

IV. THE EVIDENCE PRESENTED BY THE INDUSTRY

A. The Product Subject to the Petition

Section 4 (h) of RA 8800 defines like product as *"a domestic product which is identical, i.e. alike in all respects to the imported product under consideration, or in the absence of such a product, another domestic product which, although not alike in all respects, has characteristics closely resembling those of the imported product under consideration"*.

Section 4 (e) of RA 8800 further provides, *"directly competitive product shall mean domestically produced substitutable products"*.

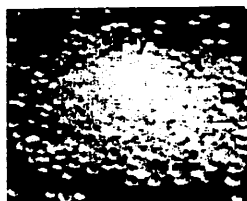
A comparison of the imported LLDPE with the locally produced LLDPE is required to determine if these are like or directly competitive products.

A.1 Domestic Product

Linear Low-Density Polyethylene (LLDPE) is a type of polyethylene resin with densities ranging from 919-925 kg. Specific gravity of less than 0.94. Primarily sold as translucent white pellets or in granular form.



Actual Size



Pellets



Granules

A.2. Product Specification

Resin Type	Evalene® Grade Name	Melt Index (190°C/2.6kg, g/10 min)	Density (g/cm³)	Characteristics
LLDPE	LF08262	0.8	0.926	Excellent puncture and tear resistance, Good tensile strength and stiffness, Barefoot
	LF08263	0.8	0.926	Excellent puncture and tear resistance, Good tensile strength and stiffness, Excellent openability, Hig slip, High antiblock
	LF10181	1	0.918	Outstanding puncture and tear resistance, Excellent openability, High slip, High antiblock
	LF10182	1	0.918	Outstanding puncture and tear resistance, Barefoot
	LF20184	2	0.918	Good clarity, Balanced mechanical properties, Good openability, Medium slip, Medium antiblock
	LF20185	2	0.918	Excellent stretchability, Barefoot
	LF20186	2	0.918	Good mechanical properties, Excellent openability, High slip, High antiblock

Source: Domestic Industry

A.3. Uses and Applications

LLDPE is very flexible and elongates under stress. It can be used to make thinner films, with better environmental stress cracking resistance. It also has good resistance to chemicals making them ideal for a broad range of applications such as:

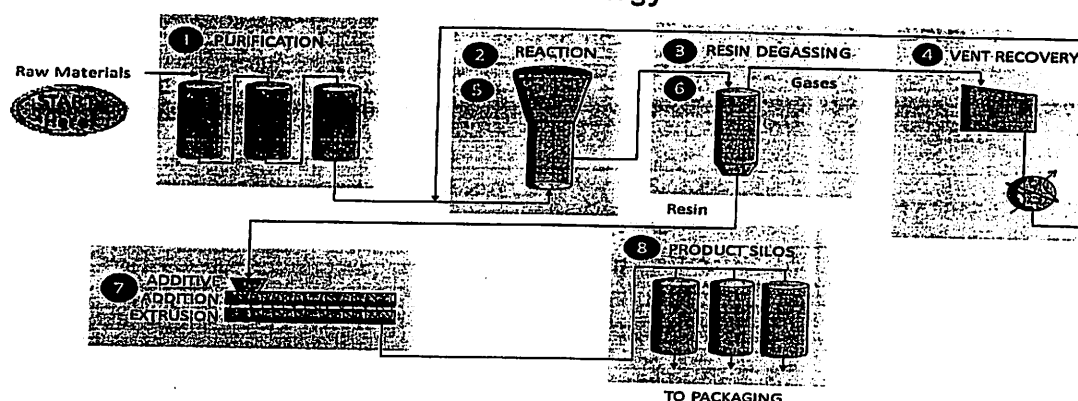
Evaluated Grade Name	Typical Application
LF08262	Heavy duty sacks, Agricultural films, High-performance flexible and industrial packaging requiring superior puncture and tear resistance
LF08263	Heavy duty sacks, Agricultural films, High-performance flexible and industrial packaging requiring superior puncture and tear resistance, high tear strength and good openability
LF10181	Flexible packaging, Agricultural films, Industrial liners, Garment bags, Trash bags, Shopping bags, Ice bags
LF10182	Flexible packaging
LF20184	Flexible packaging, Agricultural films, Industrial liners, Garment bags, Trash bags, Shopping bags, Ice bags
LF20185	Stretch films, Flexible packaging
LF20186	Flexible packaging, Agricultural films, Industrial liners, Garment bags, Trash bags Shopping bags, Ice bags

A.4. Manufacturing Process

UNIPOL™ PE Gas Technology – Existing 320 kilotons per annum (kTA) plant is one of the world's most widely used PE technology, having more than 165 licensed reactor lines in 28 countries, with a total capacity of more than 48 Million MTA.

According to JGPSC, LLDPE resins product are produced using the two world's most widely used PE Process technologies and as such are similar and substitutable with other imported LLDPE resin products, especially those used for the same end-use applications

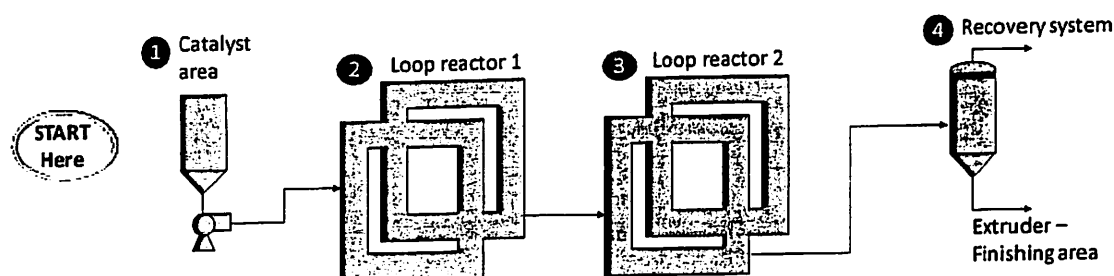
a) Univation UNIPOL™ PE Process Technology



Source: Domestic Industry

JGSPC will start to operate its third PE line using US-based Chevron Phillips MarTECH ADL™ PE production technology. The line, which has a rated production capacity of 250kTA, will be able to produce bimodal, metallocene, and bimodal metallocene LLDPE resins, for which there is no local production. The new PE line will have an initial planned grade slate of 6 new grades for LLDPE, thereby bringing the total number of LLDPE grades to 13 by end-2020.

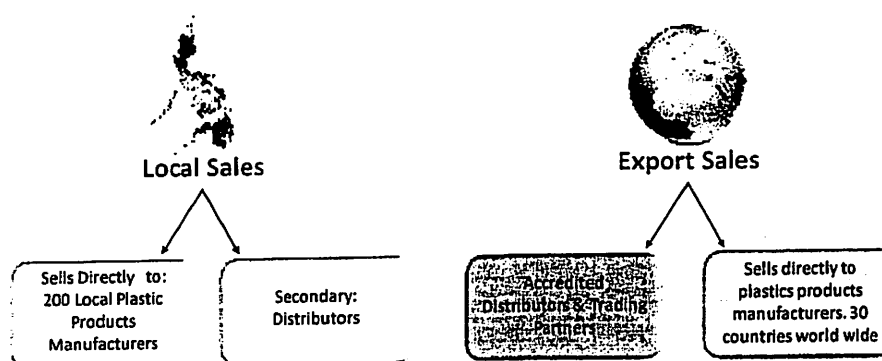
b) Chevron Phillips MarTech™ ADL PE Process: Technology able to produce



Source: Domestic Industry

A.5. Distribution Channel

For local and indirect export sales, JGSPC primarily sells its LLDPE resins directly to over 200 local plastic products manufacturers and secondarily through distributors. While for export sales, JGSPC mainly sells through accredited distributors and trading partners.



Source: Domestic Industry

B. Imported Product

B.1. Product Description under the Tariff and Customs Code 3901 (LLDPE)

AHTN	Description	MFN	AANZFTA 2015-2020	2015	AFTA 2016-2018	2019-2020	AJCEPA 2015-2018	ATIGA
3901	Polymers of ethylene, in primary forms							
3901.10.12	--- Linear Low-Density Polyethylene (LLDPE)	10						0
3901.10.92	--- Linear Low-Density Polyethylene (LLDPE)	10						0
3901.40.00	- Ethylene-alpha-olefin copolymers, having a specific gravity of less than 0.94	3						0
3901.90.90	-- Other	3	0	2	1	0	0	0

Source: Classification based on The Philippine Tariff Finder (PTF) of the Tariff Commission. Retrieved from <http://tariffcommission.gov.ph/finder>

AHTN	ASEAN Harmonized Tariff Nomenclature
MFN	Most Favoured Nation
AANZFTA	ASEAN-Australia/New Zealand Free Trade Agreement
ACFTA	ASEAN-China Free Trade Agreement
AFTA	ASEAN-India Free Trade Agreement
AJCEPA	ASEAN-Japan Comprehensive Economic Partnership Agreement
AKFTA	ASEAN-Korea Free Trade Agreement
ATIGA	ASEAN Trade in Goods Agreement
PJEPA	Philippines-Japan Economic Partnership Agreement

JGSPC claimed that LLDPE is imported into the domestic market under several HS and AHTN tariff headings, under 3901.10.12, 3901.10.92, 3901.40.00 and 3901.90.90. The multiplicity of tariff lines that LLDPE currently falls under is the subject of a petition filed by the Association of Petrochemical Manufacturers of the Philippines (APMP) with the Tariff Commission, received January 21, 2019, currently still pending resolution. APMP filed the petition in support of JGSPC, as JGSPC is the affected member company producing LLDPE. According to JGSPC, per the Tariff Commission, their combined report for both LLDPE and LDPE petitions is already submitted to the Committee on Tariff Related Matters. To date, awaiting the decision of the CTRM.

C. Comparison between Imported and Domestic Product

Locally produced and imported LLDPE products are like products on the following because of the subsequent characteristics:

- Same end-use applications
- Same Tariff Classifications
- Have same applications and functions
- Same manufacturing process

D. Period of Investigation

The POI covers imports of LLDPE from 2015 to 2019. The domestic Petrochemical industry's overall performance during the POI is also evaluated to establish whether the increased imports are the substantial cause of the serious injury to the domestic industry.

E. Determination of Increased Volume of Imports

Rule 7.2 a of the IRRs of RA 8800 provides that “the Secretary shall essentially determine whether there has been an increase in the volume of imports, in particular, either in absolute terms or relative to production in the Philippines, The Secretary shall evaluate import data for the last five (5) years preceding the application to substantiate claims of significant increase in import volume. Provided, however, that in some cases, the period may be adjusted to cover a shorter period, if necessary, in order to take into account other considerations that will ensure the appropriateness of the chosen period, e.g. seasonality of product, availability of data or facility in verification of data.”

E.1. Absolute Terms

The period of investigation covers linear low-density polyethylene (LLDPE) imported into the Philippines from 2015 to 2019. All data were sourced from the Bureau of Customs (BOC), Single Administrative Document-Import Entry and Internal Revenue Document (SAD-IEIRD). For the analysis of import volume, DTI removed imports made by the domestic industry as well as products with different commodity descriptions from the product subject to the investigation (i.e. polyethylene wax, ethylene acrylic acid copolymer, polypropylene, low density polyethylene et al) to determine whether the increase in imports is the principal cause of serious injury to the industry.

1.a Import Volume

Figure 1a: Import Volume of Linear Low-Density Polyethylene (2015 – 2019) in MT

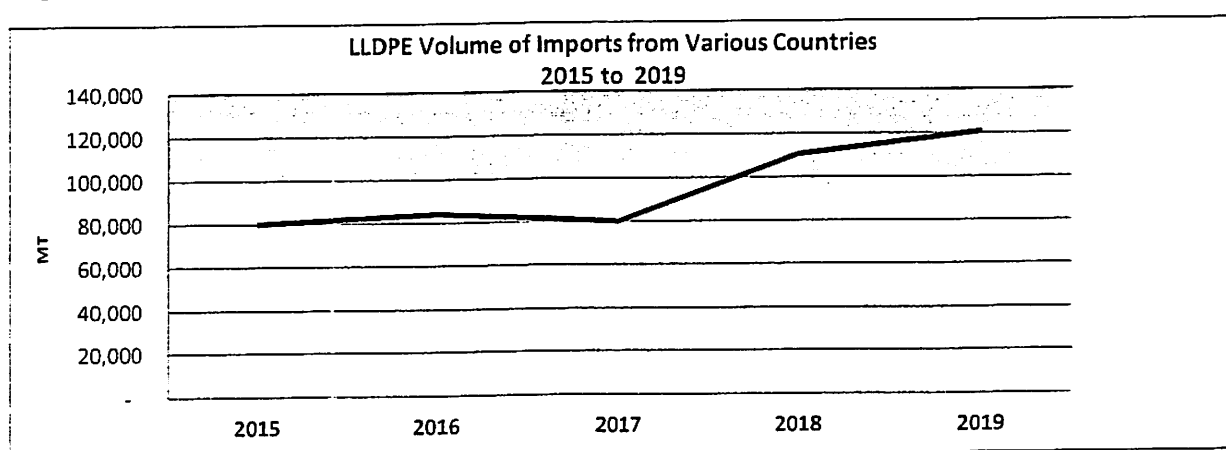


Table 1: Import Volume of Linear Low-Density Polyethylene – LLDPE

Year	Period of Investigation					2020 (Jan-Apr)
	2015	2016	2017	2018	2019	
Imports	80,094	83,965	79,813	110,275	120,601	35,041
Absolute % Increase Decrease	-	3,871	(4,152)	30,462	10,325	-
Growth	-	5%	(5%)	38%	9%	-

Source: Bureau of Customs (SAD-IEIRD)

The volume of LLDPE imports grew from approximately 80,00MT (2015) to 121,000 MT (2019).

In 2016, imported LLDPE increased by 3,871 MT or 5% over 2015 level. Imports fell by 4,152 or 5% in 2017. In 2018, imported LLDPE significantly increased by 30,462 MT or 38% from 2017 level. In 2019, it continued to increase by 10,325MT or 9% from a year ago.

1. b. Share of Imports (by Country)

Table 2: Share of Imports (by Country) Linear Low-Density Polyethylene (2015– 2019) in MT

COUNTRY	2015	% Share	2016	% Share	2017	% Share	2018	% Share	2019	% Share
Singapore	17,119	21.37	24,943	29.71	29,855	37.41	35,809	32.47	36,315	30.11
Thailand	19,642	24.52	20,493	24.41	15,580	19.52	13,131	11.91	17,906	14.85
Qatar	12,175	15.20	13,825	16.47	13,035	16.33	17,325	15.71	18,613	15.43
Saudi Arabia	14,101	17.61	11,892	14.16	11,576	14.50	23,574	21.38	19,947	16.54
Malaysia	4,450	5.56	1,098	1.31	2,083	2.61	3,220	2.92	4,489	3.72
Republic of Korea	578	0.72	819	0.98	1,934	2.42	3,704	3.36	3,781	3.14
Canada	3,182	3.97	3,454	4.11	1,665	2.09	2,305	2.09	3,732	3.09
United States	332	0.41	927	1.10	245	0.31	5,737	5.20	11,498	9.53
Major Sources:	71,577	89.37	77,451	92.24	75,972	95.19	104,807	95.04	116,281	96.42
Other Sources	8,517	10.63	6,514	7.76	3,841	4.81	5,469	4.96	4,319	3.58
Total: (Major & Other Sources)	80,094	100.00	83,965	100.00	79,813	100.00	110,275	100.00	120,601	100.00

Source: Bureau of Customs (SAD-IEIRD)

Singapore, Thailand, Qatar and Saudi Arabia remained to be the largest suppliers of LLDPE during the POI (2015 to 2019). Other major suppliers are South Korea (2018 to 2019) and Malaysia (2015 and 2019) which contributed more than three percent (3%) share to total Philippine imports.

Other Sources:

Below are the other sources of LLDPE:

Table 3: Share of Imports Linear Low-Density Polyethylene (2015– 2019) in MT

Country	2015	% Share	2016	% Share	2017	% Share	2018	% Share	2019	% Share
United Arab Emirates	1,443	1.80	1,262	1.50	1,614	2.02	2,214	2.01	2,031	1.68
Indonesia	802	1.00	1,752	2.09	365	0.46	140	0.13	702	0.58
Hong Kong	127	0.16	16	0.02	347	0.43	208	0.19	217	0.18
Chinese Taipei	657	0.82	698	0.83	317	0.40	831	0.75	429	0.36
PROC	350	0.44	159	0.19	99	0.12	399	0.36	351	0.29
South Africa	-	-	-	-	50	0.06	-	-	173	0.14
Viet Nam	198	0.25	74	0.09	50	0.06	85	0.08	60	0.05
United Kingdom	198	0.25	-	-	43	0.05	-	-	-	-
India	-	-	39	0.05	26	0.03	-	-	-	-
Japan	3,772	4.71	1,930	2.30	918	1.15	351	0.32	206	0.17
Netherlands	173	0.22	-	-	12	0.02	-	-	-	-
Kuwait	-	-	198	0.24	-	-	-	-	149	0.12
Australia	-	-	-	-	-	-	-	-	1	0.001
Spain	578	0.72	99	0.12	-	-	842	0.76	0.03	0.00002
Austria	-	-	-	-	-	-	1	0.00	-	-
Belgium	-	-	-	-	-	-	149	0.13	-	-
Brazil	50	0.06	50	0.06	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	250	0.23	-	-
Germany	95	0.12	40	0.05	-	-	-	-	-	-
France	74	0.09	-	-	-	-	-	-	-	-
Russian Federation	-	-	198	0.24	-	-	-	-	-	-
Total : Other Sources	8,517	10.63%	6,514	7.76%	3,841	4.81%	5,469	4.96	4,319	3.58

Source: Bureau of Customs (SAD-IEIRD)

E.2. Relative Terms

Table 3a: Comparison of Volume of Imports to Domestic Production of LLDPE (2015-2019) in MT

Year	Imports (MT)	Domestic Production (MT)*	Share of Imports to Domestic Production (%)
2015	80,094	100	xxx
2016	83,965	102	xxx
2017	79,813	138	xxx
2018	110,275	67	xxx
2019	120,601	71	xxx

Sources: Bureau of Customs (BOC-SAD-IEIRD) – Import Volume

Domestic Industry – Domestic Production

*Figures indexed due to confidentiality

The total imports of LLDPE relative to domestic production increased in 2016 and declined to in 2017. The share of imports relative to domestic production significantly increased to in 2018 and recorded its highest share in 2019.

V. EVIDENCE OF SERIOUS INJURY

Rule 3.1 of the IRRs of RA 8800 provides that "a general safeguard measure under Chapter II of these IRRs shall apply where there is an increase in the quantity of a product being imported, whether absolute or relative to the domestic production, which is determined to be a substantial cause of serious injury or threat thereof to the domestic industry".

Section 4 (o) of RA 8800 also provides that "a serious injury shall mean a significant impairment in the position of the domestic industry after evaluation by competent authorities of all relevant factors of an objective and quantifiable nature having a bearing on the situation of the industry concerned. In particular, the rate and amount of the increase in imports of the product concerned in absolute and relative terms, the share of the domestic market taken by increased imports, changes in levels of sales, production, productivity, capacity utilization, profit and losses, and employment".

Section 12 of RA 8800 further provides that "in reaching a positive determination that the increase in the importation of the product under consideration is causing serious injury or threat thereof to a domestic industry producing like products or directly competitive products, all relevant factors having a bearing on the situation of the domestic industry shall be evaluated. These shall include, in particular, the rate and amount of the increase in imports of the products concerned in absolute and relative terms, the share of the domestic market taken by the increased imports, and changes in the level of sales, production, productivity, capacity utilization, profits and losses, and employment.

Such positive determination shall not be made unless the investigation demonstrates on the basis of objective evidence, the existence of the causal link between the increased imports of the product under consideration and serious injury or threat thereof to the domestic industry. When factors other than increased imports are causing injury, such injury shall not be attributed to increased imports."

A. Share of the Domestic Industry

A.1 Philippine Market (size and share)

Table 4: Total Apparent Philippine Market (MT) - LLDPE

Year	Imports	Domestic Sales Volume	Apparent Philippine Market	% Increase/Decrease	Non-Manufacturers	Manufacturers	Market Share
2015	80,094	54	100	-	XXX	XXX	XXX
2016	83,965	410	124	12%	XXX	XXX	XXX
2017	79,813	251	157	7%	XXX	XXX	XXX
2018	110,275	556	82	-1%	XXX	XXX	XXX
2019	120,601	892	77	6%	XXX	XXX	XXX

Sources: Bureau of Customs (BOC-SAD-IEIRD) – Import Volume
Domestic Industry – Domestic Sales Volume
*Figures indexed due to confidentiality

Table 4 showed the total apparent Philippine market for LLDPE. Over the five (5) year period, the total apparent market generally showed an upward trend. The apparent market for LLDPE increased by 12% in 2016, 7% in 2017 and slightly declined by 1% in 2018 as imports soared by 38% while domestic sales volume declined by 48%. In 2019, apparent consumption hits its highest record as imports rose by 9% while domestic sales dropped by 6%.

The share of imports of non-manufacturers relative to the total Philippine market continuously increased from a range of 54% to 78% during the POI whereas the producer imports less than one percent (1%).

On the other hand, the share of domestic sales increased from 2015 to 2017. According to the industry, in order to maintain their market share, they try to produce and sell despite the poor financial returns. The year 2017 marked the record high LLDPE domestic industry production volume. However, in 2018, according to the domestic industry production volumes had to be drastically reduced by 51% owing to the negative impact to gross profit. By 2019, while production volumes were marginally increased by 6%, losses were almost double than the previous year. The share of domestically produced LLDPE recorded its biggest decline in 2018 at 24% and 2019 at 21%.

During the POI, the domestic industry's share contracted as imports of LLDPE gained a significant proportion of the Philippine market.

B.1. Domestic Sales

Table 5: Domestic Sales Volume and Value

Year	Sales Volume (MT)*	% Increase (Decrease)	Sales Value (Php Million)*	% Increase (Decrease)
2015	100	-	100	-
2016	124	23.74	117	17.09
2017	157	27.08	161	37.87
2018	82	(48.12)	94	(41.86)
2019	77	(5.71)	79	(15.95)

Source: Domestic Industry

*Figures indexed due to confidentiality

The domestic sales volume increased from 2015 to 2017 by 24% and 27%, with a corresponding increase in sales value by 17% and 38%, respectively. However, domestic sales volume declined by 48% in 2018 and further by 6% in 2019. Also, sales value followed a decline of 42% in 2018 and further by 16% in 2019.

According to the domestic industry, they have been steadily losing substantial sales volume from its existing customers since 2017 due to an increase in the volume of importation of competing products that are being sold at much lower prices, even lower than the cost to produce and sell.

B.2. Export Sales

Table 6: Export Sales Volume and Value

Year	Sales Volume (MT)*	% Increase (Decrease)	Sales Value (Php Million)*	% Increase (Decrease)
2015	100	-	100	-
2016	80	(19.95)	83	(16.94)
2017	120	50.00	130	56.91
2018	28	(76.79)	34	(74.21)
2019	76	174.27	79	134.36

Source: Domestic Industry

*Figures indexed due to confidentiality

The industry's export sales followed a fluctuating trend with a decrease by 20% in 2016, increase by 50% in 2017, decrease by 77% in 2018 and increase by 174% in 2019. The sales value also followed a fluctuating trend, decreased by 17% in 2016, increased by 57% in 2017, decreased by 74% in 2018 and increased by 134% in 2019.

According to the domestic industry, they sell mainly through accredited distributors and trading partners but may also sell directly to plastic product manufacturers. Since 1998, they sold their products to over 30 countries worldwide.

C. Production

Table 7: Total Production

Year	2015	2016	2017	2018	2019
Production (MT)*	100	102	138	67	71
% Increase (Decrease)	-	2.03	35.02	(51.05)	5.82

Source: Domestic Industry

*Figures indexed due to confidentiality

The industry's production volume increased from 2015 to 2017 by 2% and 35% respectively. In 2018, it declined by 51% and increased by 6% in 2019. The highest production was recorded in 2017.

According to the domestic industry, the production volume had to be drastically reduced by 51% in 2018 owing to the negative impact to gross profit. By 2019, while production volume was marginally increased by 6%, losses were almost double than the previous year.

D. Capacity Utilization

Table 8: Capacity Utilization

Year	Installed/Rated Capacity (MT)*	Actual Production (MT)*	Capacity Utilization Rate (%)	% Increase (Decrease)
2015	100	100	77.29	-
2016	100	107	83.01	7.40
2017	100	121	93.76	12.95
2018	100	100	77.32	(17.54)
2019	100	87	67.42	(12.80)

Source: Domestic Industry

*Figures indexed due to confidentiality

The industry operates two (2) PE, both of which can produce HDPE and LLDPE. Since the capacity is not mutually exclusive for the two products, the table above represents combined data for both HDPE and LLDPE.

The capacity utilization rate exhibited an increasing trend from 2015 to 2017 by 7% and 13%, respectively. It began to decline in 2018 by 18% and 13% further in 2019. The highest capacity was registered in 2017 at 94%, almost at full capacity.

According to the domestic industry, they are currently expanding capacity (upcoming x x x kTA) in response to increasing local market volume demand but has been finding it difficult to compete for the past three (3) years as the import volumes have surged and continue to surge, affecting the operations and financial performance.

E. Finished Goods Inventory

Table 9: Finished Goods Inventory

Year	Volume (MT)*	% Increase (Decrease)	Value (Php Million)*	% Increase (Decrease)
2015	100	-	100	-
2016	114	13.63	119	19.23
2017	64	(44.09)	99	(16.98)
2018	171	168.72	299	201.62
2019	119	(30.19)	152	(48.93)

Source: Domestic Industry

*Figures indexed due to confidentiality

The finished goods inventory volume exhibited a fluctuating trend with an increase of 14% in 2016, decrease of 44% in 2017, an increase of 169% in 2018 and a decrease of 30% in 2019. Also, the finished goods inventory value increased by 19% in 2016, decreased by 17% in 2017, increased by 202% in 2018, and decreased by 49% in 2019.

According to the domestic industry, there has been a deliberate decision to cut production volumes in order to minimize losses in 2017, thus, remaining inventory year on year has been kept below x x x MT.

F. Cost to Produce

Table 10: Cost to Produce

Particulars	2015	2016	2017	2018	2019
Raw Materials*	94.3	93.8	94.6	93.7	93.2
Direct Labor*	0.6	0.7	0.2	0.2	0.2
Manufacturing Overhead*	5.1	5.4	5.2	6.1	6.6
Cost to Produce (per MT)*	100	100	100	100	100
% Increase (Decrease)**	-	(12.36)	12.85	12.13	(1.97)

Source: Domestic Industry

*Figures in percentage to the cost to produce per MT

**Computed based on the absolute figures of cost to produce per MT

The cost to produce per unit declined by 12% in 2016, increased by 13% in 2017 and 12% further in 2018, and slightly decreased by 2% in 2019.

According to the domestic industry, the primary raw material component for LLDPE is the olefin ethylene and comonomers butene and hexene which contributes to approximately 95% of the average overall raw material cost. The primary raw material ethylene is sourced mainly from the upstream naphtha cracker operated by JG Summit Olefins Corporation (JGSOC), a JGSPC's affiliate company. The secondary raw materials (catalysts and additives), the comonomers hexene-1 and butene-1 are 100% imported. A formula of conversion which specifically shows the breakdown of raw material usage and wastage per product grade from the Department of Science and Technology are secured for various LLDPE products.

G. Profit and Loss

Table 11: Earnings Before Interest and Taxes

Particulars	2015	2016	2017	2018	2019	% Increase (Decrease) (2015 vs.2016)	% Increase (Decrease) (2016 vs.2017)	% Increase (Decrease) (2017 vs.2018)	% Increase (Decrease) (2018 vs.2019)
Sales*	100	117	161	94	79	17.09	37.87	(41.86)	(15.95)
Cost of Goods Sold*	100	118	164	100	89	18.04	38.95	(39.27)	(10.89)
Gross Profit*	100	84	73	(104)	(260)	(15.47)	(14.25)	(243.27)	150.85
Selling, General and Administrative Expenses*	100	140	76	50	20	40.85	(45.42)	(33.98)	(61.90)
Earnings Before Interests, Taxes, Depreciation and Amortization*	(100)	(318)	(91)	(541)	(909)	222.48	(71.77)	503.51	67.81
Depreciation and Amortization*	100	83	179	144	119	(16.24)	113.27	(20.44)	(16.39)
EBIT*	(100)	(157)	(151)	(269)	(367)	57.78	(4.00)	77.19	37.05

Source: Domestic Industry

*Figures indexed due to confidentiality

The gross profit declined from 2015 to 2019 by 16%, 14%, 243% and 151%, respectively. It can be noted that the industry exhibited a negative gross profit since 2018 and almost tripled in 2019. The earnings before interests, taxes, depreciation and amortization (EBITDA) exhibited losses during the POI, the highest loss of which was recorded in 2019 which is almost ten times compared to the loss in the beginning of POI (2015). In addition, the earnings before interest and taxes (EBIT) exhibited losses since 2015. Losses Before Interest and Taxes worsen by 58% in 2016, improved by 4% in 2017 but worsen by 77% in 2018 and 37% further in 2019.

According to the domestic industry, the low prices of imported LLDPE have affected the gross profit on the domestic sales of locally produced LLDPE. In order to compete and defend its market share, the producer is forced to adopt a policy of import parity pricing, and as such is forced to sell its products at a price below its cost to produce and sell plus a reasonable margin to recover the investment.

In trying to maintain some market commitments, the local producer has tried to produce and sell LLDPE despite the poor financial returns that have started to be experienced even from the start-up in 2014 onwards.

H. Return on Sales

Table 12: Return on Sales

Particulars	2015	2016	2017	2018	2019
Sales (Million)*	100	117	161	94	79
EBITDA (Million)*	(100)	(318)	(91)	(541)	(909)
Return on Sales	xxx	xxx	xxx	xxx	xxx
% Increase (Decrease)	-	(175.40)	79.53	(938.02)	(99.66)

Source: Domestic Industry

*Figures indexed due to confidentiality

Negative return on sales (ROS) based on EBITDA reflected throughout the POI.

I. Employment

Table 13: Employment

Year	Employees for Production*	% Increase (Decrease)	Salaries and Wages (Million)*	% Increase (Decrease)
2015	100	-	100	-
2016	115	15.05	97	(2.35)
2017	127	10.66	121	24.42
2018	141	10.91	129	5.88
2019	168	18.85	180	40.18

Source: Domestic Industry

*Figures indexed due to confidentiality

The table above shows the direct labor personnel for the entire operation of both HDPE and LLDPE products as the operation is shared in the same facility where personnel can handle either products.

Employment throughout the POI increased yearly by 15%, 11%, 11% and 19% while salaries and wages declined by 2% in 2016 and continuously increased from 2017 to 2019 by 24%, 6% and 40%, respectively.

According to the domestic industry, despite the reduced production volume in the past two years, the industry continues to hire skilled workers, such as engineering, science or technical vocational graduates, thus, contributing to reducing the need for these skilled workers to find overseas employment. Despite weakening production, continuous hiring is important to ensure that there is sufficient buffer for the current operational requirements plus some pre-hiring of those to be trained for the upcoming new builds which will start operations in the last quarter of 2020.

J. Productivity

Table 14: Productivity

Year	Production Volume (MT)	Employees for Production	Labor Productivity (MT/employees)	% Increase (Decrease)
2015	100	100	xxx	-
2016	107	115	xxx	(6.64)
2017	121	127	xxx	2.07
2018	100	141	xxx	(25.65)
2019	87	168	xxx	(26.64)

Source: Domestic Industry

*Figures indexed due to confidentiality

The labor productivity decreased by 7% in 2016, increased slightly by 2% in 2017 but declined from 2018 to 2019 by 26% and further 27% due to the hiring of additional employees despite the reduced production.

K. Price Effects

1. Price Undercutting

Table 15: Ex-Work Price of Domestic Product vs. Landed Cost of Imported Product for 2019 (P in MT)

Country	Wtd. Ave. Landed Cost (P / MT) (a)	% Share to Total Imports	Ex-work Price of Domestic Industry (P / MT) (b)	% Undercutting (b-a)/b*100 % Undercutting (b-a)/b*100
Major Sources:				
Singapore	xxx	30.22	xxx	(3.75)
Saudi Arabia	xxx	16.88		0.86
Qatar	xxx	15.67		2.49
Thailand	xxx	14.90		(3.53)
United States	xxx	9.63		(0.05)
Other Sources	xxx	12.70		2.52
Wtd. Average	xxx	100.00		(0.81)

Sources: Wtd. Ave. Landed Cost – BOC-SAD-IERD

Ex-Work Price – Domestic Industry

Price undercutting refers to the extent at which the imported product is consistently sold at a price below the domestic selling price of the like product.

Based on BOC-IEDs for 2019, the top five (5) major source countries of LLDPE were Singapore, Saudi Arabia, Qatar, Thailand and United States.

... Saudi Arabia, Qatar and from other sources by

2. Price Suppression

Table 16: Average Ex-Work Price of Domestic Product vs. Cost of Production for 2019
(P in MT)

Year	Ex-Work Price of Domestic Industry (P / MT)*	Cost of Production (P / MT) (B)*	Difference (P / MT) (A-B)*	% Price Suppression (A-B)/B*100
2015	100	100	(100)	(8.26)
2016	95	88	(2)	(0.22)
2017	104	99	(42)	(3.54)
2018	116	111	(56)	(4.15)
2019	104	109	(163)	(12.37)

Source: Domestic Industry

*Figures indexed due to confidentiality

Price suppression refers to the extent by which the imported product prevents the domestic producer from increasing its selling price to a level that will allow full recovery of its cost of production

Price suppression was recorded during the POI, 8% in 2015, 0.22% in 2016, 4% in 2017, and in 2018 and 12% in 2019.

3. Price Depression

Table 17: Domestic Selling Price of Locally Manufactured LLDPE (P in MT)

Year	Ex-Work Price of Domestic Industry (P / MT)*	% Increase/ (Decrease)
2015	100	-
2016	95	(4.68)
2017	104	9.09
2018	116	11.42
2019	104	(10.37)

Source: Domestic Industry

*Figures indexed due to confidentiality

Price depression reflects the extent at which the domestic producer decreases its selling price in order to compete with the imported product.

Price depression was recorded at 4.68% in 2016 and 10.37% in 2019.

L. Other Adverse Effects

- The negative financial status of the industry has made it increasingly difficult to get financing for its modernization, expansion and operational requirements.
- Cash flow has been affected because of the lower return on sales.
- The industry has been unable to increase the wages up to global standards because of the negative financial situation and it is more difficult to hold on and retain its more important technical personnel.

M. Other Matters:

Update of JGSPC Operations Amidst the Covid19

- Able to continue with manufacturing operations on skeletal force, following IATF guidelines on proper social distancing, enhanced health monitoring and safety procedures
- Ongoing expansion projects have completely stopped during the ECQ period but with GCQ in effect in Batangas since May 16, their BOI-registered projects including the PE project is set to resume construction, following DPWH guidelines and under LGU monitoring.
- Severely impacted by the COVID health pandemic due to lockdowns causing the shutdown of customers' plants, sudden dive in prices and drop in demand, not just locally but worldwide
- Significantly affected by recently enacted EO 113, effective for the duration of Bayanihan Heal as One Act, which adds 10% duty to naphtha and LPG that they use as raw materials to produce petrochemical products. Thus, making them even more uncompetitive compared to imported products who are not likewise being imposed with additional tariffs during this pandemic period by their respective governments.

VI.1 FINDINGS AND CONCLUSIONS

A. Volume of Imports

A.1 In Absolute Terms

- Import shipments of LLDPE increased by about 5% in 2016 and declined by the same rate in 2017.
- In 2018, there is an abrupt and notably sharp increase of 38% and further by 9% in 2019.
- In 2020 (Jan. to Apr.), imports were 29% of 2019 level.
- Singapore, Saudi Arabia, Thailand, Qatar, and the USA are the major suppliers during the POI.

A.2 In Relative Terms

- The share of imports to domestic production increased from 2015 to 2016 and declined to 75% in 2017.

- The ratio of increase of imports to domestic production significantly increased to 213% in 2018 and 220% in 2019.

B. Serious Injury

B.1. Market Size

- Increased by 12% and 7% in 2016 and 2017.
- Slightly declined by 1% in 2018. Improved by 6% in 2019 despite a 6% decline in domestic industry sales

B.2. Market Share

- The share of imports of non-manufacturers (i.e importers, distributors, etc.) increased from a range of 54% to 78% while imports share of domestic industry recorded less than 1%.
- The share of domestic sales volume significantly declined from 46% in 2017 to 21% in 2019.

B.3. Domestic Sales Volume of Value

- Domestic sales volume and value increased from 2015 to 2017 but declined from 2018 to 2019.

B.4. Export Sales Volume of Value

- Export sales showed a fluctuating trend with a decrease of 20% in 2016, increase by 50% in 2017, decrease by 77% in 2018 and increase by 174% in 2019.
- The sales value also followed a fluctuating trend, decreased by 17% in 2016, increased by 57% in 2017, decreased by 74% in 2018 and increased by 134% in 2019.

B.5 Production

a. Total Production

- Production volume increased from 2015 to 2017 by 2% and 35% respectively. In 2018, it declined by 51% and increased by 6% in 2019.

b. Capacity Utilization

- The capacity utilization rate increased from 2015 (77%) to 2017 (94%).
- It declined by 77% in 2018 and recorded its lowest in 2019 at 67%.

c. Inventories

- Inventories exhibited a fluctuating trend with an increase of 14% in 2016, a decrease of 44% in 2017, an increase of 169% in 2018 and a decrease of 30% in 2019.

d. Cost to Produce

- The cost to produce per unit declined by 12% in 2016, increased by 13% in 2017 and 12% further in 2018, and slightly decreased by 2% in 2019.

B.5 Profitability

a. Profit and Losses

- Throughout the POI, the industry exhibited losses in EBIT. EBIT exhibited losses since 2015 and worsen by 58% in 2016, improved by 4% in 2017 but worsened by 77% in 2018 and 37% further in 2019.

b. Return on Sales

- Negative return on sales based on EBITDA incurred throughout the POI.

B.6 Employment and Salaries and Wages

- Employment throughout the POI increased yearly by 15% in 2016, 11% in 2017 and 2018, and 19% in 2019.
- Salaries and wages declined by 2% in 2016 and continuously increased from 2017 to 2019 by 24%, 6% and 40%, respectively.

B.7 Productivity

- Labor productivity decreased in 2016 by 7%, slightly improved in 2017 by 2%
- Declined from 2018 to 2019 by 26% and 27%, respectively, due to a decrease in production but increase in employment

B.8 Prices

a. Price Undercutting

- Price undercutting was recorded from Saudi Arabia, Qatar and other sources by approximately 1% and 3%, respectively.

b. Price Depression

- Price depression was recorded at 5% in 2016 and 11% in 2019.

c. Price Suppression

- Price suppression was recorded during the POI, i.e. 8% in 2015, 0.22% in 2016, 4% in 2017, and 2018 and 12% in 2019.

VII. CAUSATION

The above evidence shows that serious injury to the domestic industry was caused by the increased imports based on the following:

- A significant increase in the volume of imported LLDPE in 2016 (5%), 2018 (38%) and 2019 (9%) preceded the serious injury to the industry. There was an abrupt and notably sharp increase in the volume of imports both in absolute terms and relative to domestic production from 2015 to 2019. The industry suffered a loss of market share, declining domestic sales, production, utilization rate, reduction in labor productivity, cost of production, incurred losses and increase inventory.
- The condition of competition showed that the market share of domestic products decreased during the POI from 46% in 2017 to 21% in 2019, as the share of imports in the domestic market significantly increased.

VIII. ADJUSTMENT PLAN

The domestic industry submitted its adjustment plan to undertake improvement to increase production capacity while also improving efficiency and cost of production. JGSPC is currently undertaking or plans to undertake the following projects and initiatives to help optimize existing assets, ensure the viability of upcoming investments, and improve competitiveness versus products for which safeguards are being sought.

A. Improve Economies of Scale and Competitive Advantage

1. New 250,000 MTA PE Plant

- Currently, ongoing construction is an additional 250 kTA PE plant that will be able to produce both HDPE and LLDPE, using US-based Chevron Phillips MarTECH ADL™ PE production technology. This capacity, in addition to currently existing 320 kTA, will bring JGSPC's combined PE production capacity to 570 kTA, in an effort to match projected local market demand in the short to medium term. As the petrochemical complex itself already exists and has many of its utilities outside battery limits available or requiring minimal modification to accommodate increase in capacity, the production economies of scale are improved as well as overall costs to produce and sell.
- In addition, use of the MarTech ADL™ PE production technology will allow JGSPC to produce higher value PE products, such as bimodals and metallocenes, currently not produces its existing PE plants, enabling JGSPC to cover a wider range of HDPE applications currently served by imported products, and increase its domestic market share.

Status	: Construction Ongoing
Date Available	: 4Q 2020

B. Improve on Costs

1. Power – 100 MW Coal-Fired Power Plant

- The petrochemical complex where the HDPE polymer manufacturing plants are located currently source its power requirements primarily from its diesel generators and secondarily from the grid. With power costs making up most of the variable cost, it is imperative to find ways to improve on both reducing the power costs and reducing power consumption. To this end, JGSPC plans to put up a 100 MW coal-fired power plant to provide for its own power requirements, using the latest Circulating Fluidized Bed technology for cost efficiency and even reduced emissions as opposed to current diesel or bunker-fired generation.

Status : Under evaluation
Date Available : 2023

2. Raw Material Cost – Expansion of Cracker (source of ethylene)

- JGSPC's cracking facility is currently also undergoing expansion, again in an effort to improve economies of scale and to help build up capacity to match projected local market demand in the short to medium term. With the 50% increase in cracking capacity, larger bulk shipments of the feedstock naptha and LPG are made possible, which in turn will translate into lower feedstock costs per MT for the production of ethylene, which is the primary raw material for HDPE.

Status : Ongoing Commissioning
Date Available : 1Q 2020

3. Raw Material Costs – Additives and Catalyst Savings

- With the new PE project, JGSPC invested in a catalyst activator which will allow JGSPC to activate its catalyst onsite rather than offsite (abroad), including those catalysts used for its existing plants, thereby helping to reduce on catalyst activation costs.

Status : Construction Ongoing
Date Available : 4Q 2020

- JGSPC also continuously reviews its catalysts and additives portfolio in an effort to find suitable alternative additives at lower cost, as well as higher productivity/efficiency alternatives for its catalysts.

Status : Ongoing

C. Improve Plant Reliability

1. Benchmarking Study on Reliability and Maintenance Performance

- JGSPC is undertaking a maintenance benchmarking study to analyze the primary factors impacting plant reliability and maintenance effectiveness, thereby helping identify key inefficiencies, to enable the maintenance team to focus efforts on specific and measurable improvements and leverage resources to where most needed.

Status : Ongoing
Date Available : 2Q 2020

D. Improve Production Efficiency and Output

1. Purchase of Operator Training Simulator (OTS)

- For the new PE plant, JGSPC has procured an Operator Training Simulator which is a system of networked computers programmed to mimic the actual plant processes and associated control systems. The plant model running in the OTS server is built using the same engineering data that is used in the actual plant, using graphics that are identical to those used in actual control systems. With simulated training, trainees can get operational experience in an environment that closely resembles the actual plan without posing any risk to the actual plant. Thereby helping minimize incidence of plant upsets caused by human-related errors.

Status : Ongoing purchase of software
Date Available : 2H 2020

2. Advanced Process Control (APC) System

- Advanced Process Control (APC) is a technology that uses computers to predict the behavior of the plant and manage the changes that continuously happen in the plant. It attempts to mimic the actions of the most efficient and knowledgeable human control operator, except it works untiringly 24/7, 365 days in a year.

JGSPC uses APC modules to help improve plant control stability, feed, and production maximization, reduce energy consumption, and reduce variability in product quality

Upgrade for Existing PE Plants:

Status : Completed
Date Available : 2020

New APC for New PE Plant:

Status : Data gathering to be initiated once new PE plant is operational
Date Available : Targeting 2024

IX. THE WORLD TRADE ORGANIZATION AGREEMENT ON SAFEGUARDS

Article XIX (Emergency Action on Imports of Particular Products) of the General Agreement on Tariffs and Trade (GATT) 1994 provides that: *"If, as a result of unforeseen developments and of the effect of the obligations incurred by a contracting party under this Agreement, including tariff concessions, any product is being imported into the territory of that contracting party in such increased quantities and under such conditions as to cause or threaten serious injury to domestic producers in that territory of like or directly competitive products the contracting party shall be free, in respect of such product, and to the extent and for such time as may be necessary to prevent or remedy such injury, to suspend the obligation in whole or in part or to withdraw or modify the concession."*

The WTO Appellate Body in **Argentina– Footwear and Korea – Certain Dairy Products** established that safeguard measures may be applied only when the prerequisites of Article XIX of GATT 1994 and the conditions of the Agreement on Safeguards (both Multilateral Trade Agreements and as such are integral parts of the WTO Agreement) are clearly demonstrated.

The investigation is governed by RA 8800, the Safeguard Measures Act, and the terms and conditions of the Agreement on Safeguards.

IX.a. Unforeseen Development

- US and Middle East petrochemical plants are heavily cost-advantaged versus Asian petrochemical plants
- The US shale gas boom has led to an oversupply of PE, which is primarily intended for export and is expected to flood Asian markets.
- The US-China trade war has caused the displacement of usual trade flows, giving rise to increased exports into the Philippines
- Houston — Tariffs have sharply reduced exports of two grades of US polyethylene amid the ongoing US-China trade dispute, according to data from the US International Trade Commission.

As new US startups have brought more high density and linear low-density polyethylene production on line, flows into China, the largest global demand center, have retreated since China imposed 25% tariffs on those grades in August last year. Those tariffs, like the rest China has imposed on the US products, were in response to tariffs the US first imposed on Chinese products.

USITC data showed that during the first nine months of 2019, China received 121,255 mt of US HDPE, down 57% from the January-September period of 2018.

Over the same period in 2019, US LLDPE flows fell 37% on the year to 54,747 mt.

However, flows of US low-density PE to China more than doubled to 204,199 mt from 75,911 mt, the data showed. China did not impose tariffs on LDPE last year.

US producers have started up 72% of 6.4 million mt/year of new PE capacity coming online from 2017-2019 in the first wave of new petrochemical infrastructure to be built to exploit cheap ethane unearthed by the US natural gas shale boom. The remaining 1.77 million mt/year is slated to start up by year-end, barring any delays.

The second and potentially third waves are expected to bring another 7.27 million mt of new PE capacity come online after 2020. HDPE and LLDPE make up more than 90% of the known new capacity either in operation, under construction or planned, while LDPE makes up about 6.5%.

Source: <https://www.spglobal.com/platts/en/market-insights/latest-news/petrochemicals/111819-us-hdpe-lldpe-exports-to-china-down-sharply-amid-tariffs>, 18 Nov 2019

- The US has seen a sharp decline in its HDPE and LLDPE exports to China because of trade-war tariffs that total 30% on each polymer. US producers have adjusted to the loss of China market share by raising exports to Europe, Turkey, Malaysia, and most notably to Vietnam, where the US is now selling more HDPE and LLDPE than in China.

Source: <https://www.icis.com/asian-chemical-connections/2019/10/surge-in-us-polyethylene-exports-occurs-as-china-growth-slows-asian-margins-turn-negative/> 16th October 2019

- What we do know, though, is that more US ethylene is heading to Asia from the recently started up Enterprise Navigator terminal. A total of around 150,000 tonnes of US cargoes are likely to move to Asia for loading between the end of May and July – although there could be some delays due to logistics.

Rising Asian ethylene supply could exert downward pressure on the region's PE market. US PE exports may also continue to rise in May and June following their big increases in January-April.

During the first months of 2020, US high-density PE exports rose to 1.3m tonnes from 1.1m tonnes, a 26% year-on-year increase when you look at the exact numbers. Linear-low density PE (LLDPE) exports were 35% higher, rising to 1.8m tonnes from 1.4m tonnes. But LLDPE exports declined by 7% to 409,211 tonnes from last year's 439,874 tonnes.

The data shows US January-April exports to Asia were more or less flat as a decline in shipments to southeast Asia (SE Asia) was replaced by a rise in cargoes to China. This was the result of the removal of the 25% additional tariffs on US HDPE and LLDPE, imposed as part of the trade war (last year, the US had shipped more to SE Asia as SE Asia replaced lost US volumes in China).

Source: By John Richardson on 25th June 2020 in Business, China, Company Strategy, Economics, Europe, Indonesia, Middle East, Naphtha & other feedstocks, Oil & Gas, Olefins, Philippines, Polyolefins, Singapore, South Korea, Thailand, US (icis.com)

IX.b. Notification Requirement

Article 12.1 of the WTO Agreement on safeguards states that a Member shall immediately notify the Committee on Safeguards upon:

- (a) initiating an investigatory process relating to serious injury or threat thereof and the reasons for it;

IX.c. Articles 11 of the ASEAN Trade in Goods Agreement (ATIGA)

Articles 11 of the ATIGA provide provisions on the Notification as follows:

"Article 11 - Notification Procedures

1. *Unless otherwise provided in this Agreement, Member States shall notify any action or measure that they intend to take:*
 - (a) *which may nullify or impair any benefit to the other Member States, directly or indirectly under this Agreement; or*
 - (b) *when the action or measure may impede the attainment of any objective of this Agreement.*
2. *x x x*
3. *A Member State shall make a notification to Senior Economic Officials Meeting (SEOM) and the ASEAN Secretariat before effecting such action or measure referred to in paragraph 1 of this Article. Unless otherwise provided in this Agreement, notification shall be made at least sixty (60) days before such an action or measure is to take effect. A Member State proposing to apply an action or measure shall provide adequate opportunity for prior discussion with those Member States having an interest in the action or measure concerned."*

X. RECOMMENDATIONS


Based on the above findings, there are indications that increased imports of LLDPE pellets and granules are the substantial cause of serious injury to the domestic industry in terms of declining domestic sales, production, utilization rate, reduction in labor productivity, incurred losses, suppression, depression and increase inventory.

Wherefore, premises considered, the Department, finds *prima facie* evidence to initiate and conduct a preliminary safeguards investigation to determine whether LLDPE pellets and granules are being imported into the Philippines in increased quantities and is causing serious injury to the domestic industry.

Let the notice of initiation of a preliminary safeguards investigation be published in two (2) newspapers of general circulation and individual notices be sent to all interested parties including the country members concerned.

SO ORDERED.

28 August 2020


RAMON M. LOPEZ
Secretary

Annex A

LIST OF IMPORTERS OF 3901

I. IMPORTERS OF PETROCHEMICALS

IMPORTER		IMPORTER	
1.	Alpha Supreme Corp	44.	Innovaplas Packaging Corporation
2.	Apollo Bag Industrial Corporation	45.	Integrated Logistics Phils Inc
3.	Asian Plastic Center	46.	Integrated Packaging Corporation
4.	Astrobag Manufacturing Corporation	47.	Jason Manufacturing Philippines Corp.
5.	Basic Packaging Corporation	48.	Jgks Universal Plastic Corporation
6.	Bestank Manufacturing Corporation	49.	Kang Nam Packaging House Inc.
7.	Bonflex Packaging Corp.	50.	Kilotrade Marketing
8.	Bonpack Corporation	51.	Lapanday Foods Corporation
9.	Calypso Plastic Center Co.	52.	Lewiston Concept Industrial
10.	Cangco Dotingco Enterprises	53.	Licton Industrial Corp.
11.	Cebu Sentra Plastics Corporation	54.	Liquid Packaging Corporation
12.	Cebu Sherilin Trading Corporation	55.	Lucky Sapphire Trading
13.	Ceed Forming Corporation	56.	Macondray Plastics Products Inc
14.	Centreum Corporation	57.	Mandaue Libertad Commercial & Packaging
15.	Chemplas Commercial Trading Inc	58.	Marulas Industrial Corporation
16.	Citiplas Plastic Servicing Center	59.	Masterbatch Philippines Inc
17.	Cofta Mouldings Corporation	60.	Mgm Food & Commodities Corp.
18.	CTN Pacific Packaging Corp.	61.	Mhylink Trading
19.	Cygnus Industries Inc.	62.	Michem Marketing Inc.
20.	D & L Polymer And Colours Inc.	63.	Nikkoplas Inc.
21.	Davao Packaging Corporation	64.	Omnipack Industrial Corporation
22.	Delfingen Ph Filipinas Inc.	65.	Philplastic And Polymers Inc.
23.	Djdy Marketing	66.	Plascorp Packaging Incorporated
24.	Dole Philippines Inc	67.	Plastop Asia Inc.
25.	Dunhill Plastic Industries Inc.	68.	Polymer Link (Phils.) Inc.
26.	Ednarro Trading	69.	Positive Faxfair Trading
27.	Esta Fine Color Corporation	70.	Powerflex Packaging Corporation
28.	F.A.S. Development Corporation	71.	Ppmc Packaging Mfg Corporation
29.	Falcon Yam Manufacturing Corp.	72.	Prima Plastic Manufacturing Corp.
30.	First In Colours Incorporated	73.	Rim 21 Corp
31.	First Oriental Packaging Inc	74.	Rpmc Plastics Phils. Inc.
32.	Flexible Packaging Products Corp.	75.	Sammito Packaging Corporation
33.	Flexo Manufacturing Corporation	76.	San Miguel Yamamura Packaging
34.	Gilvan Packaging Corporation	77.	Shrinkpack Phils. Corp.
35.	Goldenfortune Enterprises Co	78.	Sigma Packaging Corp
36.	Goldstar Polymer Trading Corp.	79.	Solid Form Enterprises
37.	Grand Arraier Trading	80.	Solidpoint Marketing
38.	Grand Majestic Mfg. Corp.	81.	Startrade Marketing
39.	Gt Industrial Development Inc	82.	Styrotech Corporation
40.	Hantex International Corp.	83.	Sumifru (Philippines) Corporation
41.	Hantex Trading Co. Inc	84.	Synergy Sales International Corp
42.	Inca Philippines Inc.	85.	Tradeton Corporation
43.	Incon Industrial Corporation	86.	Trans World Trading Co.Inc.

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87.	Treasure Island Industrial Corp	93.	Weida Philippines Inc.
88.	Tri Star Plastic Inc	94.	Woodstrall And Sons Incorporated
89.	Tri-Pack Phils Corporation	95.	Wpc Desu Tenso Trading
90.	Unimagna Industries Inc.	96.	Yjc International Corporation
91.	Universal Robina Corporation	97.	Zest-O Corporation
92.	Uright Resources Corporation		

Annex B

LIST OF EXPORTERS OF 3901

II. EXPORTERS OF PETROCHEMICALS

	EXPORTER	COUNTRY
1.	ABU DHABI POLYMERS CO. LTD.	United Arab Emirates
2.	ACTEGA DS GMBH	Germany
3.	ACUMEN ENGINEERING PTE LTD	Thailand
4.	BASELL SALES & MARKETING CO., B. V.	Netherlands
5.	BOREALIS AG	Austria
6.	BOROUGE PTE LTD.	United Arab Emirates
7.	BOROUGE PTE LTD.	Singapore
8.	BRASKEM S.A.	Brazil
9.	CHEVRON PHILLIPS SINGAPORE CHEMICALS PTE. LTD.	Singapore
10.	CHEVRON PHILLIPS CHEMICALS	United States
11.	CP POWDERS SDN BHD	Malaysia
12.	DEGUCHI CO., LTD.	Japan
13.	DOW CHEMICAL	Hong Kong
14.	DOW CHEMICAL	Malaysia
15.	DOW CHEMICAL	Netherlands
16.	DOW CHEMICAL	Saudi Arabia
17.	DOW CHEMICAL	Thailand
18.	DOW CHEMICAL	United States
19.	DOW CHEMICAL CANADA ULC	Canada
20.	DOW CHEMICAL COMPANY	United States
21.	DOW CHEMICAL PACIFIC (SINGAPORE) PTE LTD	Singapore
22.	DOW CHEMICAL PACIFIC LTD	Malaysia
23.	DOW EUROPE GMBH	Belgium
24.	DU PONT CHINA LTD DuPont Kabushiki Kaisha	Japan
25.	EASTERN PETROCHEMICAL COMPANY LTD (SHARQ)	Saudi Arabia
26.	EQUATE PETROCHEMICAL CO K.S.C.C.	Kuwait
27.	EXXONMOBIL CHEMICAL ASIA PACIFIC	Singapore
28.	EXXONMOBIL CHEMICAL ASIA PACIFIC	Thailand
29.	FAR EASTERN NEW CENTURY CORP.	Chinese Taipei
30.	FORMOSA CHEMICALS & FIBRE CORP	Chinese Taipei
31.	FORMOSA PLASTIC CORPORATION	Chinese Taipei
33.	FSP AUSTRALIA	Australia
34.	GC MARKETING SOLUTION	Thailand
35.	HANWHA CHEMICAL CORPORATION	Republic of Korea
36.	HANWHA TOTAL PETROCHEMICAL CO. LTD	Republic of Korea
37.	ITOCHU PLASTICS PTE., LTD.	Singapore
38.	ITOCHU PLASTICS PTE., LTD.	Viet Nam
39.	JFE SHOJI TRADE MATECH INC.	Japan
40.	JIANGYIN XINGYU NEW MATERIAL CO LTD	PROC
41.	KUM YANG CO LTD	Republic of Korea
42.	LOTTE CHEMICAL CORPORATION	Republic of Korea
43.	LOTTE CHEMICAL TITAN CORP SDN BHD	Malaysia
44.	LOTTE CHEMICAL TITAN TRADING SDN BH	Malaysia
45.	MACRO INTERNATIONAL CORPORATION	Republic of Korea
46.	MITSUI & CO. LTD.	Japan
47.	MITSUI & CO. (ASIA PACIFIC) PTE. LTD.	Japan
48.	MITSUI & CO. (ASIA PACIFIC) PTE. LTD.	Singapore
49.	MTS LOGISTICS, INC.	United States

50.	NEW CHEMICAL TRADING CO., LTD.	Japan
51.	NOVA CHEMICALS (INTERNATIONAL) S.A.	Canada
52.	NOVA CHEMICALS (INTERNATIONAL) S.A.	Switzerland
53.	OMON GROUP CO., LTD	PROC
54.	OPEC PLASTICS JOINT STOCK CO.	Viet Nam
55.	OPUS PETROCHEMICAL INC.	United States
56.	P.T. LOTTE CHEMICAL TITAN	Indonesia
57.	PEGASUS POLYMERS PTE LTD	Singapore
58.	PETRONAS CHEMICALS MARKETING SDN BH	Malaysia
59.	POLYMER LINK (PHILS.) INC.	Malaysia
60.	POLYMER LINK SDN BHD	Malaysia
61.	PRIME EVOLVE SINGAPORE PTE LTD	Singapore
62.	PRIME POLYMER CO., LTD.	Japan
63.	PT CHANDRA ASRI PETROCHEMICAL TBK.	Indonesia
64.	PTT POLYMER MARKETING CO., LTD	Thailand
65.	QATAR CHEMICAL AND PETROCHEMICAL MARKETING AND DISTRIBUTION COMPANY	Qatar
66.	RABIGH REFINING & PETROCHEMICAL CO.	Saudi Arabia
67.	RAPID COAT DIVISION	India
68.	RAVAGO GLOBAL TRADING	United States
69.	RAVAGO HONG KONG LIMITED	Hong Kong
70.	REVOLVE MATRIX POLYMERS MALAYSIA	Malaysia
71.	SABIC ASIA PACIFIC PTE LTD	Singapore
72.	SASOL CHEMICALS	South Africa
73.	SCG ICO POLYMERS CO.,LTD	Thailand
74.	SIAM POLYETHYLENE CO., LTD	Thailand
75.	SIAM SYNTHETIC LATEX CO.,LTD	Thailand
76.	SK GLOBAL CHEMICAL CO., LTD.	Republic of Korea
77.	STYROLUTION KOREA LTD.	Republic of Korea
78.	SUMITOMO CHEMICAL ASIA PTE LTD.	Singapore
79.	THE DOW CHEMICAL COMPANY	United States
80.	TOTAL PETROCHEMICALS FRANCE QATAR B	Qatar
81.	TOYO MORTON LTD	Thailand
82.	TOYOTA TSUSHO ASIA PACIFIC PTE.LTD.	Singapore
83.	TRICON DRY CHEMICALS LLC	PROC
84.	TRICON DRY CHEMICALS LLC	United States
85.	USI CORPORATION	Chinese Taipei
86.	VINH HAO TRADE INVESTMENT CO LTD	Viet Nam
87.	VINMAR OVERSEAS LTD	United States
88.	WEIDA INTEGRATED INDUSTRIES SDN BHD	Malaysia
89.	WING LEE GROUP INDUSTRIES CO	Hong Kong

[The body of the document contains several lines of text that are extremely faint and illegible due to heavy noise and low contrast. The text appears to be organized into paragraphs, but no specific words or sentences can be discerned.]