

Part 1

1. Policy and Overview of Business Operation

1.1. Vision, Mission, Objective and Strategy of the Company



Values



Our core values, enunciated in the acronym S.C.O.R.E., inspire our internal and external interactions.

Seamlessness

We leverage synergies across hierarchies, functions and locations.

Care

We value our people and are committed to their development. We take a long-term approach to all our relationships.

Ownership and Responsibility

We honor our commitments towards internal and external stake-holders.

Excellence

We stretch ourselves continuously to improve the way we work. We constantly pursue newer and better ideas, processes, products and practices.

1.2. Background of the Company and key developments

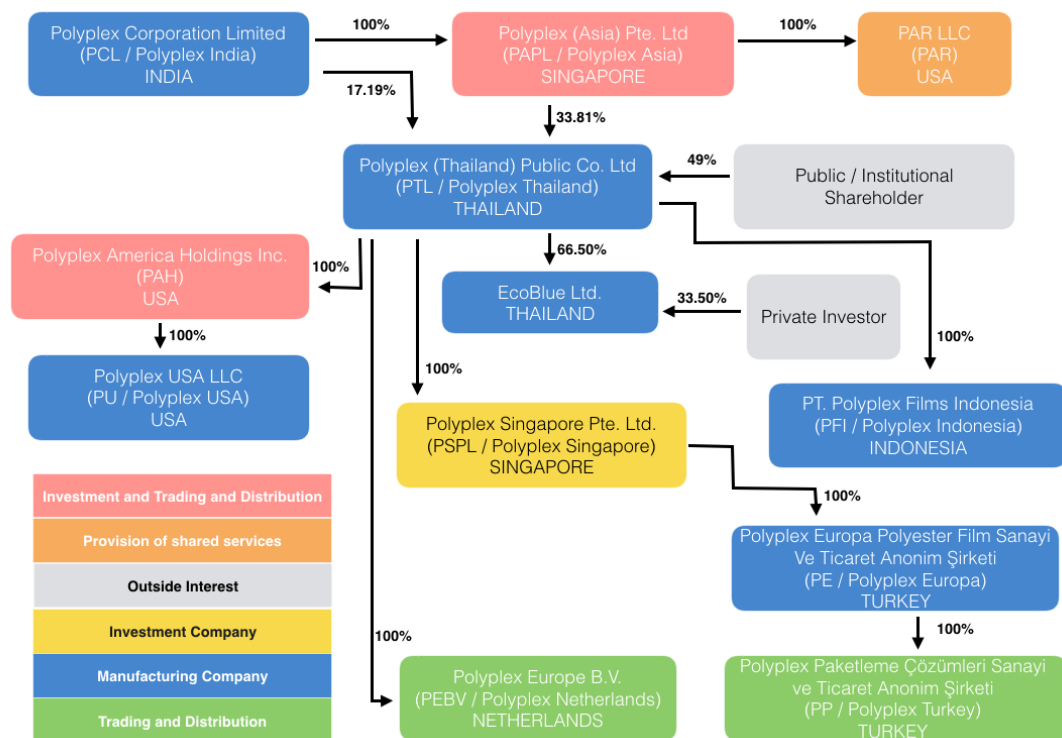
On 26th March 2002 Polyplex Corporation Limited (PCL), a company based in India and listed on the Bombay Stock Exchange and the National Stock Exchange incorporated Polyplex (Thailand) Plc. (“PTL” or “the Company”) as a private company to manufacture and distribute PET Film. The Company’s journey and key developments are outlined as follows: On 26th March 2002 Polyplex Corporation Limited (PCL), a company based in India and listed on the Bombay Stock Exchange and the National Stock Exchange incorporated Polyplex (Thailand) Plc. (“PTL” or “the Company”) as a private company to manufacture and distribute PET Film. The Company’s journey and key developments are outlined as follows:

| | |
|----------------|---|
| March 2002 | PTL was incorporated by PCL, which is a listed company (on the Bombay Stock Exchange as also National Stock Exchange) in India to set up a greenfield expansion for manufacture of Thin PET film. |
| April 2003 | Thin PET film line 1 start-up – Thailand |
| November 2003 | Thin PET film line 2 start-up – Thailand |
| August 2004 | Registration was completed to transform the Company into a Public company |
| September 2004 | PET Resin Batch plant start-up – Thailand |
| December 2004 | IPO of 240,000,000 shares at the price of Baht 6.90 per share |
| February 2005 | PET Resin Continuous plant start-up – Thailand |
| August 2005 | Metallizer Line 1 start-up – Thailand |
| December 2005 | Thin Pet film line 1 start-up in Turkey, implemented under a 100% subsidiary company Polyplex Europa Polyester Film San ve Ticaret. A.Ş. |
| January 2006 | Acquisition of 80.24% in a Trading Distribution company in USA and renamed it Polyplex (Americas) Inc. |
| March 2006 | Metallizer Line 1 start-up – Turkey |
| December 2006 | PET Resin plant start-up - Turkey |
| April 2008 | Extrusion Coating Line 1 start-up – Thailand |
| May 2008 | Thin PET film line 2 & Metallizer Line 2 start-up – Turkey Metallizer Line 2 start-up – Thailand |
| September 2009 | The Trading company in China - Polyplex Trading (Shenzhen) Co. Ltd was set up as a 100% subsidiary and capital injected through Polyplex (Singapore) Pte Ltd |
| March 2010 | Cast Polypropylene line & Metallizer Line 3 start-up -Thailand |
| March 2012 | Silicone Coating line start-up – Thailand |
| July 2012 | Polyplex USA LLC acquired Metalizing assets from Vacumet Plastics division in Austell, Georgia, USA |
| August 2012 | Set up of a Liaison office in Malaysia |
| January 2013 | Acquired the balance 19.76% from the minority shareholders of Polyplex (Americas) Inc.(PA) USA and merged the Trading company with the manufacturing subsidiary PUL |
| April 2013 | Thin PET Film line 1 start-up in Decatur, USA under a 100% subsidiary company – Polyplex USA LLC |
| April 2013 | Set up a Trading and distribution company in Netherlands – Polyplex Europe B.V, as a 100% subsidiary of the Company |
| June 2013 | Extrusion Coating line 2 start-up – Thailand |
| September 2013 | Set up of a Trading and Distribution Company in Turkey – Polyplex Paketleme Çözümleri Sanayi ve Ticaret A.Ş. as a 100% subsidiary of Polyplex Europa Polyester Film San ve Ticaret. A.Ş. |
| October 2013 | Thick PET Film line & Blown PP film line start-up -Thailand |
| December 2013 | Recycling plant start-up in Thailand, implemented under a new subsidiary - |

| | |
|----------------|--|
| | EcoBlue Limited |
| February 2014 | PET resin plant start-up – Thailand (For Thick film) |
| March 2014 | Offline coater start-up – Turkey |
| October 2014 | Set up of a Liaison office in Korea |
| October 2014 | PET Resin plant start-up – USA |
| October 2014 | Metalliser Line 4 start-up – Thailand |
| January 2015 | Metalliser Line 3 start-up – Turkey |
| January 2015 | Disposal to Indorama Netherlands B.V, of 100% stake held in Polyplex Resins Sanayi ve Ticaret A.S (PR) by its wholly owned subsidiary Polyplex Europa Polyester Film San ve Ticaret. A.Ş. (PE), Turkey and its parent company Polyplex (Asia) Pte Ltd (PAPL), [67% held by PE and 33% held by PAPL] |
| April 2016 | Increase in Share Capital and Rights offering of 100 million Ordinary shares in the ratio of 1 new share for every 8 existing shares, at an Issue price of Baht 6.40/share approved in the Extra Ordinary General Meeting of shareholders |
| May 2016 | Rights Offering fully subscribed including oversubscriptions and Baht 640 million capital successfully raised |
| October 2017 | Set up of PT Polyplex Films Indonesia as a 99.995% subsidiary of Polyplex (Thailand) Plc and Equity of IDR 202. 5 billion was injected in November 2017 |
| May 2018 | Equity of IDR 135 billion was injected |
| July 2018 | Blown film line 2 start-up – Thailand |
| August 2018 | Metallizer start-up – USA |
| August 2018 | Board of PTL approved the liquidation of the Trading company in China |
| August 2018 | Set up of a Representative Office in Japan to expand our market reach and further strengthen our market positioning in this premium market |
| June 2019 | Board approved the proposal to set up a BOPP film line in Indonesia at an Investment cost of USD 65 million (including working capital) |
| November 2019 | Thin PET line 1 & Metallizer Line 1 start-up – Indonesia |
| January 2020 | Offline Coater start up – Thailand |
| March 2020 | Holography Line start up – Turkey |
| March 2020 | PET Resin plant start-up – Indonesia |
| March 2020 | Board approved the Project to set up a state-of-the-art Post consumer-waste recycling line at Ecoblue Limited at a Capital cost of 12 million USD. The Board subsequently approved a proposal to enhance the scope of the project to include recycled PP (rPP) in addition to the earlier scope to have recycled PET (rPET). |
| June 2020 | Completion of Liquidation of the Trading Company in China |
| September 2020 | Board approved a Brownfield BOPET Thin Film project at the subsidiary in USA at a Capital cost of 83 million USD. |
| January 2021 | Blown film line 3 start-up – Thailand |
| January 2021 | Holography line start-up – Thailand |
| March 2021 | Batch Resin line start up – Turkey |

Shareholding structure

The Group Shareholding structure as at 31st March, 2021 as follows:



Note: The Trading company in China – Polyplex Shenzhen (Trading) Co Ltd has been liquidated in June 2020, since the Company is able to ship the limited volumes of Specialty film sales to China market through direct shipments from the manufacturing locations and saw no major benefit of retaining Trading operations in China. We continue to have our own Local sales representative based in China to increase our volumes in the Specialty segment.



Incepted in 1988, PCL has been in the plastics manufacturing and distributing business for over 30 years. Not only is it one of the major producers and distributors of Polyester film in India but globally it has the 6th largest capacity for PET film. Listed in both the Bombay Stock Exchange as well as the National Stock Exchange in India, its paid-up capital is INR 319.7 million (approximately Bt. 133.9 million)

Holding Information: The aggregate of its indirect and direct shareholding in the Company is 51% of PTL's paid up capital

Market Segmentation Policy: Given that both PCL and PTL and its subsidiaries overlap in business segments and operate in both the domestic and export markets, the Group has developed an equitable policy for distribution of markets. Factors such as product range, delivered cost to customer, supply lead times and preferential duty access are among those considered for this purpose.

Investment Related Policy: The Group has further developed a policy regarding future investments in polyester film or related areas between PTL and its parent company. Investments in India/SAARC regions would be decided and made by PCL and its other subsidiaries (excluding the Company), while investments in all other countries would be made by PTL or its subsidiaries

Polyplex Europa Polyester Film Sanayi Ve Ticaret Anonim Şirketi
(PE / Polyplex Europa)
TURKEY

PSPL had incorporated a 100% owned subsidiary company, PE in Turkey for setting up a Greenfield polyester film plant to cater to the European and other proximate markets. The commercial operations started in December, 2005 with the start-up of the first thin PET film line

The issued and paid up capital of PE, including Additional Contribution from PSPL, as of March 31, 2021 stands at Euro 8.8 million

Polyplex USA LLC
(PU / Polyplex USA)
USA

Polyplex USA LLC, Decatur, Alabama, was established in FY 2011-12 as a 100% subsidiary of PAH. This is the first manufacturing base of Polyplex in USA. The thin PET film line has started commercial production in April, 2013 and the PET Resins plant project commenced commercial production in October 2014. The members' contribution which represents the paid-up capital as on 31st March'21 is USD 46.2 million

PT. Polyplex Films Indonesia
(PFI / Polyplex Indonesia)
INDONESIA

In October, 2017, PT. Polyplex Films Indonesia (PT PFI) was established with an Authorized and Registered Share Capital of IDR 540 billion. PT PFI is owned 99.99% by PTL and 1 share is held by Mr. Amit Prakash, to comply with a regulatory requirement in Indonesia, of having a minimum of 2 shareholders

The Thin PET line start-up was in November 2019 and the resin plant in March 2020

In June 2019, The PTL board additionally approved the investment into a BOPP line in Indonesia the start-up of which is expected in Q2 of 2021-22

As at 31st March, 2021, the Called up and Paid up Share capital of PT PFI is IDR 540 billion

EcoBlue Ltd.
THAILAND

In 2013, Polyplex has made an investment to provide sustainable solutions for film-based process waste was one of its first major steps towards this direction. The operations have been implemented in Thailand, under a subsidiary called Ecoblue Limited (EB). Polyplex currently owns 66.5% stake in this subsidiary, balance being held by a minority shareholder who is also the Managing Director of the Company.

In March, 2020, the PTL Board has approved an Investment into a state-of-art Recycling facility and subsequently, the Board also approved a proposal to enhance the scope of the project to include recycled PP (rPP) in addition to the earlier scope to have recycled PET (rPET). The start-up of which is expected in Q3 of 2021-22.

As at 31st March, 2021 the Paid-up Capital of EB is Baht 137.65 million.

Investment and Trading and Distribution

Polyplex (Asia) Pte. Ltd
(PAPL / Polyplex Asia)
SINGAPORE

Polyplex America Holdings Inc.
(PAH)
USA

PAPL, a 100% subsidiary of PCL, established in 2004, is a major shareholder of the Company, holding 33.81% as on March 31, 2021

In FY 2011-12, PTL invested in setting up a 100% Investment and Trading & Distribution Company in USA. PAH has further invested in Polyplex (USA) LLC, a manufacturing facility. The issued and paid up capital of PAH (including the Additional Paid-In Capital) as on 31st March'2021 is USD 46.62 million

Investment Company

Polyplex Singapore Pte. Ltd.
(PSPL / Polyplex Singapore)
SINGAPORE

PSPL, a 100% subsidiary of PTL, was established as a wholly owned investment company in 2004. The investments in Polyplex Europa (PE) and the trading company in China (PTSL) were made via this entity. The issued and paid up capital of PSPL (including Preference Share Capital) as of March 31, 2021 stands at Euro 9.14 million

Trading and Distribution

Polyplex Paketleme Çözümleri Sanayi ve Ticaret Anonim Şirketi
(PP / Polyplex Turkey)
TURKEY

In FY 2013-14, Polyplex Europa Polyester Film Sanayi ve Ticaret Anonim Şirketi (PE) had established a company in Turkey, named Polyplex Paketleme Çözümleri Sanayi ve Ticaret A.Ş. holding 100% of its share capital. This company is mainly engaged in trading of PET Film, PET chips and other products of the Company. The Registered Share capital of this company is TRY 100,000 as of March 31, 2021, which has been fully called and paid up.

Polyplex Europe B.V.
(PEBV / Polyplex Netherlands)
NETHERLANDS

Polyplex Europe B.V was established in April 2013 as a 100% subsidiary of Polyplex (Thailand) Plc. The registered capital is 3 million Euro of which Euro 0.2 million has been called and paid up till 31st March'21. This company is mainly engaged in the warehousing and distribution of different products of the Company in the European market.

2. Nature of Business

Company Overview

The Company offers a wide range of plastic films across various substrates - PET (thin & thick), BOPP, CPP and Blown PP/PE. These films are used not only in flexible packaging but also in several diverse industrial applications like tapes, labels, thermal lamination, imaging and graphics, photo-voltaic, construction, and optical applications. Within the substrates, Polyplex Group has sixth largest global capacity for Polyester Thin (PET) films.

PET film is a high-performance film with a unique combination of qualities such as high tensile strength, durability, heat resistance, good gas-barrier properties, dimensional stability, chemical inertness, clarity and recyclability. This product versatility matched with a wide and growing range of applications negates any dependence on any particular product or application.

Downstream businesses like metallizing, silicone coating, extrusion coating, holography and offline chemical coating have enabled Polyplex to offer products for a variety of applications - general packaging, specialty packaging, electrical, liners, roofing and a whole gamut of other industrial applications. The Blown PP lines in Thailand have helped expand the product line of the downstream silicone coating business.

Flexible packaging provides unmatched value as compared to rigid packaging by consuming lower raw material owing to being light weight, occupies less shelf space, generates relatively less waste and is the most cost-effective method for packaging. Better packaging not only improves the shelf life of products but is also essential for improving product appeal in a competitive consumer goods industry.

The Company believes that its unique model of on-shore, offshore and near-shore business locations in combination with its other strengths including customer relationship, access & intimacy and wide offering of specialty, innovative and value-added products shall continue to be the key enablers for outperformance and earnings stability.

There is an increasing concern by all stakeholders & environmental groups on usage of plastics. Flexible packaging provides sustainability benefits in several ways which include resource efficiency, reduced material to landfill, high product to package ratio, lower carbon footprint throughout the life cycle of packaging among many others. The Company continuously strives to work on providing sustainable solutions (products, processes) as a commitment towards sustainable environment. The Company's recycling unit in Thailand – Ecoblue Limited, which was set up way back in 2013, much before global environmental concerns heightened and governments started implementing various measures to address this concern, provides sustainable solutions for film-based process waste was its first major step towards this direction. There is a Project underway at Ecoblue for recycling hard to recycle materials such as post-consumer PET and PP based materials.

PET film is made from Polyester resin (chips), which in turn is produced from Purified Terephthalic Acid (PTA) and Mono- Ethylene Glycol (MEG). The Company produces its own PET resin which not only provides cost advantages but also helps in maintaining consistent quality of its film and supports new product development by adding the required additives at the PET Resin stage

2.1. Revenue Structure

PTL's consolidated sales value classified by regions is shown below:

| CONSOLIDATED | 2018-19 | | 2019-20 | | 2020-21 | |
|-----------------------------------|------------------|---------------|------------------|---------------|------------------|---------------|
| Customers | Bt. Million | % | Bt. Million | % | Bt. Million | % |
| Exports | | | | | | |
| Asia | 3,162.70 | 20.72 | 2,990.64 | 21.17 | 2,847.20 | 18.74 |
| North America | 2,404.06 | 15.75 | 2,534.77 | 17.95 | 2,922.57 | 19.24 |
| Europe | 3,511.09 | 23.00 | 3,005.33 | 21.28 | 2,952.31 | 19.43 |
| Others | 374.91 | 2.46 | 548.73 | 3.88 | 987.76 | 6.50 |
| Total exports | 9,452.77 | 61.93 | 9,079.46 | 64.28 | 9,709.84 | 63.91 |
| Domestic sales | | | | | | |
| - PTL (Thailand) | 858.16 | 5.62 | 814.33 | 5.77 | 783.40 | 5.16 |
| - PE (Turkey) | 950.81 | 6.23 | 978.97 | 6.93 | 952.29 | 6.27 |
| - PUL (USA) | 2,637.57 | 17.28 | 2,502.24 | 17.72 | 2,230.38 | 14.68 |
| - PFI (Indonesia) | - | - | 283.48 | 2.01 | 977.18 | 6.43 |
| Total Domestic sales | 4,446.54 | 29.13 | 4,579.01 | 32.42 | 4,943.25 | 32.54 |
| Sale of chips/others ¹ | 846.88 | 5.55 | 392.37 | 2.78 | 491.30 | 3.23 |
| Total sales revenues | 14,746.18 | 96.61 | 14,050.85 | 99.48 | 15,144.39 | 99.68 |
| Other revenues ² | 517.86 | 3.39 | 73.85 | 0.52 | 48.16 | 0.32 |
| Grand total | 15,264.05 | 100.00 | 14,124.70 | 100.00 | 15,192.54 | 100.00 |

Note:

- 1) Sale of chips/others includes both domestic and export sales.
- 2) Includes Exchange gain (if any), Export Incentive, interest received, etc.

2.2. Business Goals

The Company vision is to be the leader and preferred provider of flexible packaging solutions globally. Consistency in quality, best-in-class after sales services, excellence in innovation and global presence through its geographically diversified manufacturing set up in 5 countries and Trading & distribution / Sales representative set up in all other key markets, are just some of the strengths and areas of focus for the Company to help realize this vision.

To this end the Company will continue building trusted, strong partnerships with Customers, Vendors, Employees and Communities where it functions to be able to create long term growth and value for its shareholders.

2.3. Promotion certificates of PTL

| S.No | Certificate No. | Type of business | Date granted |
|------|------------------|-------------------------------------|---------------|
| 1 | 1321(2)/2545 | PET film | 20-May-02 |
| 2 | 1287(2)/2546 | PET film and PET Resin | 11-Jun-03 |
| 3 | 1159(2)/2548 | Metallized Films | 22-Feb-05 |
| 4 | 1261(2)/2550 | Thermal Lamination Films | 14-Mar-07 |
| 5 | 1044(2)/2551 | Metallized Films | 10-Jan-08 |
| 6 | 1110(2)/2552 | CPP film (Plain and Metallized CPP) | 4-Feb-09 |
| 7 | 1719(2)/2553 | Silicone Coated Film / Blown PP | 14-July-10 |
| 8 | 1705(2)/2555 | Thermal Lamination Film (Line 2) | 12-May-2012 |
| 9 | 1827(2)/2555 | PET Thick Film and PET Resin | 21-May-2012 |
| 10 | 1357(2)/2557 | Metallized Films | 20-March-2014 |
| 11 | 61-0672-1-18-1-0 | Blown Film | 11-June-2018 |
| 12 | 63-1153-1-00-1-0 | Blown Film | 20-Oct-2020 |
| 13 | 64-0281-1-00-1-0 | PET Resin | 16-Mar-2021 |

2.4. Business Operations by Each Product Line including Product Descriptions, Characteristics and Applications

SARAFIL

Sarafil base films are suitable for a range of applications with its inherent properties of being clear, transparent, flexible and with high Tensile strength and modulus with high heat resistance.

The key product line of Polyplex continues to be its Sarafil range of plastic films which are base films manufactured by using petrochemical raw materials like PET (Polyester) resin and PP (polypropylene) resin. Polyplex has an inhouse captive capacity for all PET resin requirements.

BOPET FILMS

They are clear, flexible, transparent or translucent material produced from PET polymer, a linear, thermoplastic polyester resin. PET film is a high-performance plastic film and is generally more expensive than other plastic films with several unique properties that are required for various end-uses. PET film has certain inherent desirable qualities such as high tensile strength, durability, heat resistance, good gas-barrier properties, dimensional stability, chemical inertness and clarity. PET film is available commercially in a range of widths, thicknesses and properties depending upon the needs of end users. It can be made as a single layer or can be coextruded with other co-polymers into a multilayer film encompassing the desired characteristics of each material. The distinct physical properties of the various types of PET film can be imparted into the product either during the polymerization of the PET resin, by the addition of chemicals such as slip modifiers (surface modifiers) or color additives, or subsequently during the PET film production process where various surface finishes may also be imparted by externally treating the films' surface(s). The biaxial orientation of the PET film makes it suitable for such applications as food packaging, electrical insulation, and printing sheets by increasing the product's crystallinity and thereby improving its tensile strength, heat resistance, and gas-barrier properties.

BOPET - Thin Film

All these years, Polyplex was predominantly operating only in thin PET films. The largest application of thin PET films is flexible packaging.

On back of state-of-the-art Thin film line capabilities and several downstream investments, Polyplex offers a wide range of products both for flexible packaging and industrial applications. Products offered impact the end use in many different ways such as aesthetics, functional performance, durability, strength, ease of processing, cost efficiency, productivity, reducing carbon foot print, meeting bio content guidelines etc.

Below is a list of few products from the large product basket of Polyplex Thin films

| | | |
|---------------------|-----------------------|-------------------|
| Plain | Antiskid PET | White |
| Corona Treated | Thermoformable PET | Ultra Clear |
| Chemically Coated | Straight Tear PET | UV Stabilized PET |
| Transparent Barrier | Peelable Sealable PET | Metallized |
| Heat sealable | Shrink Sleeve PET | |
| Green Wrap | Carton Lamination PET | |
| (Confectionary PET) | Matte | |

BOPET - Thick Industrial

Polyplex thick PET film segment with a thickness range of 23 to 350 μ . Thick PET film is suitable for various Display, PV, Electrical and Industrial applications. Sarafil Thick film is produced with strict quality and cleanness norms:

- ◆ Cleanroom condition for super clear PET films (Class 1000/10000)
- ◆ Low MD shrinkage (<1.0%) capability
- ◆ Web inspection and Auto web cleaning at TDO outlet

Below is a list of few products in Thick films

Graphic Application
Window Film Application
Electrical & Electronic Application
General Industrial Application
PV Application

BOPP FILMS

Sarafil BOPP films are transparent bi-oriented polypropylene films designed to offer high performance, great appearance and easy converting for flexible packaging and other applications.

Like BOPET film, BOPP is also a biaxially oriented film with good mechanical and physical properties. It is a clear, flexible, transparent or translucent material produced from PP polymer, a linear, thermoplastic polypropylene resin. BOPP film is available commercially in a range of widths, thicknesses and properties depending upon the end use requirements. The subsidiary in Indonesia is implementing a project for BOPP film which is expected to start-up in Q2 of 2021-22.

Key characteristics of BOPP films are:

- ◆ Good surface gloss
- ◆ Good hot tack & seal strength
- ◆ Good slip & anti-static
- ◆ Good moisture barrier
- ◆ Good surface treatment retention

- ◆ Good machinability
- ◆ Good mechanical properties

Below is a list of few products in BOPP films

Transparent - Non Heat Sealable
Transparent — Heat Sealable
Transparent – Metallizable
Metallized- High Barrier
Metallized- Holographic
White Opaque
Pearl White
Matte
Specialty BOPP
Metallized Holographic

CPP FILMS

Sarafil CPP films are transparent cast polypropylene films designed to offer high performance, great appearance and easy converting for flexible packaging and other applications.

CPP films are also produced from a combination of various grades of PP polymer. Various constructions of CPP are available (multi-layer options) which are used to cater to several applications in specialty packaging, as a sealant layer in conjunction with other plastic substrates for packaging of food products, twist wrap usage in candies, etc.

Key characteristics of CPP films are:

- ◆ High Clarity and Gloss
- ◆ Higher seal strength
- ◆ Good hot tack strength
- ◆ Good anchoring of inks and adhesive to Treated Surface
- ◆ Good machinability on Packaging line
- ◆ Resistance to grease and oil
- ◆ Good resistance to tears & puncture
- ◆ Good moisture barrier
- ◆ Low static properties

BLOWN PP/PE FILMS – Sarafil BLOWN PP and PE film are available in a wide variety of features and properties used in specialty flexible and other applications

BLOWN PP, another variant of PP based film are used in pressure sensitive applications

Another variant of PP based film; this film would be silicone coated either on one or two sides for usage as a carrier film for pressure sensitive applications. Available in various colors, this kind of PP film is mainly used in the peel & stick waterproofing membranes where low release property at very high temperature is required. The Blown PP film is a niche product requiring specialized assets with unique flatness and low shrinkage requirements to enable optimum film processing a on variety of coating machines.

SUSTAINABLE FILMS

Sustainable Films - Polyplex sustainable range of films aim to reduce the carbon footprint for a greener earth.

Key characteristic of sustainable films are:

- ◆ Source Reduction
- ◆ Low GHG emission
- ◆ Biodegradable
- ◆ Bio-Based
- ◆ Post-consumer Recycle (PCR) Content

HOLOGRAPHIC FILMS - Sarafil Holographic range of films are PET and BOPP base film with a wide range of design and features for use in Brand protection, Aesthetic, Decoration, Packaging, and Gift Wrap applications.

Holography film is widely used for brand protection, increases the brand value and protects against counterfeiting of the end products by making it completely holographic.

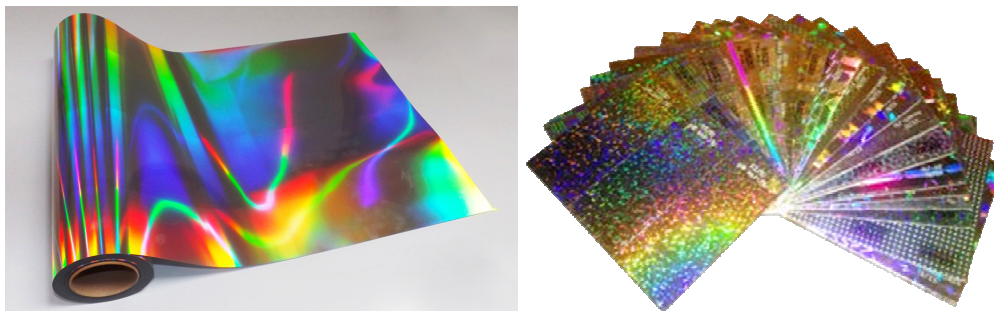
The film gives the product that perfect shine and highlights its brand looks.

- ◆ Brand Protection
- ◆ Aesthetic Appeal
- ◆ Decorative Packaging
- ◆ Premium Packaging

Sarafil Holographic films are available with both:

- ◆ Seamless and
- ◆ With Shim lines

Holographic Patterns are created by way of an embossing process which can provide a remarkable 3-D effect and/or spectral (rainbow) coloring. The embossing process is akin to cutting tiny grooves into the film's surface at various angles and in different shapes. These micro-embossed grooves cause the "diffraction" of normal white light into stunning spectral color.



SARALAM

The Saralam range of extrusion coated film products cater to a variety of end use such as thermal lamination products like book covers, identity cards, etc besides carton lamination, wide format commercial films, etc.

Saralam films are extrusion coated with adhesive resins like LDPE or EVA to make lamination films which cater to applications like Thermal Lamination of documents or printed media, Reflective Insulation,

Flexible packaging intermediates and Rigid packing using printed corrugated carton board. Polyplex can offer a range of BOPP, BOPET and Nylon based extrusion coated films.

BOPET thermal lamination films are used to get some properties which are typical in polyester like a high gloss and high stiffness. A wide variety of PET thermal lamination films is available in a range of thickness from 25mic to 250mic. Other key features of PET thermal lamination films include High bond strength, UV coating on the surface and high tensile strength. Applications of these films are increasing each day. Some main applications are Costly brochures, Catalogues, Menu cards, Mark sheets, Maps, Publicity material, etc.

Metallized BOPET lamination films cater to two very important industries - Reflective Insulation in the construction industry, also termed as "Roof Insulation" and "Carton Lamination", in the Offset Printing industry. Metallized lamination films are gaining strong grounds in the following applications:

- In **UV OFFSET PRINTING**: For its advantages to offer higher press productivity, superior adhesion to paper/ board lamination, as a process saving tool & most important to print houses, as a "TIME" saving tool
- In **ROOF INSULATION**: As an economical lamination substitute and a highly user-friendly material, to very high cost Aluminum foils.

BOPP films have a wide range of aesthetics and hence it is easily possible to have various looks of laminating films. Main features of BOPP thermal lamination films are higher yield (m2 per kgs) in the same cost with comparison to some other films like BOPET films, reasonable strength for lamination purpose, excellent gloss, high transparency, good moisture barrier and good chemical resistance. Typical applications of BOPP thermal lamination films include Textbook covers, Brochures, Leaflets, Sweet boxes, Cosmetics, Shopping bags, Diaries.

| | | |
|--|---|--|
| Reflective Insulation Film | Polyester Thermal Lamination Film-Thick gauge | MegaBond Polyester Thermal Lamination Film |
| Decorative Lamination Film | Polypropylene Thermal Lamination Film | MegaBond Polypropylene Thermal Lamination Film |
| Polyester Thermal Lamination Film-Thin gauge | Nylon Thermal Lamination Film | Zafira UV Polyester Thermal Lamination Film |
| | MegaBond Nylon Thermal Lamination Film | |

SARACOTE

The Saracote range of silicone coated films (PET/PP) is designed to provide an excellent carrier to pressure sensitive material. The typical applications are in labels, tapes, roofing shingles and peel & stick underlayments

Silicone coated films are widely used in pressure sensitive adhesive applications as a carrier film. Polyplex offers a wide variety of film thicknesses with custom release levels to suit individual application needs. These REACH compliant films provide excellent silicone anchorage, smooth silicone lay down and flat release profile both at various de-lamination speeds and a wide range of temperatures. With products across clear, colored, metallized and matte category, Polyplex offers one or two-sided coated films using both 100% solids and solvent-based technologies. Custom printing and slitting are also offered as a part of the total solution.

| | | |
|-------------------------|----------------------|-------------------------------------|
| Release Liner-Labels | Shingle Roofing Tape | Primer Coated Liner |
| Release Liner-Specialty | Release Film Liner | Release Liner – Electronic Industry |

The segmental break-up of revenue (PTL Consolidated) from Film sales [Plain (Thin & Thick) & Metallized PET films, Offline Coated films, Thermal Lamination films, Silicone Coated Films, CPP film and Blown films are as follows:

| CONSOLIDATED SALES | 2018-19 | | 2019-20 | | 2020-21 | |
|-------------------------|------------------|---------------|------------------|---------------|------------------|---------------|
| Segment | Bt. Mn | % | Bt. Mn | % | Bt. Mn | % |
| Packaging Use | 8,186.91 | 58.90 | 9,426.92 | 69.02 | 10,341.04 | 70.57 |
| Industrial Use | 5,651.24 | 40.66 | 4,088.32 | 29.93 | 4,312.05 | 29.43 |
| Electrical Use | 61.16 | 0.44 | 143.24 | 1.05 | - | - |
| Total Film Sales | 13,899.30 | 100.00 | 13,658.48 | 100.00 | 14,653.09 | 100.00 |

Note:

Sales of all types of films have been segregated above, depending on end use application of each type of product sold.

2.5. Business Strategy

Over the years, Polyplex has been working towards developing a strategy which would enable it to become one of the Leading One-stop Innovative plastic film suppliers, the preferred Global Packaging Solution providers, offering a wide range of plastic films.

Key elements of the Business strategy are:

- ◆ Focus on expanding the product basket and high value add sales through down-stream and side-stream investments but without losing sight of cost structure. Follow a plant in plant concept where we excel both in specialty focus as well as cost efficiency.
- ◆ Continually upgrade technical and R&D capabilities along with necessary equipment capability to augment strategy of Innovation and improve value add product portfolio with Time to Market and affordable product being the corner stone
- ◆ Attain cost leadership by way of capacity expansion through debottlenecking existing assets or investing in new high productivity lines and vertical integration. Backward integration into the manufacturing of its own PET chips at all the manufacturing locations has helped strengthened the cost structure, in addition to maintaining the quality of input resin and hence of final product. On the other hand, down-stream investments in metallizing and coating have not only helped in expanding the product portfolio but also reducing the cost of such products in comparison of stand-alone production of same thereby making them affordable for customers
- ◆ Continued focus on improvement in cost efficiency through Kaizens including debottlenecking and energy saving/ efficient investments
- ◆ To build strong global delivery capabilities with a judicious mix of on-shore, near-shore and off-shore strategy.
- ◆ Capture high growth markets and build good customer relationship. The new BOPET film capacity at Polyplex Indonesia, commissioned in November 2019 and fully ramped up in 2020, is considered as the most cost competitive line in the group, being the world's fastest and widest line with highest capacity in the region and will enable us to capture the demand growth in all key regional markets.
- ◆ The new BOPET film line announced for US will help consolidate our position in US market, reducing our cost of operations and helping serve our customers promptly with local production of not only standard films but also wide range of special films which are planned to be produced on existing line once the new line is operative in H2 of 2022-23.
- ◆ Concentric and related diversification to bring stability in earnings. The Brownfield BOPP film project under implementation at Indonesia and the other downstream smaller investments in Silicone Coated film, Holographic film, Blown film and Offline coated film at Thailand and Turkey help reinforce this strategy.
- ◆ Consolidate market position through our strong presence in all the key geographies either through a manufacturing or a distribution/ liaison office set-up. The wide network of distributors and agents has helped the Company to gain access to all key markets of the world and ensure a geographically diversified customer portfolio of about 2000 customers in over 75 countries and hence, there is no significant exposure or dependency on any single large customer or group.
- ◆ Systems are created and strengthened to enhance cross-learning and sharing best practices/benchmarking across various units and businesses of the Group to enhance efficiency and synergy.
- ◆ Focus on sustainability initiatives including development of new sustainable products using higher recycled content and also to adopt, sustainable processes.

- Lead the way for circular economy through chemical recycling. Capacity expansion for the same implemented in Turkey and underway at Thailand, taking the total capacity of rPET resin to more than 30 KTPA globally. This makes the company ready and prepared to meet the growing demand for 70% to 100% PCR content PET films using in-house chemical recycling facilities
- The setting up of a recycle plant in Thailand in 2013, under its subsidiary Ecoblue Limited, for providing sustainable solution for film-based process waste was the Company's first step towards the Green Initiative. A new state of the Art recycling facility is coming up at this subsidiary to recycle hard to recycle PET/ PP based materials and would cater to high end applications in PET Bottles, Polyester Filament Yarn and support brand owners meet their sustainability targets.
- Availability of films to support mono-PET film structures with a possibility of having high PCR content is a big step in this direction.

2.6. Distribution Channel

The Company distributes its products to both domestic and overseas markets, with main focus put on the latter.

The product distribution is being made directly to the end users using its own marketing arms in USA, Turkey and Netherlands, its Representative offices in Korea and Japan, Own Sales Representatives in China, Malaysia, Vietnam and Philippines, as well as commission agents across the globe. The indirect channel is mainly through distributors in designated areas. The sales through distributors and commission agents help support and even boost the sale volumes as these distributors and agents are in close proximity of the target markets, hence allowing for closer service provision to the customers with rapid delivery, and also better market penetration to access small customers.

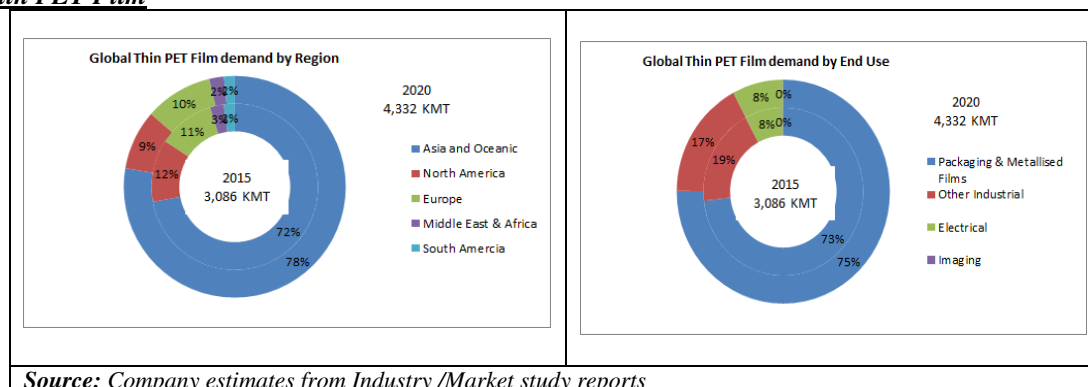
Value of total film sales to end users and distributors are as follows. Sales made through commission agents are included in 'End Users' segment.

| CONSOLIDATED SALES | 2018-19 | | 2019-20 | | 2020-21 | |
|--------------------|------------------|---------------|------------------|---------------|------------------|---------------|
| Customers | Bt. million | % | Bt. Million | % | Bt. Million | % |
| End Users | 10,091.68 | 72.61 | 9,371.92 | 68.62% | 10,000.27 | 68.25% |
| Distributors | 3,807.62 | 27.39 | 4,286.56 | 31.38% | 4,652.82 | 31.75% |
| Total | 13,899.30 | 100.00 | 13,658.48 | 100.00 | 14,653.09 | 100.00 |

2.7. Markets and competitive environment

2.7.1. Global Demand and supply

Thin PET Film



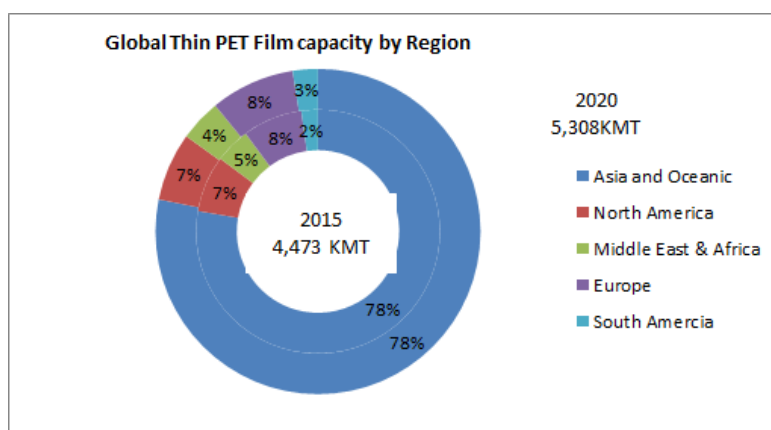
As is evident from above graph, the largest application of thin PET films is flexible packaging, which accounts for about 75% of the Global Thin PET film demand. Better packaging not only helps to retain the aroma and freshness of the food content packed but also improves the shelf life of the products. It is also essential for improving product appeal in packaging of food and non-food - personal care & hygiene products in today's highly competitive consumer goods industry. Flexible packaging also plays a key role in source reduction on the principle of 'use less waste in the first place' which has ensured higher-than-GDP growth in the flexible

packaging industry across the globe. PET film, being a higher-end substrate within packaging, has historically grown more rapidly than other substrates, growing at an average of about 5-7% per annum, globally.

Demand in packaging is quite resilient as it relates to consumption of food products and consumer staples which are to a large extent non-discretionary in nature. The historic trend of demand growth is expected to continue in the long term and also in the near future, despite impact on global economies from the prolonged Covid-19 pandemic. The pandemic has increased consumer concerns on food safety and personal hygiene which has further given a boost to the already healthy growth rates in demand of packaging films. These concerns around food safety and personal care & hygiene are expected to continue and stay long after the pandemic is over.

An increase in the purchasing power, coupled with the changing life style of people in the developing countries has brought with it a substantial increase in the per capita consumption of packaging material. As a result of this, Asia is the largest market for Thin PET films with more than three-fourth of the films produced globally being consumed in this region. Within Asia, China and India are the largest consumers. At the same time, per capita consumption of packaging material in developing countries is still very low as compared to the mature markets. The key drivers of demand growth in these regions are the increase in the share of organized sector, increasing consumerism, changing demographics and the resulting need for better and more convenient packaging.

A similar trend is also evident on the supply-side with more than three-fourth of the Global capacities being located in Asia. Most of the new capacity in Thin film is also focused on the packaging segment, with an emphasis on high productivity and low operating costs. The high speed and productivity of the new technology 10.6 meter width lines (similar to the Indonesia line of Polyplex) are expected to increase the cost competitiveness of the key players and may result in closure of some old and inefficient lines which are unable to compete.



The steady growth in demand over the past few years is reflected in the improved industry CUF and margins. Companies with consistent quality products, continued focus on improving cost efficiency, diversified product portfolio including specialty products in their portfolio, access to international customers and a superior supply chain model stand a better chance of participating in the market growth and improving/maintaining their margins above the industry averages.

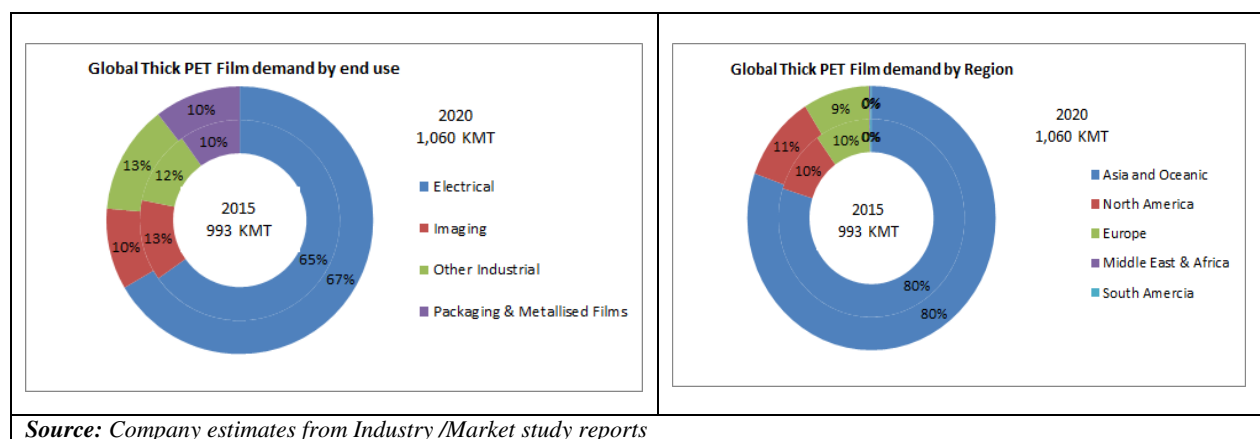
Thick PET Film

Electrical and Industrial are the key segments in Thick film industry. In the last few years the demand of Thick PET film has been growing at a CAGR of about 4-5%.

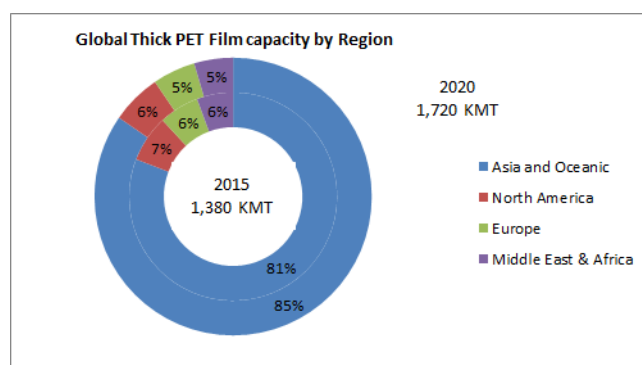
New innovations and usage new applications in the Electrical segments (like Flat Screen panel, PV solar cells, Lithium Ion Battery for Electric Vehicle -EV segment etc) have been driving the growth in the recent few years and would help this industry to continue to grow at a healthy CAGR of about 4-6% in the long term, although there is a temporary contraction in demand due to the impact of Covid-19 pandemic and the demand of thick PET film declined by 8% in 2020. The most pronounced downturn is seen in the countries like China, Japan, and South Korea which have highest exposure to Electrical & Electronic and Industrial end use segments. Average growth in thick film demand is forecasted to be around 4-6% p.a. Flexible electronics' applications, Solar PV cells and Electric Vehicle segment (EV) are expected to be growth engines for Thick and industrial segments in years to come. For Polyplex, since we have with only 1 Thick film line at Thailand,

we choose to cater to a wide range of specialty focused applications and remain confident of keeping the line fully utilized at all times, irrespective of the industry CUF levels. This would also help generate better margins help bring about stability to our earnings.

Due to high quality standards required by optical thick film customers, manufacturers targeting this sector face higher levels of wastage due to defects, and therefore the saleable output of thick film lines is often poor relative to thin film lines. As a result, thick film lines often operate at less than 75% utilization levels.



Similar to Thin Film industry, the additions in the capacity of Thick PET film has mostly been done mainly by countries within Asia like China, South Korea and Japan, resulting in Asia having 85% of the Global capacities.



2.7.2. Industry Situation

Global competition

Due to the consistent and healthy growth in demand for the past few decades, the BOPET film industry has attracted new investments globally, by incumbent players as well as few new entrants. This has, in the recent few years, led to a structural change in the industry. The erstwhile majors owing to their higher operating cost structures have chosen to concentrate on niche technology-oriented segments like films for Optical applications, solar panels and specific high-end applications within packaging. The competition in the Flexible Packaging segment is hence limited to few other players including Polyplex who have scaled up their operations over the years and have strategically distributed their manufacturing presence globally in order to diversify the geographical risk and be closer to the target markets. Polyplex has also been able to successfully enter the vacuum created by the erstwhile majors' exit from the flexible packaging segment, especially on product development and innovation front. With its strong in-house R&D capabilities, Polyplex continues to lead the new product development and innovation drive in this industry.

Despite the new capacity additions, the Industry still remains quite fragmented with the top player having only 7% capacity share and the top 10 players accounting for just 45% capacity share.

| Producer | % Capacity-2020 |
|--|-----------------|
| Jiangsu Shuangxing Color Plastic New Materials | 7.5% |
| Uflex Industries | 6.5% |
| Jiangsu Sanfangxiang Group Co. Ltd | 5.3% |
| Toray Advanced Film Co., Ltd | 4.8% |
| Hengli Group | 4.4% |
| Polyplex Corporation | 4.2% |
| SRF Polyester | 3.8% |
| Rongsheng Petrochemical Co Ltd | 3.3% |
| Jindal Poly Films Ltd | 2.9% |
| Billion Industrial Holdings Ltd | 2.7% |

As is evident from the above table, Polyplex group with its well spread out manufacturing facilities in India, Thailand, Turkey, USA and the latest one in Indonesia, is one of the major players and has attained preferred supplier status in the industry.

Domestic competition

Thailand's PET film market is of small scale as compared to the global PET film market. As per our estimates, demand of PET film (thin & thick) in Thailand is approximately 55,000-60,000 tons per year with growth rate for next few years expected to be about 2-3% p.a. PTL has principally focused on Thin PET film since its inception in Thailand and started with one PET film line, within nine months set up a second line as well. Over the years, PTL has had several other capacity expansions in downstream and side stream businesses. It is presently having the second largest capacity in Thin BOPET.

The film production capacities of the various plastic film producers in Thailand as at 31st March 2021 are as follows:

| Production line (tons per year) | Thai Film Industrials Plc. | A.J. Plast. Plc. | SRF industries Limited | PTL* |
|--------------------------------------|-------------------------------|---------------------|---------------------------|----------------|
| BOPP film | 103,000 | 132,000 | | - |
| PET Thin film | - | 62,000 | 72,500 | 48,000 |
| PET Thick Film | | | | 30,146 |
| CPP film (incl. CPP metallized film) | 3,500 | 16,000 | | 16,114 |
| BOPA film | - | 30,000 | | - |
| Metallized film | 4,500 | 23,500 | 12,000 | 23,800 |
| Blown Film | | | | 15,920 |
| Total | 111,000 | 263,500 | 84,500 | 133,980 |
| Thermal Lamination film | - | - | | 365 mn Sqm |
| Silicone Coated Film | | | | 816.48 Mn Sqm |
| Offline Coated Film | | | | 70 Mn Sqm |

Source: Form 56-1/Industry sources

* PTL capacities are as approved by BOI (for projects promoted by BOI). For actual attainable capacities, please refer table below, under section 'Production Capacity'

** Combined capacity p.a. as approved by BOI for CPP plain and metalized film

Conclusion on PET film industry

The demand supply situation in global PET thin has improved during the past couple of years. This has resulted in overall improvement in the industry CUF in 2020 to 82%. However, the CUF in Thick Film has been declining in last 2 years and was at 60% in 2020, mainly due to decline in demand for certain applications in the electrical and industrial segments on account of the impact on global economies and reduction in consumer spending due to the Covid pandemic.

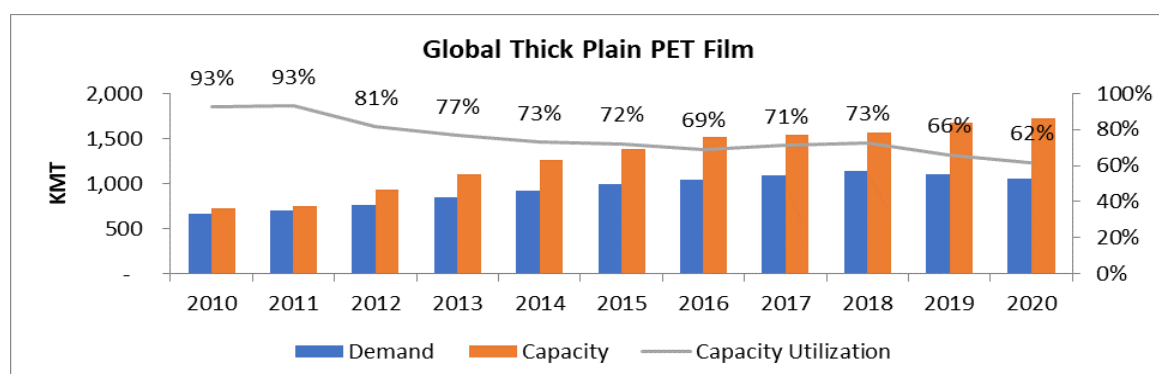
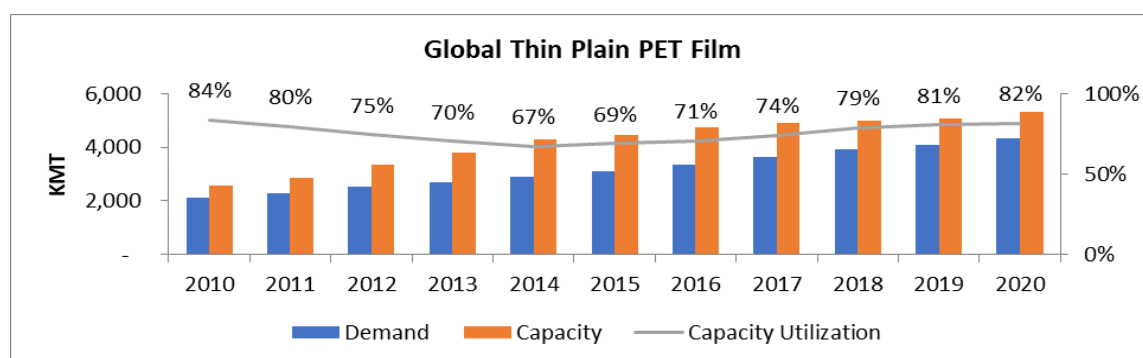
Levels of 80-90% are considered high and close to the full machinery capacity. In practice, some producers produce lower than the nameplate capacity being constrained by older assets while some produce with capacity utilization even higher than 100% of the nameplate capacity using new and modern machinery and based on their long-time expertise and experience.

The year 2020 witnessed start-up of some new BOPET lines, mostly by incumbent players in different parts of the world and was absorbed quickly without affecting the demand supply balance significantly as demand for Thin PET film remained strong & resilient even during the pandemic.

There are new capacities totaling to about 1.8 million tons, slated to be added over next 2-3 years which is about a CAGR of 6.5% p.a as against a historic CAGR of 5-7% p.a in demand. Out of the overall expected capacity additions in Thin film, about 56% will be in China and balance capacities are mostly in India and few in rest of the globe. The Covid 19 situation might result in delays in the start-up of some of these new capacities, due to restrictions on movement of technicians from the machinery supplier and help to spread out the capacities over a longer period of time. Nevertheless, due to the healthy demand growth expected, especially in the Flexible packaging, the new capacities are not expected to be too disproportionate, although temporary market disruptions may be felt, as and when each new line starts up.

The Company believes that its well-distributed manufacturing operations, diversified product portfolio with an increasing share of Specialty films, quality consistency, international customer base, customer relationship, access & intimacy, efficient supply chain and a strong Balance Sheet will allow it to grow profitably and withstand industry volatilities better as compared to Industry peers.

The trend of global capacity utilization for Thin and Thick PET film for last 10 years is as under:



Source: Company estimates from Industry/Market study reports

Despite the rising demand for PET film, it is not easy for new entrants to compete with the existing players. This is because, it is an industry, that needs high levels of know-how, skills and expertise to ensure the exact product size, standard and specifications required by the customers. Project management skills are also needed to enhance efficiency and cost effectiveness that will lead to competitiveness against other producers.

Polyplex group has accumulated over 30 years' experience in the PET film industry. It has been strengthened with consistent expansion in production capacity. Its management is highly competent. Delivery of products is efficient by having geographically distributed production bases and a widely spread sales and distribution network that allow for easy access to the customers.

The emphasis on the countries with high demand growth potential, production and cost effectiveness and concentrating on business segments such as packaging, industrial and electrical segments which have recorded healthy growth all along has contributed to the Polyplex group becoming one of the leading global producers and preferred supplier of thin PET film.

Trade defense risk

Trade defense measures (Anti-dumping duties, countervailing duties, safeguard measures etc) are imposed to protect local producers against unfairly traded or subsidized imports. Anti-dumping duties are imposed on imports if the ex-factory prices of such imported products are proved to be lower than the local selling prices of similar products in the respective exporting country. Countervailing duties are tariffs levied on imported products to offset the impact of subsidies applicable for exporters in those nations. Such tariff measures increase prices of imported products, usually rendering exporters uncompetitive.

PET Film: International trade in PET film has been subject to trade defense measures for more than three decades through the imposition of anti-dumping duties and countervailing duties. The important markets adopting this measure are the EU, the US, Korea, Indonesia and Brazil.

A summary of the AD/CVD duties applicable in the major export markets of PET Films are as under:

| Country of Import | Duty (AD+CVD) applicable on Polyplex | Other Countries on whom AD/CVD applicable | Other Countries Duty Rates (AD+CVD) Excluding Polyplex (Min-Max) |
|-------------------|--|--|--|
| USA | 13.75%(PCL) | India# China Taiwan# UAE | 7.22% - 65.59% 31.24% - 76.72% 0% - 4.48% 4.05% - 70.75% |
| Brazil | 0.26(\$/Kg) (PCL) 0.067(\$/Kg) (PE) | India# Turkey UAE Mexico Egypt# China# Bahrain Peru | 0(\$/Kg) – 0.93(\$/Kg) 0.65(\$/Kg) 0.44(\$/Kg) - 0.58(\$/Kg) 1.01(\$/Kg) 0.26-0.48(\$/Kg) 0.65(\$/Kg) 0.48(\$/Kg) 0.12(\$/Kg) |
| Korea | 34.90% (PCL) 3.67% (PTL) | India Thailand Taiwan UAE China | 34.90% 3.68% - 3.71% 8.68% 7.98% - 60.95% 13.51% - 36.98% |
| Indonesia | 8.5% (PCL) 2.20% (PTL) | India# China# Thailand# | 4.00% - 8.50% 2.60% - 10.60% 5.40% - 7.10% |
| Turkey | 21.61%(PCL) | India | 4.25% - 21.61% |

#Sunset review ongoing

The company is undertaking all the safeguards to insulate against the risk arising out of anti-dumping duties and other protective barriers imposed by the importing countries. Polyplex's strategy of having a geographically diversified manufacturing set up has protected it from such trade barriers and helped retain its competitive positioning over the years. As a local producer in many countries, it is also evaluating actions for protection against unfairly traded or subsidized imports from other countries.

BOPP Film: The key markets imposing trade defense measures in case of BOPP films are Indonesia, Vietnam, Korea, Pakistan etc. The brownfield expansion in Indonesia which is expected to start in Q2 of 2021-22 may have some impact on exports to Korea. On the other hand, the Indonesian market is protected against imports from other key exporting countries like Thailand, China, Malaysia & Vietnam.

PET Film Resin: In case of PET Film Resin, there are not many trade defense measures across the globe except the safeguard duties imposed by Turkey on imports from Korea.

Outlook for the PET film industry:

- Global demand for Thin PET films is expected to grow at a CAGR of about 5-6% pa over the next few years and for Thick PET films is forecasted to be around 4-6% p.a., driven mainly by electronics applications.
- The capacity additions of approximately 1.8 million MT over next 2-3 years, in Thin BOPET film (including China), is mostly by incumbent industry players and is not considered as too disproportionate when compared to the historic growth rates in demand. Delay in start-up of some of these new lines due to Covid19 may help to spread out the capacities over a longer period of time.
- The industry could see closure of some old lines which cannot compete with the new high speed and cost-efficient lines.
- The manufacturers of the new lines would also work towards diversifying their product range and expanding their market reach, although this will be a slow process given the nature of applications and tedious customer qualification timelines.
- Industry is stepping into competitive era which would see survival of the fittest. Key differentiators would be Product basket, Cost of production, Debt leverage and Cash reserves.
- Older and inefficient film lines, especially in Europe, China and Indonesia may eventually shutdown due to their inability to compete with the new high capacity lines.

2.8. Manufacturing of product

2.8.1. Production

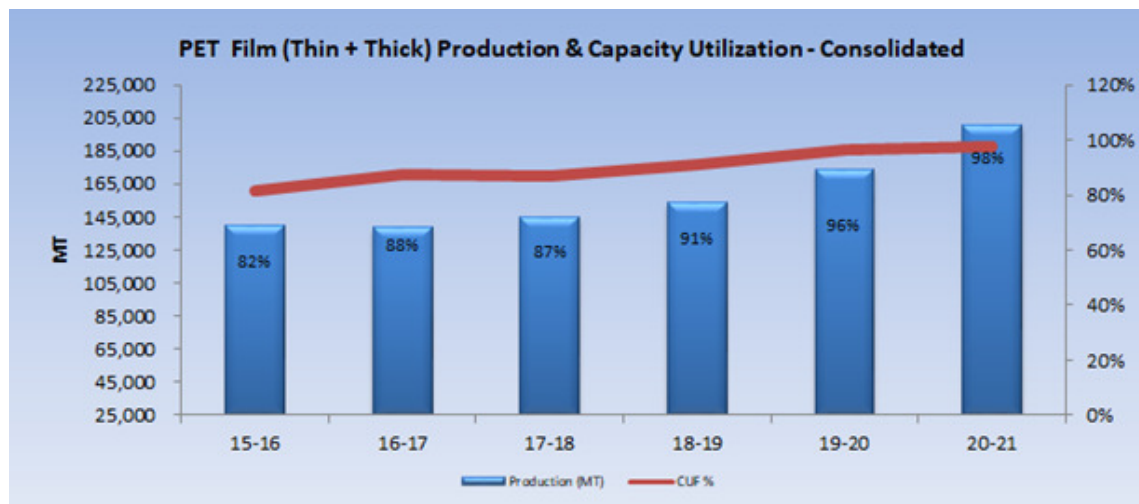
Production capacity

Capacity of Polyplex group is as follows:

| Products (Unit: MT) | | Thailand | Turkey | USA | Indonesia | Total PTL | Polyplex Group |
|------------------------------|-----------------------|----------|--------|--------|-----------|-----------|----------------|
| PET Resin | Normal* | 106,050 | 75,850 | 86,000 | 73,000 | 340,900 | 418,500 |
| | Recycled | 43,000 | - | - | - | 43,000 | 43,000 |
| Base Film | PET Thin | 42,000 | 58,000 | 81,000 | 48,000 | 229,000 | 284,000 |
| | PET Thick | 28,800 | - | - | - | 28,800 | 28,800 |
| | BOPP | - | - | - | 60,000 | 60,000 | 95,000 |
| | CPP | 10,000 | - | - | - | 10,000 | 10,000 |
| | Blown PP | 13,645 | 4,392 | - | - | 18,037 | 18,037 |
| Downstream Value Added Films | Coated (Million Sqm.) | 985 | 320 | - | - | 1,305 | 1,562 |
| | Metalized | 21,700 | 17,700 | 9,250 | 18,000 | 66,650 | 103,950 |
| | Holography | 960 | 480 | - | - | 1,440 | 5,520 |

Note: Capacities mentioned above are attainable capacities. For BOI approved capacities of the Company, please refer table above under section 'Domestic competition'.

The capacity utilization rates for the Plain PET film lines (Thin + Thick) of PTL (Consolidated) are as follows:



- Capacity and Production of any new line is included in above graphs for proportionate period, since start of commercial production

Improved CUF has been possible due to continuing efforts by the Company in debottlenecking its existing capacities

2.8.2. Major raw materials

PET resin

PET Resin (polyethylene terephthalate resin) is the major raw material in the production process for PET films. It has been the strategy of Polyplex to produce its own Resins at all the manufacturing locations. Accordingly, every location has its own Resin plant with sufficient capacity to meet its requirement.

Purified Terephthalic Acid (PTA) and Mono Ethylene Glycol (MEG):

The major raw materials for PET resin production are purified terephthalic acid (PTA) and mono ethylene glycol (MEG). To ensure uninterrupted procurement of raw materials the Company has currently tied up with local suppliers for PTA and MEG for PTL. In Turkey, the company procures bulk of PTA & MEG from 2-3 global suppliers through long term / yearly contracts and also explores spot opportunities for some part of the business as and when the market conditions are favorable to leverage on the surplus situation on these raw materials from time to time. The subsidiary in USA and in Indonesia are largely procuring their requirements from local suppliers.

The company enters into Annual contracts as per which 100% of the company's requirements would be supplied as per the specified price formula throughout the contractual period(s).

Major Raw materials for the Extrusion Coated Film production:

Apart from PET film, which comes mostly from the company's in house production and imports from the group company (at Arm's length pricing), the major raw materials for the Extrusion Coated film production are BOPP base film and Coating chemicals such as LDPE and EVA. All these are sourced from various manufacturers / traders from within Thailand as well as imports from within the region.

Major Raw materials for the Cast Polypropylene Film production:

The major raw materials for the Cast Polypropylene film production are Homo Polymer and Co-Polymer. Homopolymer is being procured locally while Co-Polymer is sourced from imports within the region and from middle-east / India.

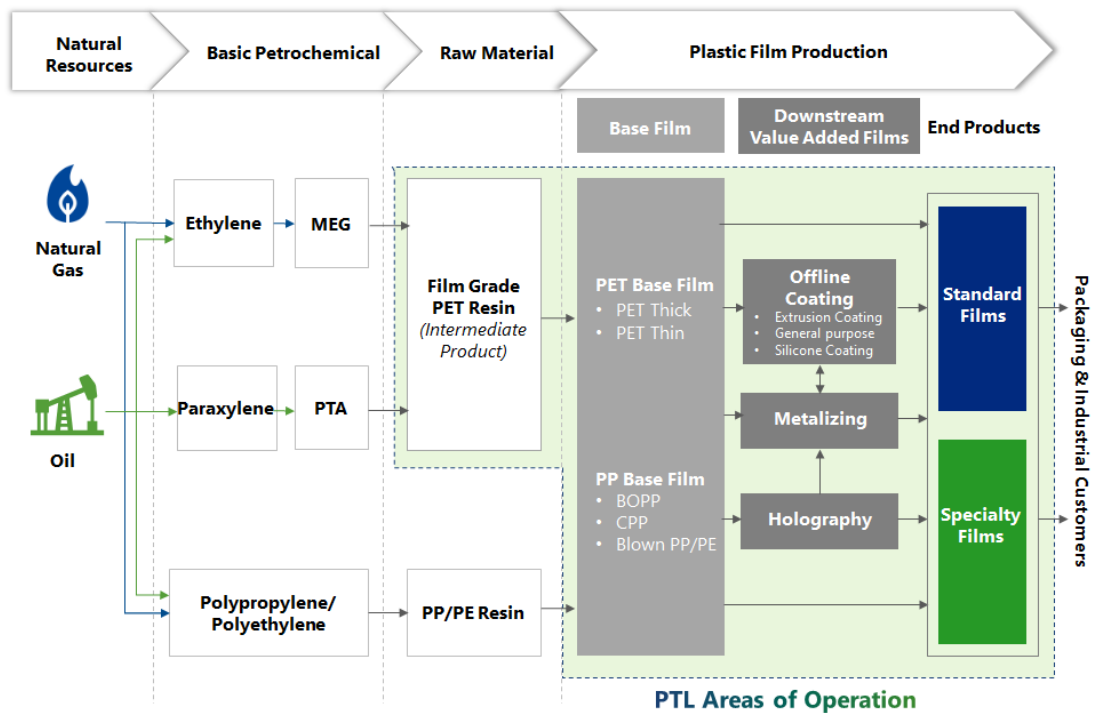
Major Raw materials for the Silicone Coated Film production:

For the Silicone Coating line, the main raw material is PET film which is transferred from the Company's in-house production and also imported from the Group companies (at Arm's length pricing). Silicone and other chemicals are being imported from USA and Europe from leading suppliers.

Major Raw materials for the Blown PP Film production:

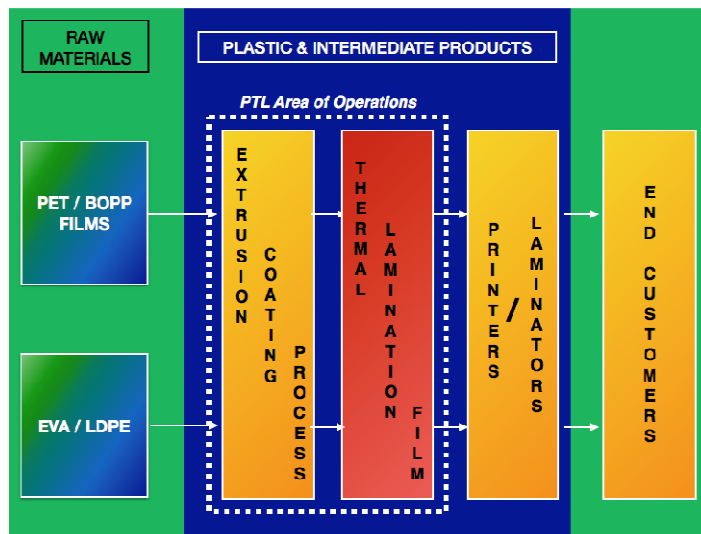
For Blown PP film line, the main raw material is PP resins (Homopolymer, Co-Polymer and PP Color master batches). These are sourced from local suppliers as well as imports from within this region.

The value chain for the Company's PET, CPP & Blown PP film business is depicted below:



6

The value chain for Thermal Lamination film is given below:



2.8.3. Impact on the environment

There is minimal impact on environment caused from the polyester film production process since PET in both film and resins are generally recyclable. Also, the Company being on the forefront of this issue, has developed a few products with post-consumer recycling content of up to 90%. The Company's subsidiary in Thailand, Ecoblue Limited is investing in a state-of-the-art recycling line dedicated for hard to recycle materials such as mixed plastic laminates, coated films, label matrix, printed PP & HDPE waste. The Group also has a dedicated R&D center whose main focus is to work collaboratively with customers and help provide innovative and sustainable solutions such as down gauging of film, create mono material substrate etc. The Group is an active member of international forums and associations working in this direction.

For its existing Polyester resin line and the upcoming new line, it has received the required EIA approval and submits regular reports required as per EIA approval to the concerned authorities.

The Company has been following best practices relating to the environment, health and safety and has been diligently following the guidelines that have been set out as per the following certifications:

| Management System International Standards | PTL-Thailand | PE - Turkey | PU - USA | PFI – Indonesia | Ecoblue Limited |
|--|---|--------------------------------|----------------------------|---|--------------------------|
| Quality Management System (ISO 9001:2015) | Certified since 2004 | Certified since 2006 | Certified since 2018 | Certified since 2020 | Certified since May 2021 |
| Environment Management system (ISO 14001:2015) | Certified since 2004 | Certified since 2009 | Certified since 2018 | Certified since 2020 | - |
| Occupational health & safety management system (OHSAS 18001:2007/ISO 45001:2018) | Certified since 2008 | Certified since 2009 | | Certified since 2020 | - |
| Food Safety Management System (ISO 22000:2005 / BRC-IOP/ FSSC-V5) | Certified since 2009 (ISO 22000) and FSSC 22000 V4.1 since 2020 | Certified since 2006 (BRC-IOP) | Certified since March 2021 | Under Implementation and expected by Q3 2021-22 | - |
| Energy Management System (ISO 50001:2011) | Under implementation and expected by Q4 2021-22 | Certified since 2014 | | Under Implementation and expected by Q3 2021-22 | - |
| Global Recycled Standard Certification | - | - | - | - | Certified since 2020 |
| Letter of No Objection (LNO) for Food Contact Applications (U.S. Food & Drug Administration) | - | - | - | - | Certified since 2019 |
| IMS (IMS (Interstate Milk Shippers) Certification | - | - | Certified since 2020 | - | - |
| RCS (Recycled Claim Standard) Certification for RPET Resin and Film | Certified since May 2021 | - | - | - | - |

3. Risk Factors

Before deciding to invest in the shares of the Company, investors should prudently consider the information about risk factors described in this section and all information contained herein. Apart from the said risk factors, there could still be other unpredictable risks that may adversely impact the Company's operating results.

The key risk factors are:

3.1. Competition and Business Volatility Risks

Polyplex's business is quite diversified not only geographically but also in terms of customer concentration as well as product portfolio which provides significant stability to earnings and reduces the risk to a great extent.

Thin PET film, constituting 65% of consolidated sales, remains the core business for the Company and a sizeable quantity is directed towards higher value-added downstream product-lines like silicon coating, extrusion coating, holography, and general-purpose offline coating. These downstream businesses tend to be benefited when margins in Thin PET film business is low because end pricing remains largely stable. Further, the Company continues to focus on increasing sales of specialty products as well as industrial products to further mitigate the volatility and competition risks which is also evident from historical performance.

The industry margin in standard PET film hinges on Value Addition "VA" (i.e. difference between the PET film price and the prices of PTA and MEG which are the major raw materials). Whenever the demand supply balance favors the suppliers, VA usually widens as Suppliers are able to hold on to selling prices even if there is a decline in input raw material prices. On the contrary, if PET film supply is larger than market demand, the film prices tend to decline, hence narrowing VA levels as Suppliers are unable to adjust the Selling prices on a timely basis, to pass on the entire impact of increase in input raw material prices to the customers.

The thin PET film industry is prone to margin fluctuation primarily driven by bunching of capacity additions, while demand growth remains consistent and impact on margins could vary across regions depending upon extent of new capacities and nature of competition. A geographically diversified operation helps mitigating the risk significantly.

Further the industry is not as volatile as commodity due the very nature of the product. A few characteristics of the product which differentiates it from other commodity products are as follows:

- PET film is almost always made to order and so, the production is not with an intention to stock but intended to cater to a specific customer requirement.
- The product is often produced with different surface treatment (plain, corona or inline coated) and/or different processing conditions to provide varying mechanical / other properties in the finished film for various end use applications. Many a times, variations in input resin (which we produce in-house at all the locations) is also required to suit target applications or develop new ones.
- Other than above important features, the specification of product in terms of thickness, width and length are generally unique to each customer
- If we take all these factors into considerations, the number of SKU's for the Company would be running into tens of thousands

The industry utilization rates have improved significantly in the last 3-4 years with constant demand growth. 2020 witnessed start-up of some new lines, mostly by incumbent players in different parts of the world and were absorbed quickly without affecting the demand supply balance significantly. There are several more lines which are slated to start in the next 2-3 years. Most of these lines are in India and China and are by incumbent players. The prolonged Covid-19 pandemic might cause some delays in the start-up of these capacities and could even result in some cancellations. In a hyper competitive market

scenario, the industry may also see likely closure of some old and inefficient lines which may not be economically viable when compared to the high capacity and cost competitive contemporary lines.

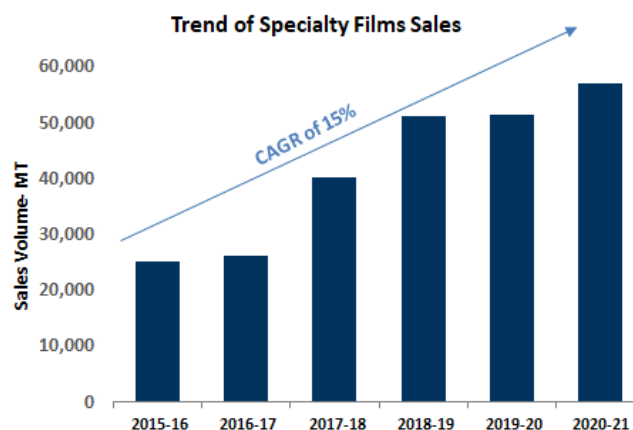
The industry volatility for the standard products has also become somewhat damped over the last 4-5 years due to a host of factors including more rational behavior by industry participants, lenders, sponsors besides institutional changes, especially in Asia on new lending norms, bankruptcy laws, etc.

The other base films businesses like Thick PET films, BOPP films, CPP and Blown PP films are inherently less volatile due to variety of factors as mentioned below:

- Exposure to Industrial end use segments where end product prices are relatively stable
- Market dynamics are dependent upon country / regional factors like in the BOPP and CPP businesses, long haul trades are not possible due to potential quality related issues as well as proliferation of capacities across the world
- Captive usage where significant part of the current production volume is consumed in-house
- Limited market participation like in Thick PET films where bulk of the consumption is in Far East countries like Japan, Korea, Taiwan and China

To mitigate such risks, the Company has taken several steps:

- With high productivity levels and consistently higher than industry CUF, cost control measures and a diversified product range with continued focus on enhancing Specialty films, Polyplex believes it has a well-designed and robust business model which helps moderate the volatility in its earnings.
- A geographically well spread manufacturing presence and broad-based product offering, comprising of different substrates of plastic films, including Specialty films helps to maintain a balanced sales portfolio and mitigate the risk of over dependency on a single product and single market.
- To counter the impact of volatility and margin fluctuations in the Standard Films business, Polyplex has, over the last 3-5 years diversified its product portfolio to significantly increase its share of high value-added segment (HVAS) or Specialty films segment. The Specialty Film segment comprises of those product types which are a specialty either from the production/process perspective and/or application/customer perspective and are usually higher and stable margin sales. Given evolving product portfolio, market needs and entry barriers, the Company periodically revisits and redefines the methodology for determining the Specialty film sales according to the changing nature of the applications and its key differentiations in comparison to standard films and vis-à-vis the competition.



- Regular and judicious investments in metallizing/ downstream coating and side-stream investments in blown PP/PE capacities helps Polyplex continuously innovate on product offerings to its customers and further improve the mix of HVA film in its sales.
- Investments to upgrade and modify the older lines further helps in reorienting the product mix towards specialty and enabling production of standard products on the higher productivity newer lines thereby optimizing costs
- Increased focus on new product development and sustainable solutions through R&D, in addition to having a strong technical services team is a further differentiator between Polyplex and its competition.

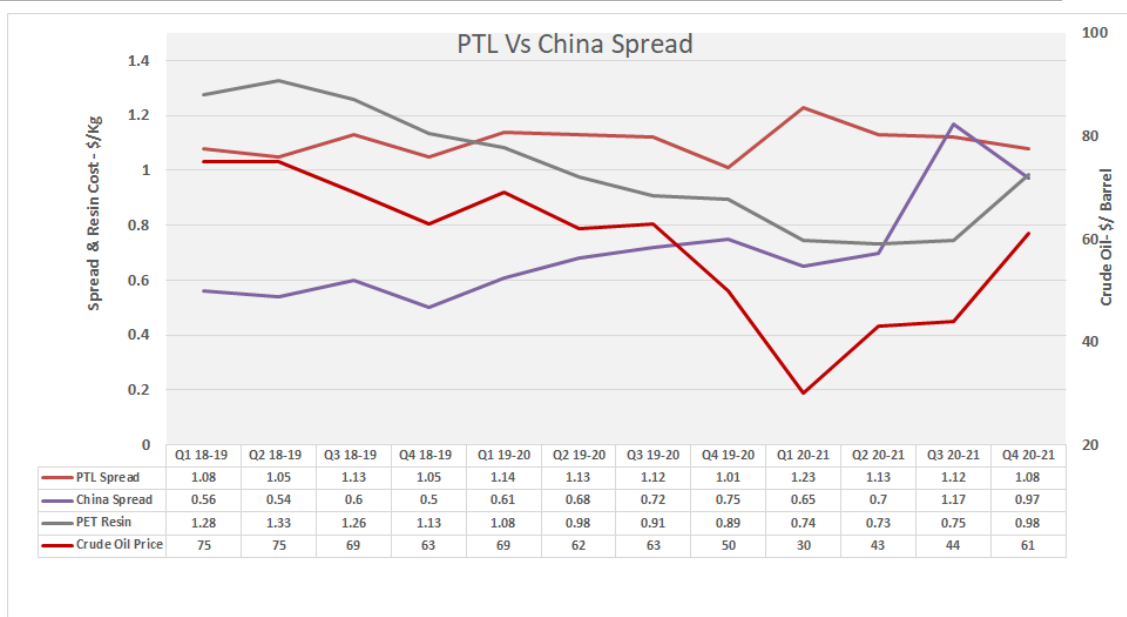
3.2. Risks relating to uncertainty in prices of the product and raw material

The basic raw material for production of PET film is PET resin, which in turn is produced from Purified Terephthalate Acid (PTA) and Mono Ethylene Glycol (MEG). Being byproducts of the petrochemical chain, the prices of PTA & MEG are impacted by Global crude oil prices, apart from demand-supply within its own industry.

Since the cost of resin is the single largest component of the total production cost of Polyester film, any adverse fluctuations in the PET resin input prices may impact the Company's operating margins depending upon the ability of the Company to pass on the same to its customers. As selling prices are usually negotiated on a monthly / quarterly basis, in a balanced demand supply situation, the Company is usually able to adjust the selling prices for the standard products following any changes in the PET resin cost and other operating costs, although this happens usually with a time lag varying from 1-3 months depending on the region and prevailing market conditions. The price and margins on the HVA products tend to be more stable and counter cyclical.

The below graph helps to analyze the correlation between crude oil prices and VA of PET films. Any movement in the raw material prices is generally passed on to the end customers, albeit with some time lag of 1-3 months. More importantly, with the diverse product mix and increasing proportion of HVA film sales, Polyplex has much better ability to maintain relatively stable overall VA over a longer period of time, which is reflected in the consistently higher VA levels as compared to standard film VA prevailing in China. In Q3 & Q4 20-21, the China VA seems to be an aberration as demand for PET Film suddenly spiked early October due to pent up downstream demand arising out of impact of Covid-19, further compounded by low inventory in the pipeline.

Stability of crude oil at any particular level usually helps in improving business sentiment and enables all the players in the entire supply chain to overcome uncertainty caused by crude oil volatility. Given the diverse product offering at PTL and the fairly good mix of HVA products, PTL's VA remains higher in comparison to industry VA (China) of standard PET films and the Company continues to improve its HVA product portfolio by making new investments to improve its HVA production capabilities.



Source: Industry reports and Company Information

The Company monitors world and local input price trends carefully and determines its procurement plans accordingly. Also, unpredictable price movements of raw materials affect all industry participants and thus does not put Polyplex in a materially advantageous or disadvantageous position vis-à-vis its competitors. The prices of downstream products like Off-line coated, silicone-coated and extrusion coated films are less susceptible to changes in raw material prices and thus helps to counter the volatility in the standard films. Similar factors are at play in the inputs required for the Polypropylene (PP) based CPP/Blown films used in flexible packaging. However, the industrial end use films – Thick PET films, Coated PET films and some of PP based films are more stable in pricing and margins

3.3. Risk associated with reliance on only a few raw material suppliers

The 2 major raw materials for the BOPET film production are PTA and MEG, which are well traded commodities, and are available from a variety of manufacturers across the world. At all its manufacturing locations, the Company sources its major raw materials either locally and/or through imports, based on pricing and other commercial considerations such as delivery lead time/ inventory carrying levels etc. The Company usually enters into yearly contracts for the supply of its major raw material so as to ensure its availability. Some of these contracts have a supply guarantee clause to ensure that the supplies remain uninterrupted for a reasonable period of time in case of any unforeseen circumstances. In any case, these are well traded commodities and availability is usually not an issue. The company also maintains sufficient safety stock, for PTA/MEG as well as PET Resin to take care of any contingency. As far as the pricing is concerned, since it is formula based linked to certain standard international benchmark indices, there is high degree of transparency.

For the other downstream coated films and PP based films, apart from PET film which is transferred from the Company's in-house production and also imported from third parties or other group companies at arm's length pricing, the other major raw materials are relatively insignificant in value terms and sourced from various manufacturers / traders locally as well as imports.

3.4. Risk from environmental regulatory measures

All the production lines of PTL, except for the Polyester resin line, do not require any environmental impact assessment (EIA). For its existing Polyester Resin line, the Company has the required clearance from the regulatory authorities and utmost care is taken to ensure compliance to the same. For the upcoming Batch PET resin line, the Company has already received the EIA approval and the Project is expected to be successfully commissioned in Q3 of 2021-22.

For the new project in Indonesia as well as in the existing production lines in USA and Turkey, the Company has received the necessary environmental licenses and/or approvals required for our industry.

3.5. Risk from competition from existing manufacturers and entry of new players

With consistently rising demand and healthy growth potential, the PET film industry attracts new investments from time to time from existing large manufacturers who are well-established companies with long experience in this industry, as well as medium to small producers and sometimes new entrants with capability to accommodate investment in PET film plants and machinery. Few new capacities have already started up last year in various regions and have had no material adverse impact on the market situation or the margins of most players, including Polyplex, as can also be seen from the financial performance for the year. Most of the new capacities coming up in next 2-3 years are also mostly by incumbent players in India and China. Given the prolonged Covid-19 situation, some of these capacities might be delayed, deferred or even cancelled. There could also be likely closure of some old and inefficient lines which may not be economically viable when compared to the new high productive assets like the one commissioned by the Company in Indonesia. Overall, despite the past volatile history of this industry, it continues to remain an attractive industry with strong fundamentals and a steady demand growth with Polyester film finding many new applications every few years.

Compared to other players, Polyplex's lower cost of production, established quality and technical services, geographically diversified manufacturing presence, wide range of products and applications and global market reach are some of key factors which make Polyplex one of the leading and preferred players in this industry and it remains confident of being able to outperform the industry peers.

The Company has been continuously evaluating other growth options in PET film / value added products / related areas like CPP / BOPP / Blown film/ Silicone Coated Films at all existing manufacturing locations in Turkey/Thailand/US/ Indonesia, while also carefully evaluating growth options in other new locations/new product lines. The BOPP line under construction in Indonesia is another step towards diversifying the product portfolio and becoming a one stop solution for all packaging film needs of our customers. Similarly, company pursues a strategy of being "one stop shop" for several industrial applications line PV, Labels, Construction etc.

3.6. Risk from trade barrier measures

Trade barrier measures imposed by various countries are broadly of two major types:

- a) Anti-dumping (AD): An anti-dumping duty can be imposed on imports if the ex-factory prices of such imported products are proved to be lower than the local selling prices of the similar products in the countries of the exporters. The important markets adopting this measure in the past few years on BOPET film are the European Union, USA, Korea, Indonesia, Turkey and Brazil. In order to protect the domestic economy from Covid-19 impact, Turkey imposed additional custom duties of 40% till 31st December 2020 and 10% thereafter on all countries excluding those with FTA's and Custom Union.

The key markets imposing trade defense measures on imports of BOPP films are Indonesia, Vietnam, Korea, Pakistan etc. The brownfield expansion in Indonesia which is expected to start in Q2 2021-22 may have some impact on its exports to Korea. On the other hand, the Indonesian market is protected against imports from other key exporting countries like Thailand, China, Malaysia & Vietnam.

In case of PET Film Resin, there are not many trade defense measures across the globe except the safeguard duties imposed by Turkey on imports from all countries which is in force for three years effective November 2020.

- b) Anti-subsidy: A countervailing duty (CVD) can be imposed if the government or any government agency provides any benefits or privileges specifically to any company or exporter of such country.

Such tax measures cause higher import duty on the goods produced and exported from the targeted countries and hence may find it difficult to compete with the products of the rivals with lower duty applicable. For manufacturers like Polyplex, who have a diversified manufacturing base across multiple locations, such trade defense measures can be an opportunity if anti-dumping duties are levied against imports from some of the countries.

The company is taking all safeguards to insulate against the risk arising out of anti-dumping duties and other protective barriers imposed by the importing countries. A geographically well-diversified manufacturing presence and end-to-end product portfolio like ours will help mitigate the adverse fall-out of such an action, if any. The local manufacturing presence in USA, Europe and now in Indonesia, helps the Company to take advantage of such trade barriers levied by these countries against imports from Asian countries.

3.7. Risks from future projects

The major risks associated with any new Projects are as below:

- **Market Risk:** Since Polyplex has a global reach and an extensive marketing and distribution network, the Company does not foresee any major risk in developing markets for its products, even for the new upcoming BOPP film line in Indonesia, where the Company can leverage on customer synergies and become a single source preferred supplier for all the flexible packaging film needs of its customers.
- **Competition Risk:** The Company believes that its cost structure would be globally very competitive and it has the widest product range which is one of the major advantages to gain an edge over some of the existing producers/new entrants.
- **Project Implementation risk:** Due to the experienced Projects team at Polyplex, the Company remains confident of successful implementation of new projects on time and within Budgeted costs except for un-foreseen circumstances. The BOPP Project at Indonesia is on schedule and expected to start commercial operations within Q2 of 2021-22.
- **Funding Risk:** For large projects, the Company takes long term Debt to the extent of 65-75% of the Project cost and the balance is funded out of internal accruals. Based on the good relationship with existing banks and the low gearing ratio, the Company is quite confident of raising the required financing for any new future projects at competitive terms and conditions. For the BOPP project in Indonesia, the Company has contracted a term loan of USD 25 million (or Euro equivalent) and the balance is being funded out of Equity / Quasi-equity investment. For the brownfield BOPET film line project in USA, although most of the Project cost is intended to be funded out of internal accruals of the Company and Cash surplus within the group, the Company is also evaluating creating a bank loan option for up to USD 25 Million to care of any unforeseen situation such as Project cost overrun etc.
- **Currency Risk:** For any new project, the currency of borrowing is decided, based on the projected operational cash flows of the project. The currency which has the maximum surplus in the operational cash flows is chosen to be the currency for the loan. If there are multiple currencies of surplus in operations, the Company may also consider borrowing in more than 1 currency (USD and/or Euro), depending on the currency exposure in the Project cost. This helps to create a natural hedge for the Project expense as well as the loan repayments, as and when the repayments start. The company also has internal FX guidelines to cover net exposure of Project costs, in various currencies by booking appropriate forward contracts, so that the risk on the initially estimated overall Project cost, on account of currency fluctuations is minimized.

Apart from all the Project specific risks and their mitigation plans as discussed above, the Company would also like to mention here that the overall Project risk of any new Project is covered by taking appropriate Insurance policies to cover various risks such as Erection and Construction all risks, Marine risks, Loss of Profit coverage due to delay in Project Start-up etc.

3.8. Risk from dependence on the parent company

As at 31st March, 2021, Polyplex Corporation Ltd. (PCL), through direct and indirect shareholding, controls 51% of the paid-up shares in the Company.

Over the years, the Company successfully implemented a program for reducing the dependence on expatriates by increasing the proportion of local Thai staff in operating/managerial positions and has

been managing the production and operations efficiently thereafter. The Company's present management team is composed of experienced key personnel in production, marketing, distribution and accounting/finance. It has thus been able to run the business on its own without too much reliance on the parent company.

PTL's business operations are independent from PCL with respect to public offering of equity, borrowing of loans, and other investments in the future. The parent company need not request any approval from any government bodies except for reporting of significant events to two stock exchanges where it is listed, namely Mumbai Stock Exchange and National Stock Exchange.

The Company is confident that there will be no conflict of business interest between PCL and PTL on account of the following:

- It is Polyplex's policy in business operation that there is an equitable distribution of business between the various manufacturing units aligned to efficient servicing of customers.
- The investment in PTL and its subsidiaries is significant as compared to PCL's own assets and hence considered to be the flagship company of the Polyplex Group. As such, the success of PTL is very critical for PCL.

3.9. Risk from Sponsor Group holding about 51% of total shares

PTL's major shareholder is PCL (As of March 31, 2021 the promoter Mr. Sanjiv Saraf and related parties control 50.97% in PCL), holding 17.19%, and Polyplex (Asia) Pte. Ltd. ("PAPL") which is wholly owned by PCL, holding 33.81%, thus in aggregate holding 51% of PTL paid-up common shares of Bt. 900 million. Thus, in matters that require a three-fourths majority vote of shareholders, the minority shareholders can successfully oppose corporate actions undertaken or supported by the majority shareholders. However, the parent company will continue to play a vital role in determining the Company's policy and strategic direction setting. PCL is on the Stock Exchanges in India and abides by the Corporate Governance regulations prevailing for listed companies in India.

3.10. Foreign exchange risk

Most of PTL's products, i.e. about 75-85%, are for exports, which are mostly denominated in US dollars and Euro. As against this, raw material (PTA & MEG) prices are linked to the US dollar, although their payments are done in Thai Baht and there are Long term loan related interest payments/loan repayments in USD and Euro. On a standalone basis, the company as at March 31st '21 had USD loan of about 0.1 million and Euro loan of about 101 million borrowed over the past few years from the Turkey subsidiary for the investment in Indonesia, repayment including prepayment of bank term loans and working capital loans. There are some expenses which are in Thai Baht, i.e. locally procured raw materials, packing materials, salaries, utilities and other administrative expenses which have to be settled by income from domestic sales and from the surplus income from USD/Euro exports. Thus, broadly speaking, PTL has a net surplus US dollar and Euro position on the trade front, which can be hedged somewhat against repayment/ interest payment on its long-term loans. To the extent possible, the company has been trying to create a natural hedge to mitigate the risk from currency fluctuations. On an ongoing basis, the company also takes forward covers, to cover the net surplus exposure in USD and Euro.

Similarly, the Company's subsidiary in Turkey has a net surplus Euro currency whereas they have certain payments in the local currency, which is hedged from time to time by taking appropriate forward covers.

The subsidiary in USA mainly has USD revenues and USD payments, so there is a natural hedge. The US subsidiary has also taken some inter-co loans from Polyplex Europa (PE) for supporting its financing requirements. These loans are Euro denominated and the O/S amount of the loan at 31st March, 2021 was Euro 46.8 million.

The subsidiary in Indonesia had contracted Long term debt of USD 55 million (or Euro equivalent) for its BOPET project and USD 25 million for the upcoming BOPP project. The outstanding of BOPET loan until 31st March, 2021 is Euro 28.5 million Euro and USD 18.6 million. Apart from this, they have also borrowed inter-company debt of Euro 43 million from the Group company in Turkey to support its project financing and working capital requirement. The Company has exports to Europe

and US and in Euro and USD currencies respectively, which will be used to naturally hedge against Loan repayment/ interest payments.

However, the Company continues to be exposed to unrealized FX fluctuation impact as the forex loans need to be restated at the period end exchange rate, in line with the applicable accounting standard and this can create sharp swings in the reported profitability of the Company. But the Company considers it prudent to plan its cashflows and forex risk management based on the principles of natural hedging. As such, it continues to focus on improving the operational performance, rather than trying to protect the unrealized FX fluctuation impact as the purpose of borrowing loans in foreign currency and the natural hedge from export earnings would be defeated if the forex loans are swapped to local currency, merely to eliminate the risk of unrealized FX fluctuation on the loan restatements and to achieve more stability in reported earnings. In order to provide a better assessment of operational performance, the Company has been normalizing the impact of the FX fluctuation, while reporting the performance to shareholders and while considering the Net profits for dividend payout.

3.11. Interest rate risk

As of March 31, 2021, the Company's outstanding long-term bank loans on a consolidated basis were Euro 28.5 million and USD 18.7 million whereas outstanding short-term loans were Baht 650 million. The USD loans have floating LIBOR based interest rates and the Euro loans have floating EURIBOR based rates. Apart from the above, the Company in Thailand and the subsidiaries in Indonesia and USA have inter-company loans from the Turkey subsidiary totaling to Euro 190.8 million, which gets eliminated in consolidation. Pricing of these loans are on Arms' length basis, linked to Floating EURIBOR rates. The floating interest rate may put the Company at a risk of rising financial cost if the interest rates move up. There are various reasons for interest rate changes like economic growth, inflation expectations and unemployment, among others. All these factors are external and uncontrollable. However, the company has been constantly monitoring the interest rates and will evaluate interest rate swaps for converting the liability into fixed rates, if considered beneficial.

3.12. Risk from overlap of products and markets

The product portfolio of PCL, PTL, PE, PFI and PUL is quite similar. In order to mitigate the risk from overlapping of products and markets, Polyplex has also evolved an equitable policy for distribution of markets, between its Indian, Thailand, Turkey, Indonesian and USA operations based on the several factors like product range, delivered cost to customer, supply lead times and preferential duty access. Based on the same, PTL & PFI would mainly serve South East Asia, Asia Pacific, China, and Australia & New Zealand. PCL would serve South Asia. Turkey operations will mainly cater to Europe, Africa and CIS/Russian markets.

The new line in Indonesia, although planned mainly to cater to the domestic market, is currently also exporting some volumes to Korea, Japan, Europe and USA, depending on the Pricing, material availability, delivered cost to customer, preferential duty access etc. The US manufacturing entity would mainly focus on North American market. Certain markets which are basically spot markets such as Middle East, South America etc may be serviced by either of the supply locations depending on the availability of the product and other factors such as capacity availability etc.

The Polyplex Group also has a policy on future investments in polyester film / related areas between the Company and its parent company. Investments in India/SAARC region would be decided and made by PCL and its other subsidiaries (excluding the Company) while investments in Thailand / ASEAN region as well as other countries would be in all likelihood be made by PTL or the subsidiaries in which the Company has a major stake. The above is subject to availability of Investible cash / ability to borrow debt by the existing / preferred Company as per the policy. In line with this Investment policy, the latest investment in Indonesia is fully owned by PTL.

3.13. Credit risks

Credit risk of customers is another significant risk for any business. Credit risk refers to the risk of non-payment by debtors. This risk increases in case of unsecured or open payment terms. The Company manages the risk by adopting appropriate credit control policies and procedures. The Company has a well-defined and robust internal credit management system to monitor unsecured

sales. The Company also has a global credit insurance cover to secure non-payment risks of customers. As such, most of the sales, which are on credit are secured either through a Letter of credit issued by the customer or secured under credit insurance coverage. The Company also takes extra caution in selection of any new customers and granting of credit.

3.14. Risk from regulatory measures or drive against use of plastics

Globally, there are increasing concerns on the usage of plastics in general due to low rates of recycling of post-consumer waste and lack of efficient collection and sorting systems. The ongoing Covid-19 crisis has however resulted in a re-think on the benefits of plastics in general and may also re-orient thinking on recycling strategies and solutions.

Within various forms of packaging, flexible packaging is held to be a relatively environmental friendly form of packaging due to its lower packaging weight to product ratio with a significantly lower carbon footprint (GHG emission), etc. However, its recyclability is an issue arising from technical challenges and lack of efficient & economic collection mechanism for post-consumer waste. This has led to regulatory measures like banning the use of single use plastics, implementing levies and mandating recyclability. However, there is a general acceptance and understanding on advantages of flexible packaging and, therefore a complete ban on multilayer flexible packaging is unlikely as is the case with other single use plastics. In addition, all the stakeholders in the value chain including brand owners, converters, plastic manufacturers, etc. are working together on various fronts e.g. higher recycled content, improved collection system, achieving higher recyclability by changing the structure, etc.

Governments around the world and the industry at large are focusing on developing economical models for collection, sorting and reuse/ recycling of post-consumer plastic waste.

To facilitate the same, there is an increasing trend towards Extended Producer Responsibility (EPR) measures to fund such initiatives. Additionally, several industry Groups and Organizations like CEFLEX, Ellen MacArthur Foundation etc, are actively pursuing the sustainability agendas simultaneously.

The Industry is working on multiple fronts to provide sustainable solutions such as:

- Higher rPET content in packaging
- Single substrate packaging solutions
- Higher Bio content or Bio sourced solutions
- Several alternative usages of plastic waste being pursued like conversion to fuel oil, incineration, road construction, etc.

Being a complex issue, each industry participant is challenged with both threats as well as opportunities. Polyplex Group has been one of few companies working on sustainability initiatives for a long time. It has become members of organizations like PETCORE, CEFLEX etc and actively participates in various initiatives in this direction at a global forum. The Company had invested in a Recycling arm in Thailand, Ecoblue Limited, in 2013 which focuses on recycling post-consumer as well as post-industrial plastic waste for varied applications. The Company has recently launched a few products with post-consumer recycling (PCR) content of up to 90%. This Company is investing in a state-of-the-art recycling line dedicated for hard to recycle materials such as mixed plastic laminates, coated films, label matrix, printed PP & HDPE waste. The Group also has a dedicated R&D center whose main focus is to work collaboratively with customers and help provide innovative and sustainable solutions such as down gauging of film, create mono material substrate etc.

As per Industry experts, given the advantage of BOPET film in flexible packaging, there are currently no viable alternatives to PET film in this segment. Further, any new alternative would take few years' time to be established and to gain acceptance in the Industry and hence, there is no major threat to this industry in the medium term i.e. next 3-5 years. In any case, the multi country manufacturing and sales base of the Company will help reduce the extent of risk of any adverse development in any particular country / region.

3.15. Covid-19 Related risks

The impact of the pandemic on the PET film industry stems from expected fall in disposable income worldwide due to reduction in economic activities/higher unemployment levels and lockdowns in some or other parts of the world. . The prolonged Covid-19 pandemic may result in a reduction in the demand for discretionary items in both the packaging and industrial segments. These would include expensive snacks/boutique products etc. and white goods, mobile devices, LED/LCD devices and the automotive segment, thereby leading to a reduction in demand for the films used in these segments. However, given the relatively lower exposure of Polyplex to the Industrial and Electrical segment and also its presence and active participation in a wide range of industrial applications, Polyplex will not be impacted by temporary drop in demand of these segments. Increased demand of health and personal protection/hygiene related products such as face shields will help alleviate the stress on CUF and margins.

On the other hand, consumer staples, which make up approximately 70% of Polyplex's business, has seen stable to elevated demand. In developed economies such as Japan, Korea, Europe and US - there is an increase in demand for films going into flexible packaging, as consumers gravitate towards more packaged goods to avoid inherent risk of contamination in the fresh food segment. Even in developing economies, people have become more health conscious and prefer to buy packed products rather than those which are sold loose. Demand for personal care and hygiene products has gone up and is expected to be at elevated levels in years to come, which will lead to increase in demand for flexible packaging of which PET film is an integral component.

4. Operating Assets

4.1 Core assets of the Company as of March 31, 2021

The Net book value of Property, Plant and Equipment is as under:

| ASSET TYPE | Unit – Baht million | |
|--|------------------------------|------------------------------|
| | 31 ST MARCH, 2020 | 31 ST MARCH, 2021 |
| Land | 605,111 | 666,025 |
| Buildings and building improvements | 2,717,017 | 2,636,377 |
| Machinery and equipment | 7,128,488 | 6,839,990 |
| Furniture, fixtures and office equipment | 129,529 | 163,409 |
| Motor vehicles | 29,384 | 28,235 |
| Assets under installation and construction | 96,691 | 1,368,158 |
| TOTAL NET BOOK VALUE | 10,706,220 | 11,702,194 |

Note:

The Company and its subsidiaries have pledged their property, plant and equipment amounted to approximately Baht 3,571 million (2020: Baht 5,340 million) as collateral to secure credit facilities obtained from financial institutions

4.2 Intangible Assets

The net book value of other intangible assets as at 31 March 2021 was Baht 531 as compared to Baht 1,307 million in 2020.

4.3 Investment in subsidiary company

PTL's wholly owned subsidiary Polyplex (Singapore) Pte. Ltd. (PSPL), an investment holding company, holds 100 % stake in Polyplex Europa Polyester Film Sanayi Ve Ticaret Anonim Şirketi (PE), a company incorporated in Turkey which is manufacturing and distributing PET films. PTL monitors and supervises the operations of PSPL by having couple of representatives who sit on the latter's board of directors. PE has further invested 100% in a trading company in Turkey – Polyplex Paketleme Çözümleri Sanayi ve Ticaret A.Ş (PP) for the distribution of the company's products in the Turkey region.

In January 2006, PTL had acquired 80.24% stake in Polyplex (Americas) Inc., to enhance its distribution network in the North American market. PCL, PTL's parent company also had a 9.88% stake while the balance 9.88% was held by a foreign US-based shareholder. In January 2013, PTL acquired the minority

stake from the shareholders to make PA its 100% subsidiary. Post this acquisition, PA was merged with Polyplex USA LLC w.e.f 31st January, 2013.

In 2011, PTL invested in a 100% owned subsidiary Polyplex America Holdings Inc. (PAH), an Investment holding company, which further invested in Polyplex USA LLC (PUL) which is 100% owned subsidiary of PAH, the company under which a PET Thin Film line and PET Resin project was commissioned in 2013.

In 2013, PTL invested 100% in a trading company in Netherlands – Polyplex Europe B.V, which will be engaged in the warehousing and distribution of different products of the Company in the European market.

As a sustainability initiative, the Company invested in a project to recycle and provide sustainable solution for film-based process waste. The project was implemented in Thailand in December 2013, under the Company's subsidiary - EcoBlue Limited, in which the Company is holding 66.5% stake. In March, 2020, the PTL Board has approved an Investment into a state-of-art Recycling facility. Subsequently, the Board approved a proposal to enhance the scope of the project to include recycled PP (rPP) in addition to the earlier scope to have recycled PET (rPET). The start-up of this new line is slated for Q3 of 2021-22.

In October, 2017, PTL invested in PT. Polyplex Films Indonesia (PT PFI) in Indonesia for setting up a Greenfield BOPET film line project. PT PFI is owned 99.99% by PTL and 1 share is held by Mr. Amit Prakash, to comply with a regulatory requirement in Indonesia, of having a minimum of 2 shareholders. The BOPET Thin PET line start-up was in November 2019 and the resin plant in March 2020. In June 2019, The PTL board additionally approved the investment into a BOPP line in Indonesia the start-up of which is expected in Q2 of 2021-22

The Polyplex Group also has a policy on future investments in polyester film / related areas between the Company and its parent company. Investments in India/SAARC region would be decided and made by PCL and its other subsidiaries (excluding the Company) while investments In Thailand / ASEAN region as well as other countries would be in all likelihood be made by PTL or the subsidiaries in which the Company has a major stake. The above is subject to availability of Investible cash / ability to borrow debt by the existing / preferred Company as per the policy.

5. Legal Dispute

NONE

6. General Information

6.1 General Information

| | |
|-----------------------------------|--|
| The company | Polyplex (Thailand) Public Company Limited |
| Stock Exchange of Thailand symbol | PTL |
| Registered Head office | 75/26, Ocean Tower II, 18 th Floor, Sukhumvit Soi 19, Kwaeng North Klongtoey, Khet Wattana, Bangkok - 10110 |
| Telephone | (662) 665-2706-8 |
| Facsimile | (662) 665 2705 |
| Factory -1 | Siam Eastern Industrial Park, 60/24, Moo 3, Tambol Marbyangporn, Amphur Pluak Daeng, Rayong- 21140 |
| Factory -2 | Siam Eastern Industrial Park, 60/91 Moo 3, Tambol Marbyangporn, Amphur Pluakdaeng, Rayong 21140 |

Factory -3

Siam Eastern Industrial Park, 60/109,Moo 3,
Tambol Marbyangporn, Amphur Pluakdaeng
, Rayong 21140

Type of Business

Manufacturer of Polyester Thin Film (Plain and Metallized), Polyester Chips, Polyester Thick Film (Plain), Extrusion Coated film, Cast Polypropylene Film (Plain and Metallized), Silicone Coated Film, Blown PP Film, Offline Coated Film and Holographic Film.

Company registration number

0107547000729

Telephone

(66) 38 627 074 - 99

Facsimile

(66) 38 627 070

Website

<http://www.polyplexthailand.com>

Registered Capital

Baht 900,000,000

Common Shares

900,000,000 shares

Par Value

Baht 1.00 per share

Paid-up Capital

Baht 900,000,000

Number of Employees

1,488 including subsidiaries in Turkey, USA and Indonesia and 738 in Thailand

6.2 Subsidiaries in which the company holds more than 10% share – As at 31st March, 2021

| Company Name and Address | Business Type | Registered Capital (shares) | Issued & Paid Up - No. of shares held by the Company | % shareholding | Type of Shares |
|---|---|-----------------------------|--|----------------|----------------------|
| Polyplex (Singapore) Pte Ltd. 61, Club Street, Singapore-069436 | Investment Holding Company | 100,000 300,000 | 100,000 39,100 | 100% 100% | Common Preference |
| Polyplex Europa Polyester Film* Sanayi Ve Ticaret A.S. Karamahmet Mah. Avrupa Serbest Bolgesi, , 3 Sokak No. 4 Ergene , Tekirdag, TURKEY | Manufacturing Company | 1,500,000 | 1,500,000 | 100% | Common |
| Polyplex (Americas) Holding Inc. 251 Little Falls Drive, Wilmington, DE 19808 | Investment and Trading & Distribution Company | 10,000 | 9,324 | 100% | Common |
| Polyplex USA LLC*** 641 South Lawrence Street, Montgomery, AL 36004 | Manufacturing Company | **** | \$46,616,500 | 100% | Common |
| EcoBlue Limited 60/91, Moo 3 Siam Eastern Industrial Park, Marbyangporn Sub-district, Pluak | Manufacturing Company | 13,765,000 | 9,153,725 | 66.5% | Common |

| | | | | | |
|---|--------------------------------------|--------|--------|---------|--------|
| Daeng District, Rayong, THAILAND | | | | | |
| Polyplex Paketleme Çözümleri Sanayi ve Ticaret A.Ş. Muhittin Mahallesi, Çetin Emeç Bulvarı, Acun Sokak, Cemil Bayram Apt., No: 7/1 Çorlu/Tekirdağ, Turkey | Trading & Distribution Company | 20,000 | 20,000 | 100% | Common |
| Polyplex Europe B.V. Zuidplein 126WTC, Toren H, 1077 XV Amsterdam NETHERLANDS | Trading & Distribution Company | 30,000 | 2,000 | 100% | Common |
| PT. Polyplex Films Indonesia Jl. Modern Industri XVIII Blok AN No. 7, Nambo Udik, Cikande, Serang Regency, Banten, Indonesia -42186) | Manufacturing Company | 54,000 | 53,999 | 99.998% | Common |

* Indirect holding via PSPL

*** Indirect Holding via Polyplex America Holdings Inc.

**** There are no shares of Polyplex USA LLC. Capital contribution from PAH is termed as Members Unit and it is 100% by PAH.

Indirect holding via Polyplex Europa Polyester Film Sanayi Ve Ticaret Anonim Sirketi

6.3 Other references

(a) Registrar

Name Thailand Securities Depository Co., Ltd.
Address 93 Ratchadaphisek Road, Dindaeng, Bangkok 10400, Thailand
Telephone (662) 009-9000
Facsimile (662) 009-9991

(b) Trustee

N/A

(c) Auditing Firm

Name EY Office Limited
Address 33rd Floor, Lake Rajada Office Complex, 193/136-137 Rajadapisek road, Klongtoey, Bangkok 10110, Thailand
Telephone (662) 264-9090
Facsimile (662) 664 0789-90
Auditors* Mr. Chayapol Suppasertanon (CPA No. 3972) and/or Ms. Pimjai Manikajohnkit (CPA No. 4521) and/or Ms. Sumana Punpongsanon (CPA No. 5872) and /or Ms. Rosaporn Decharkom (CPA No. 5659) and/or Ms. Kirdsiri Kanjanaprakasit (CPA No. 6014)

* Auditors of the company for the FY 2020-21

(d) Legal Advisors

Name Linklaters (Thailand) Ltd
Address 20th Floor, Capital Tower,
All Seasons Place, 87/1 Wireless Road
Bangkok 10330, Thailand
Telephone (662) 305 8000
Facsimile (662) 305 8010
Contact person Mr. Pichitpon Eammongkolchai

Name Baker & McKenzie Ltd.

Address 990 Abdulrahim Place, 5th floor and 22nd -25th Floors, Rama IV Road, Silom, Bangkok,
Bangkok 10500, Thailand
Telephone (662) 636-2000
Facsimile (662) 636-2110
Contact person Mr. Theppachol Kosol

(e) Advisor or manager under management contract