ROK Market Brief No.18

Plastic Film Market

Opportunities under the Korea-Central America Free Trade Agreement

The Korea-Central America FTA (K-CA FTA) brings significant benefits for CA exporters. Under the agreement, the Republic of Korea and the Central American countries will immediately or gradually reduce tariff on more than 95 percent of traded products. Such benefit will help CA exporters compete with exporters from other countries which have trade deals with Korea.

This guide provides an overview of the plastic film category that benefit from tariff reductions under the K-CA FTA and have market access.

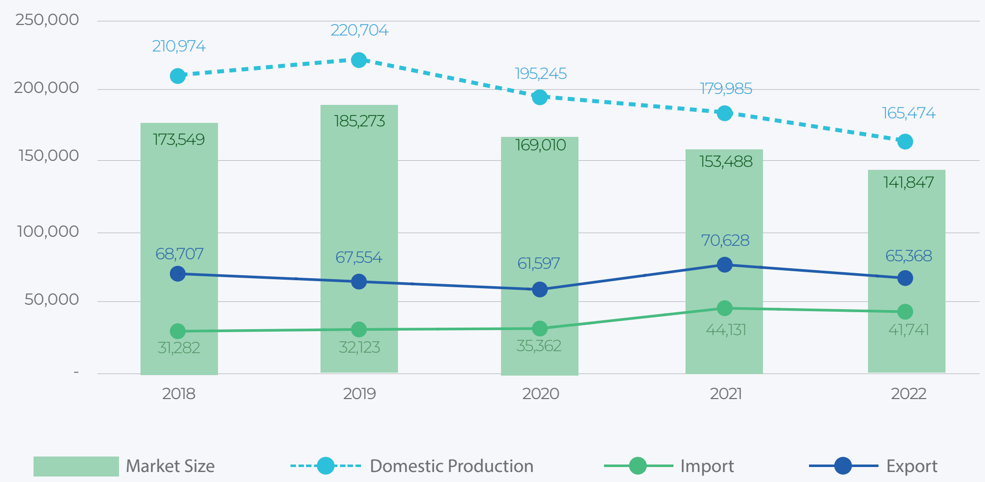
Market Snapshot

The ROK plastic film market volume has experienced a gradual decline in volume from 185,273 tons in 2019 to 141,847 tons in 2022, with an average annual growth rate of -4.70%. Market value also shows a declining trend with an annual growth rate of -0.45%.

The proportion of domestic production is dominant in both volume and value, accounting for 116.6% in volume and 106% in value in 2022. While imports represent 29% in volume, exports account for 46% in volume in 2022. Overall, the market exhibits self-sufficiency in plastic film production domestically.

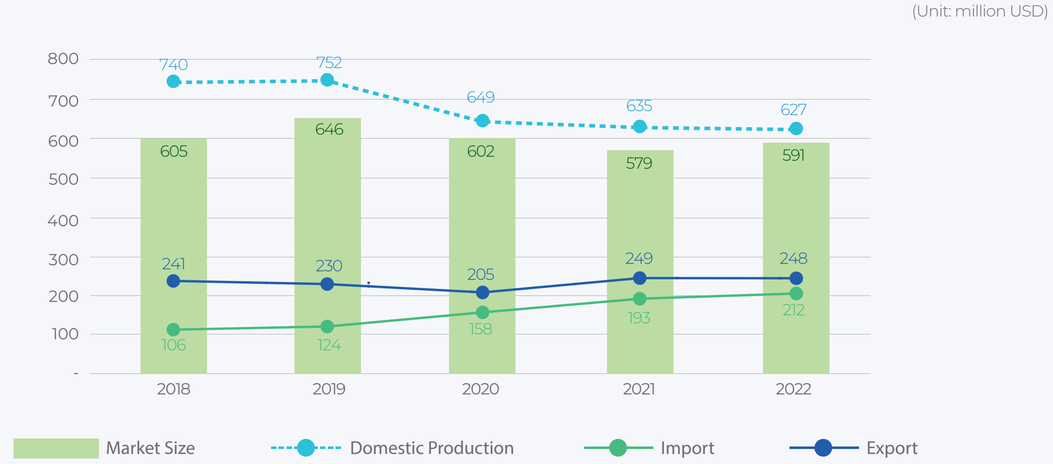
Figure 1. ROK plastic film market trend in volume (2018-2022)

(Unit: Ton)



Source) Korea Customs Service Import and Export Statistics (2023)
Note) Market Size = (Domestic production+Import) – Export

Figure 2. ROK plastic film market trend in value (2018-2022)



Source) Korea Customs Service Import and Export Statistics (2023)
Note) Market Size = (Domestic production+Import) – Export

Due to various internal and external factors, the market size is projected to decrease further. As for the annual growth rate of the ROK plastic film market size for the next 5 years from 2022 to 2027, it is estimated to show about -0.86% in value and about 4.0% in volume. Yet, instead of domestic production, the import proportion is expected to grow going forward. In particular, bio-gradable plastic types will be more in demand instead of PP or PE films.

Under the K-CA FTA, all six countries participating in this agreement enjoy a 0% tariff rate on plastic film, signaling a favorable trade environment that facilitates uninhibited access to the Korean market.

Table 1. Tariff on HS Code 392020 as of 2024

Country	HS Code	WTO bound rate	Current rate (2024)	Elimination of custom duties[1]
Costa Rica	392020.0000	6.5%	0%	2019.11.01
El Salvador	392020.0000	6.5%	0%	2020.01.01
Panama	392020.0000	6.5%	0%	2021.03.01
Honduras	392020.0000	6.5%	0%	2019.10.01
Nicaragua	392020.0000	6.5%	0%	2019.10.01
Guatemala	392020.0000	6.5%	0%	-
China	392020.0000	0~25.04%	0~25.04%	2019.01.01
Indonesia	392020.0000	0~25.04%	0~25.04%	2023.01.01

Source) Customs Law Information Portal. (2024); FTA powerhouse, KOREA. (2024); FTA agreement and basic documents

Noteworthy is the anti-dumping tariff on the plastic film products from China, Indonesia, and Thailand since 2013. As a response to the dumping of plastic films produced in China, Indonesia, and Thailand at a cheap price, the ROK government has imposed anti-dumping tariffs to polypropylene films from those countries that have a thickness equal to or greater than 10 micrometers, to protect domestic industries. China, Indonesia, and Thailand will be imposed of the anti-dumping tariff until mid-2024.

[1] Effective date of the FTA: Nicaragua and Honduras(Oct. 2019), Costa Rica(Nov. 2019), El Salvador (Jan. 2020), Panama (Mar. 2021), For Guatemala, it is assumed in the report that the FTA will come into effect within the year 2024.

Competitive Landscape

China, Indonesia, and Japan are the major suppliers of plastic films to the ROK market. 26,230 tons of plastic films were from the three major suppliers, accounting for 63% of total import. The detailed import statistics in volume from 2018 to 2022 is presented in the table below.

Table 2. Import volume of plastic film per country (2018-2022)

(Unit: Ton)

	2018	2019	2020	2021	2022
China	7,104	8,546	11,113	17,599	18,705
Indonesia	3,236	3,183	3,715	4,459	4,309
Japan	3,800	3,990	3,654	3,175	3,216
India	3,099	4,248	4,492	5,324	2,741
Philippines	4,072	2,994	2,007	2,595	2,715
Malaysia	1,616	1,386	2,320	2,941	2,539
Thailand	1,834	2,086	2,165	2,472	2,309
Vietnam	2,034	2,250	1,789	1,368	1,228
Taiwan	384	573	1,342	1,618	1,206
Others	4,103	2,867	2,765	2,580	2,773
Total	31,282	32,123	35,362	44,131	41,741

Source) Customs and Excise Department import and export statistics (2023). Export and import performance (by item)

Within imported products, China and Indonesia show the largest import value and volume. Looking into the statistics of imported plastic film by volume, it is observed that China's sole import volume takes about 45% among the total volume. This can be attributed to the fact that China holds market dominance with its strong price competitiveness.

Consumer Preference

In ROK, there is rising awareness among consumers that it is necessary to reduce the consumption of plastic packaging. According to the survey conducted in November 2023, 83% of respondents answered that the current use of plastic packaging at cafes and restaurants are 'excessive', and moreover, 78% of respondents perceived that this use of plastics has serious impact on the climate crisis and waste generation.

Figure 3. Excessive plastic packaging in Korean culture

Delivery food packaging	Plastic containers waste

Source) Dailian (2024) ; Herald economy (2021)

In a same vein, there is growing concerns of consumers in sustainability in ROK. This, in turn, made companies actively participate in ESG management to contribute to sustainability. In particular, one notable ESG activity in the food industry is the introduction of eco-friendly packaging and this is expected to be expanded in the future as the international community and government are establishing more strengthened regulations for environmental protection.

Thus, the eco-friendly packaging market is growing steadily worldwide; In 2022, the global eco-friendly packaging market was estimated to be about $36.7 billion, and it is expected to grow at an average annual rate of 6.5% by 2030. One example is Hansol paper's biodegradable paper containers which targeted to replace plastic packaging for food industry.

Figure 4. Hansol paper's biodegradable paper containers

Hansol Paper's paper containers

Source) Hankyung ESG (2024) ; Hansbiz (2023)

Especially in ROK, the revised "Basic Act on Resource Circulation", which took effect on January 2024, is bringing changes to the food industry, which has had a lot of plastic and vinyl use. Most notable are the reduction of plastic use and application of eco-friendly vinyl.

Table 3. Korean government's measures to remove plastics for Circular Economy

ROK goals: Reduce Plastic waste by 20% until 2025			
Reduce	· Reduce excessive wrapping · Offer alternative options · Offer incentives to customers	Recycle	· Offer plastic waste to be reproduced · Promote recycle
Support Industry	· Support the development of recycled materials (degradable) industry · Promote new technology, business	Accountability	· Proactively lead int'l agreements for removing plastics

Source) Asiatoday (2022)

These recent trend of consumer preferences on plastic film along with the government regulation is reinforcing the demand for bio plastic or recyclable plastic and relevant technologies.

Yet, notably, Korea is recognized among the top 20 global importers of plastic packaging materials, as reported by the World Bank's World Integrated Trade Solution (WITS). The Korean packaging material market witnessed significant growth, surging from 14.10 billion USD in 2010 to 51.53 billion USD in 2020. This remarkable expansion with an annual growth rate of 37% is attributed to societal changes, such as the rise of single-person households, dual-income families, and an increased focus on personal leisure time. The increasing popularity of Home Meal Replacement (HMR) products, as well as food delivery led to the surge of demand for plastic film for food packaging purposes and has contributed to this growth.

Main Distribution Channels

The distribution of plastic film begins with raw material suppliers, whether sourced domestically or imported, directing plastic film to processing companies responsible for manufacturing and packaging. The finalized items then make their way to product packaging stage and supplied to the food manufacturing companies and restaurants. Navigating through wholesalers or agencies, the packaged goods are distributed to B2C channels, reaching end consumers, and ensuring the continuous flow of plastic films in the dynamic South Korean packaging market.

Below are some of the major ROK importers of plastic films.

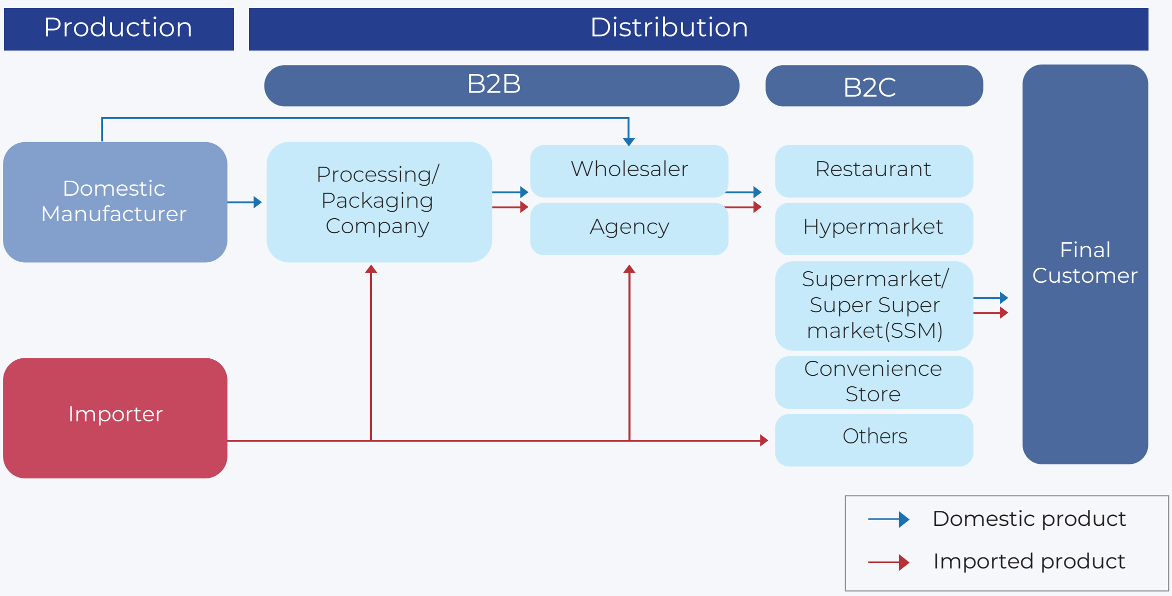
Table 4. Major ROK importers of Plastic film

No.	Company name	Enterprise scale	Import value (Unit: million USD)	Industry classification	Major importing countries	Address	Tel	Website
1	Woo Sung M.F.	Midsize business	20 ~ 50	Plastic Film, Sheet, and Plate Manufacturing	Taiwan, India, Indonesia	68, Cheongwonsandan 3-gil, Mado-myeon, Hwaseong-si, Gyeonggi-do, Republic of Korea	+82-(0)31-492-2081	www.woosungmf.co.kr
2	TORAY INTERNATIONAL KOREA	SMEs	20 ~ 50	Comprehensive Wholesale of Goods	Japan, Taiwan	17F, 24, Yeoui-daero, Yeongdeungpo-gu, Seoul, Republic of Korea	+82-(0)2-3273-8900	www.toray.kr
3	YoulChon Chemical Co., Ltd.	Midsize business	10 ~ 20	Plastic Sack, Bag, and Similar Product Manufacturing	Japan, China	112, Yeouidaebang-ro, Dongjak-gu, Seoul, Republic of Korea	+82-(0)2-822-0022	www.youlchon.com
4	SEIL Co., Ltd.	SMEs	10 ~ 20	Wholesale of Paper Products	Taiwan, China	427, Docheokro, Docheok-myeon, Gwangju-si, Gyeonggi-do, Republic of Korea	+82-(0)31-763-2081	www.seil88.com
5	MYUNGJI P&P Co., Ltd.	SMEs	1 ~ 10	Plastic Film, Sheet, and Plate Manufacturing	Japan	68-13, Seokpo-ro, Paltan-myeon, Hwaseong-si, Gyeonggi-do, Republic of Korea	+82-(0)31-355-5811	www.mjpnp.com

No.	Company name	Enterprise scale	Import value (Unit: million USD)	Industry classification	Major importing countries	Address	Tel	Website
6	Filmax Corp.	SMEs	1 ~ 10	Plastic Film, Sheet, and Plate Manufacturing	Philippines, Thailand	170, Sanho-daero, Gumi-si, Gyeongsangbuk-do, Republic of Korea	+82-(0)54-468-5800	www.filmax.co.kr
7	Nuintek Co., Ltd.	SMEs	1 ~ 10	Other Miscellaneous Automobile Parts Manufacturing	Japan, China	243, Eumbongmyeon-ro, Eumbong-myeon, Asan-si, Chungcheongnam-do, Republic of Korea	+82-(0)41-541-8100	www.nuin.co.kr
8	JPNC INC.	SMEs	1 ~ 10	Comprehensive Wholesale of Goods	China, Thailand	106, Pyeongtaekhang-ro 268beon-gil, Poseung-eup, Pyeongtaek-si, Gyeonggi-do, Republic of Korea	+82-(0)31-684-2517	www.jpnckorea.com
9	WEDUS CHEMICAL Co., Ltd.	SMEs	1 ~ 10	Plastic Film, Sheet, and Plate Manufacturing	China	91, Anseongmatchum-daero, Seoun-myeon, Anseong-si, Gyeonggi-do, Republic of Korea	+82-(0)31-769-8511	www.weduschemical.com
10	HPM GLOBAL INC.	SMEs	1 ~ 10	Plastic Sack, Bag, and Similar Product Manufacturing	Japan, China	7280-25, Seodong-daero, Iljuk-myeon, Anseong-si, Gyeonggi-do, Republic of Korea	+82-(0)2-551-5981	www.hpmglobal.com

Source) KOIMA (www.koima.or.kr)

Figure 5. Distribution Channel of plastic film



Source) DL Chemical, Youlchon Chemical, and Dongwon Systems quarterly reports; World Bank. (2021). World Integrated Trade Solution (WITS) INNOPOLIS FOUNDATION. (2021) Global Market Trend Report: Beverage Packaging Market; and Korea IR Council. (2021).

Regulations

Import Requirements

Plastic film and foil of polymers (for food industry) (392020) must undergo precise inspection by the Ministry of Food and Drug Safety (MFDS) in accordance with the relevant laws and regulations in ROK.

However, if they are to be used in manufacturing after importation, the precise inspection may be waived. Here are the detailed import procedures.

Food industry plastic film and foil must undergo precise inspection by the Commissioner of the Ministry of Food and Drug Safety (MFDS) upon initial importation, as per *Article 20 of the Special Act on Imported Food Safety Control.*

Before importation, the overseas manufacturing facility operator or importer must obtain and submit documents such as a foreign factory registration certificate to register the overseas manufacturing facility with the MFDS.

It should be noted that if the overseas manufacturing facility is not registered, the MFDS cannot accept the declaration. The processing period for registration is three days, and delays may occur if there are any deficiencies.

Additionally, the validity period for overseas manufacturing facility registration is within two years, and renewal applications must be submitted before the expiration date.

For MFDS declaration, Korean labels must be attached to the product or retail packaging, and this labeling can be done either in the exporting country or within the bonded area of ROK after importation.

Table 5. Information to be included in the Product label: Plastic Film

Product Name	
Purpose	Food use or food contact marking 
Materials	
Country of Origin	
Overseas Manufacturing Facility	
Importer/Retailer Name and Address	
Return and Exchange Information	
Caution	

Source) Rohan Customs Advisory Office

Import Process

To export plastic film and foil for food industry to ROK, the overseas manufacturing facility must be registered before importation, and the importer must have a business registration for importing and selling imported food products.

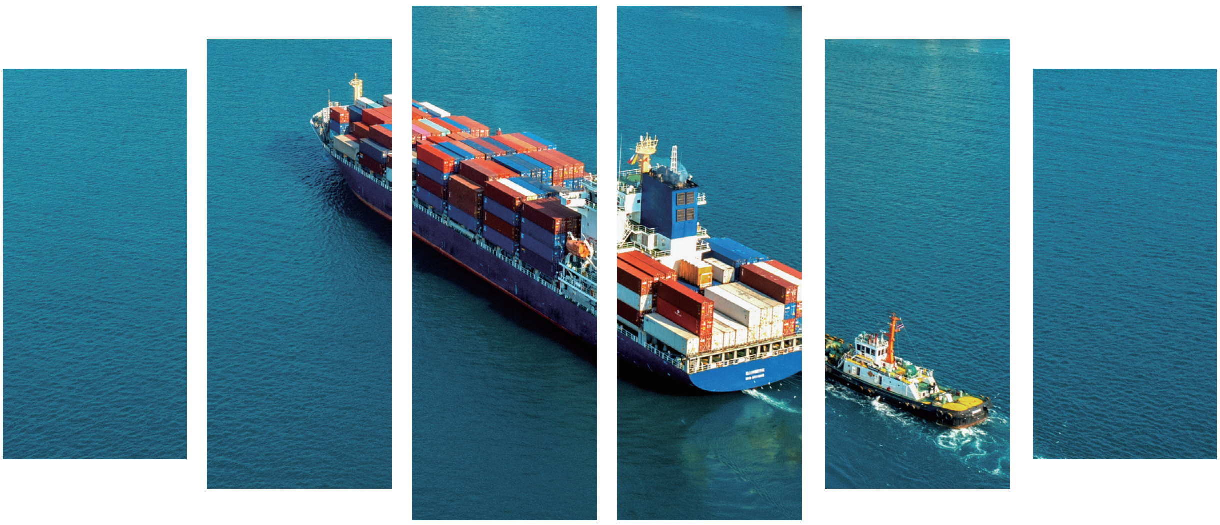
Additionally, Korean labels must be attached to the product or retail packaging before submitting a report to the Ministry of Food and Drug Safety (MFDS) and undergoing the initial precise inspection.

The precise inspection can be conducted either by internal institutions of the MFDS or external institutions, as chosen by the importer. Upon passing the MFDS precise inspection, proper customs clearance procedures can be initiated, and upon satisfactory inspection, the goods can be received after tax payment.

It should be noted that if the net weight of the product exceeds 100KG during the initial precise inspection, the inspection must be conducted again when the subsequent shipment weight exceeds 100KG. The validity period for the precise inspection is 5 years.

Other Obligations and Cautions

Food industry plastic film and foil to be sold in the ROK market must be labeled with the country of origin on the minimum retail packaging or container. The country of origin must be marked in Korean, Chinese characters, or English, and must be labeled as "MADE IN [Country Name]". If the product is an original equipment manufacturing (OEM) product, the country of origin must be marked in Korean on the front of the product or packaging or container. The method of marking depends on the packaging area, but it must be marked in at least 12 points font size.



SWOT Analysis

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Strengths

Most importantly, the ROK-Central America Free Trade Agreement (K-CA FTA) would further enhance the appeal by eliminating the tariff, providing a competitive edge for potential CA suppliers and facilitating their entry into the Korean market. With K-CA FTA, CA exporters are expected to enjoy the full tariff-free status; Plastic films (392020) fall under staging category A. Hence, the tariff for CA countries was immediately eliminated as the agreement went effective. The effective year per each CA country is as follow: Costa Rica (2019), El Salvador (2020), Honduras (2019), Nicaragua (2019), Panama (2021), and Guatemala (2024). The FTA not only reduces trade barriers but also signifies a strategic alignment, fostering sustained growth and collaboration in plastic films trade between Central America and Korea.

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Weakness

There are stringent regulations to follow. Since the legislative amendment in 2009, the ongoing regulations, such as the *Act on the Promotion of Saving and Recycling of Resources*, and initiatives to reduce plastic usage, have created an atmosphere across Korean society that encourages the reduction of plastic usage, particularly for disposable plastic food packaging and plastic grocery bags. As a result, there has been an overall decrease in demand, influenced by these policies and campaigns aimed at resource conservation and recycling promotion. With the strengthening of environmental regulations and the promotion of 4R activities (Reduce, Reuse, Recycle, and Refuse), a reduction in plastic usage is anticipated and required.

In this regard, the decreasing demand and negative market projection is the biggest weakness of plastic film market in ROK. The demand for plastic (propylene) film products in South Korea has consistently decreased since 2019. The market size of plastic (propylene) film in South Korea has decreased by over 20 percent, from 185,000 tons in 2019 to approximately 142,000 tons in 2022. Also, the production of related products has also consistently decreased since 2019. Domestic production, which was around 210,000 tons in 2018, decreased to approximately 165,000 tons in 2022, over a 20 percent decrease in the last five years.

An analysis of the annual growth rates in the plastic (propylene) film market showed an average growth rate of approximately -0.4 percent in terms of value over the past five years, indicating stagnation. In terms of value, the annual average growth rate was around -4.7 percent, demonstrating a negative growth rate. Considering the diminishing trend of annual growth rates in the past five years, it is estimated that over the next three years, the plastic (propylene) film market in South Korea will experience either stagnation or a decline in terms of value and approximately -4.0 percent in terms of weight.

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Opportunities

It is important to note that major domestic manufacturers supply the plastic (propylene) products to large-scale food conglomerates in Korea. This phenomenon is due to the distinctive relationship with domestic manufacturers and its clients; Among the major manufacturers in the market who supply to large-scale companies, Youlchon Chemical is an affiliate of Nongshim, and Dongwon Systems is an affiliate of Dongwon Group. Therefore, the food manufacturers within the subsidiary group are the main customers of the packaging – plastic film – manufacturers.

On the other hand, the major consumer of imported products are privately operated restaurants and coffee shops, and small to medium-sized food companies which do not have direct business ties with large domestic food packaging manufacturers. In fact, the top 10 exporters primarily supply to individual coffee shops. When large corporations can adapt to government regulations and social trends quickly, smaller businesses, individual cafes and restaurants are relatively less sensitive and slower to adapt. These small businesses will continue to keep the demand for the imported products in the near future and considered an opportunity factor for CA suppliers.

On the other hand, there is a growing demand for the mono-materialization of PP or PE for resource recycling. Consequently, an increase in demand for BOPP (Biaxially Oriented Polypropylene Film) is anticipated in the future. BOPP films have gained recent popularity and significant demand due to their flat surface, excellent chemical resistance, superior UV resistance, excellent barriers to water vapor and oil, and recyclability without emitting harmful substances. Bags and pouches hold the largest market share in the BOPP film market, and they are applicable to products such as cereals, pet food, beverages, dairy products, and cosmetics.

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Threats

Despite the evident decreasing trend in domestic production, the size of domestic production of plastic (propylene) film is still large at 630 million USD in value and 165,000 tons in volume as of 2022. In comparison, the import only amounts to 210 million USD in value and 42,000 tons in volume. This shows that the size of domestic production is around three to four-fold of import.

Considering the role and influence of large-scale businesses in domestic production, there are barriers to market entry in the domestic large enterprise market. As for the small and medium-sized enterprise/private restaurant/café market, the price competition is relatively intense.

Business Case

ROK Market Insights

· ROK Government's policy measure discourages the use of plastic food packaging

· ROK consumers' increasing demand on Home Meal Replacement (HMR) foods

· ROK's stable and growing market tendency of coffee shops

Niche

· To partner with small and medium-sized food/distribution companies, rather than domestic major food companies

· To partner with Home Meal Replacement production companies

· To design and propose eco-friendly materials such as BOPP in plastic film packaging

Cultural Adaptation

· Understand Korean's main usage of plastic films

· Understand the Korean consumer's consumption behavior on take-out beverages, Home Meal Replacements, and delivery foods

· Understand ROK's growing tendency on environment-friendly perception and policy measures

Strategy Snapshot

· To enhance the visibility and exportability of Central American countries' plastic films to ROK market, it is recommended to use and participate in the various B2B promotional campaigns hosted in ROK on the preferential basis.

· To foster a successful and sustainable export of Central American countries' plastic films to ROK market, it is recommended to partner with dependable ROK importers who has good relationships and networks with ROK B2B distribution channels.

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