucon Plc.	6,221	<b>Thai:</b> Thai individuals <b>JP:</b> Takeuchi Press				✓	✓	✓	
Bangkok Can Manufacturing Co., Ltd.	4,432	<b>Thai:</b> Crown Seal Plc. <b>JP:</b> Toyo Seikan	✓						
Next Can Innovation Co., Ltd.	3,746	<b>Thai:</b> Swan Industries (Thailand) Co., Ltd. <b>JP:</b> Toyo Seikan	✓						
Crown Food Packaging (Thailand) Co., Ltd.	3,587	Crown Holdings (US)		✓					
Asian-Pacific Can Co., Ltd.	3,488	Thai Union Group		✓					
Crown Bevcan and Closures (Thailand) Co., Ltd.	3,056	Crown Holdings (US)	✓						
Crown Seal Plc.	3,012	<b>TH:</b> Beverage manufacturers <b>JP:</b> Toyo Seikan							✓
Standard Can Co., Ltd.	2,939	Thai individuals 100%	✓	✓	✓				
Poon Sub Can Co., Ltd.	2,401	Thai individuals 100%		✓	✓				
Royal Can Industries Co., Ltd.	2,332	<b>TH:</b> Thai individuals <b>JP:</b> Nippon Suisan		✓					

Source: Gathered from Ministry of Commerce and company's websites

Note: (1) The metal package manufacturing companies in the table above are:

- The companies register their businesses under Thailand Standard Industrial Classification (TSIC) 25949, which is the manufacture of metal can and other containers made of metal, excluding the manufacture of large metal drums and pallet
- The companies that have total revenue of over two billion baht in 2016

(2) The company's total revenue may include non-metal packaging businesses.

#### 4. Industry Outlook

- **Several driven factors**, *i.e. growing global demand for canned food, growing urbanization and steady economic growth of SEA nations, increasing international tourists*, **are estimated to increase the demand for metal packaging in Thailand over the next several years.**
- On the contrary, there are also some key challenges of the industry in different aspects. The food can industry will indirectly face unforeseen circumstances, *i.e. drought and food supply shortage*, which affects the demand for can packaging. The increasing popularity of using plastic bottles in beverage has also adversely affected the aluminium can and metal cap industry.
- Nevertheless, **the business opportunity in this industry still lies through collaboration with the local manufacturers.** The potential business partners would be large food and beverage manufacturers looking to expand their businesses domestically and regionally. By establishing their own packaging facility, they will reduce dependency on others and increase their packaging capabilities. However, this requires significant capital investment, and they might run the risks of inconsistencies in their plant. The investment in the metal packaging industry in Thailand can be used as the starting manufacturing base before expansion in the region.

Note:

- (1) Estimated from the metal packaging manufacturers' main revenue, which include steel can, aluminum can, but exclude aluminum tube and metal closures.
- (2) Source: Thailand Metal Packaging Association (TMPA)
- (3) FAO forecasted that the global per capita fish consumption will increase from 20.3 kg/ year in 2017 to 21.8 kg/ year by 2025.
- (4) The modern retail stores' growth was approximately at a CAGR of 8% in 2013-2016. The number is derived from the total number of major modern retail stores, including department store, discount store, supermarket, convenient store, and specialty store, provided by Krungsri Research (May 2017).