

Part 1

Business Operation

1. Policy and Overview of Business Operations

1.1 Vision, Mission, Objective and Strategy of the Company

Vision

Indorama Ventures will be one of the leading global producers in the polyester space with our key focus on people and processes, thus making us one of the most admired companies in the world.

Mission

We will continuously upgrade the quality of our products and services through the involvement of stakeholders and by utilizing world-class processes to attain customer delight, thus becoming a preferred supplier. We will institutionalize people learning as a key factor for business growth.

Value /Objective

People First

We believe that people are our core strength, be it our employees, suppliers, customers, shareholders or other stakeholders. Their involvement and satisfaction are the key drivers for our success and growth.

Customer Delight

We believe we exist because of our customers. We focus our activities to achieve customer satisfaction and loyalty for a long lasting relationship.

Social Responsibility

We believe in being responsible and caring for society; maintaining as well as enhancing the environment around us.

Corporate Governance

We believe in transparency, accountability and ethics. We aim to achieve the highest degree of governance in accordance with best practice.

Group Strategy

Our objective is to strengthen our position as a market leader in the polyester value chain segment of intermediate petrochemicals in terms of scale, integration and differentiation as well as profitability and return on investment, supported by a focus on delivering long-term, superior shareholder value.

Indorama Ventures is a major global intermediate petrochemicals producer and one of the largest vertically integrated polyester value chain producers in the world, serving world-class customers in diversified end-use markets including food, beverages, personal and home care, health care,

automotive, textile and industrial uses. With more than 14,000 employees, 59 sites¹ in 20 countries across 4 continents, we supply our products to customers in nearly every part of the world.

It is estimated that in 2030, the world population will reach 8.4 billion people. This population growth surge will present global challenges, but we see these as opportunities for demand across all our markets. With the fast-paced evolution of technologies, innovation will also play a key role in chemical industry to create a market that is sufficiently sustainable to balance the environment, resources, climate, food and nutrition, and quality of life. As the fastest growing polymer in the world at a rate of 6.5% annually, polyester is the future.

Strategic Levers

Our strategy has been designed to help us continue achieving our objectives as follows:

- Focused Growth and Investment
- Vertical integration business model
- Geographical Diversification
- Product Diversification
- Sustainability
- Cost efficiency and operational excellence and
- Financial prudence

Focused Growth and Investment

Our growth and investment strategy is to build and enhance our existing market leadership position in each of the regions that we operate, as well as expand our geographical presence through organic growth and value-enhancing acquisitions in our industry.

We have an established a track record of implementing this strategy through Greenfield investments, brownfield expansions as well as via attractive acquisitions. Acquisitions are a main contributing factor for achieving our strategic targets. Indorama Ventures has strategic and financial acquisition criteria that are used to evaluate potential acquisition targets. We have strong track record of acquiring businesses and integrating them successfully into our organization.

Vertical Integration Business Model

We expect vertical integration, either through asset ownership, co-located sites with owned assets or virtual integration through co-located sites with key raw material suppliers, to enhance our operational and logistical efficiency, cost competitiveness and raw material security. Integration through owned assets also enhances our ability to insulate ourselves from sector cyclicalities and improve the quality, visibility, and predictability of earnings. Continuing with our strategy we have invested into ethylene

¹ As on Dec 2015, we are 59 sites (including cracker & India and excluding Spain 3 sites).

production through our 400kt pa Louisiana-based gas cracker which is under refurbishment after we acquired it in 2015. We expect a commercial restart by the end of 2017.

Geographical Diversification

Diversifying our customer mix, both geographically and through end-use applications (for some business segments), is an important aspect for our continued success in the polyester value chain. We plan to continue to enhance our marketing efforts to geographically diversify our customer base for the product lines. Today, the Group sells its products in more than 100 countries and, through its localized manufacturing facilities in various regions, is able to serve its customers from close and convenient locations.

Product Diversification

As a leading polyester value chain player, we intend to focus on the development of our research and development capabilities, either through our own facilities or through the establishment of key relationships with other industry players.

We work carefully alongside our customers to provide them with innovative ideas, expertise and support solutions for their specific requirement. Through this differentiation goal, we have significantly expanded our non-commodity or high value added (HVA) portfolio.

As part of its product diversification strategy, the Group aims to focus its expansion into industries with HVA products. Such industries include automotive, personal care, packing and specialities and industrial. In the automotive industry, the Group focuses on HVA products such as interior textiles, tires, airbags and seatbelts. In the personal care industry, the Group supplies high quality materials for end products such as flame retardant home textiles, diapers, wet wipes and other medical care products. The Group believes that these HVA businesses have strong market potential and high barriers to entry and will continue to leverage on its leading market positions in these HVA industries to further growth.

Sustainability

We believe that increase in our ability to use recycled materials and integrate such recycled materials within our standard processes will allow us to cater to changing customer objectives and proactively address environmental issues. In addition to recycling, we continue to promote our sustainability initiatives through the seven pillars of sustainability namely Waste Reduction, Reducing Resources, Renewable Energy, Recycling, Employee Development, Stakeholder Engagement and Local Community Development.

Operational Excellence

Maintaining a low cost philosophy by continued focus on production cost efficiency, scale and technology efficiency, raw material efficiency and investment efficiency will help us maintain our industry cost position in the future. In our volume-driven commodity businesses, such as our PET, PTA and some commodity polyester fiber businesses, cost competitiveness is a key driver which differentiates industry leaders from others.

We emphasize the importance of operational excellence to bring synergies and facilitate best practice knowledge transfer across the global IVL footprint. Key focus areas include benchmarking conversion costs, optimizing the workforce, wastage reduction and recovery, and environment health and safety issues.

Financial Prudence

We are committed to maintaining a continued emphasis on financial discipline and prudent investment decisions. We evaluate each potential investment on the basis of stand-alone profitability and efficiency, in addition to its potential synergistic contribution within the overall organization. We strive to maintain an efficient capital structure as we grow to provide us sufficient flexibility in our operations and sufficient liquidity in our cash flow position to meet our covenants at all times.

1.2 Changes and Important Developments

Background of the Company

Indorama Ventures Public Company Limited, formerly known as Beacon Global Limited, was established on February 21, 2003, and re-named Indorama Ventures Public Company Limited on March 19, 2009. Indorama Ventures Public Company Limited is a holding company with investments in companies operating in the intermediate petrochemicals industry in Thailand and globally. These companies are manufacturers and suppliers of three key business segments, namely PET resin, fibre and yarns and feedstock comprising PTA, MEG and various Ethylene Oxide (EO) derivatives.

Background of the Business

Beginning of Business in Thailand

We commenced business operations in 1994 with the incorporation of Indorama Holdings Ltd., which was the first worsted wool yarn producer in Thailand.

Entry into the PET Business

The Group's PET business segment comprises primarily the manufacture and sale of PET, a plastic polymer resin primarily used for beverage containers and food packaging, as well as for the packaging of pharmaceutical and household products as well as in industrial packaging applications. Moreover, the Group also manufactures High Value Added ("HVA") products such as packaging for oxygen-sensitive foods and beverages. In 1995, we entered the petrochemical industry focusing on the polyester value chain business with the establishment of a PET resin facility in Thailand. Since then, each successive growth and addition has been committed to the polyester value chain. We have grown significantly to become a major global polyester value chain producer with a presence in three key business segments, PET resin, polyester fibers and yarns and Feedstock comprising PTA, MEG and various EO derivatives.

Our growth in the PET business has been achieved through greenfield investments, strategic acquisitions, and brownfield expansions. From 1995 to 2002, we grew our PET business by engaging

in the downstream production of PET preforms, bottles and closures through a joint venture with Serm Suk Pcl, as well as through various expansion projects leading to increased capacities.

Entry into the Fiber and yarns Business

The Group's fiber and yarns business segment comprises the manufacture and sale of a variety of polyester and other types of fibre and yarns (which are also used in the Group's HVA products, particularly in personal care, automotive and industrial applications). Polyester is one of the most widely used synthetic fibres in the world and is a versatile material with wide-ranging textile and industrial applications. Our development in the polyester business has been achieved through the acquisition of distressed assets and organic growth through debottlenecking and asset optimization. We entered the polyester business in 1997 through the acquisition of Indo Poly, a polyester fiber plant in Thailand. In 2008, we acquired Tuntex Thailand, the largest polyester fiber producer in Thailand. Both of our polyester facilities were acquired as distressed assets at a discount to their replacement cost and have been successfully turned around. In 2009, Indo Poly transferred all of its assets to, and all of its liabilities were assumed by Tuntex Thailand, which was subsequently re-named Indorama Polyester Industries.

Backward Integration into Feedstock

The Group's feedstock business segment comprises the manufacture, production and sale of PTA, MEG, EO derivatives and by-products, which are raw materials used in the production of the Group's polyester products. The Group's feedstock business segment supports its PET and polyester business segments and forms part of its strategy to vertically integrate its operations.

Becoming Global Leader

Expansion of PET Business in US and Europe

We expanded our PET production footprint internationally into North America in 2003, with the acquisition of the StarPet facility, and into Europe in 2006, with the commencement of our Orion Global PET facility. The expansion made us the only PET resin producer with operations in the three largest consuming regions of Asia, Europe and North America. We have further expanded our manufacturing presence with the acquisition of two PET resin facilities from Eastman Chemical Company in Europe in 2008, and a Greenfield investment in the PET business with AlphaPet in North America in 2009. In the first half of 2011, IVL had completed major acquisitions of PET plants in China, Indonesia, Mexico, Poland and USA, leading the company to become the world's largest PET producer and the largest player in Europe. We also expanded our PET production footprint to Africa by implementing the new solid state polymerization SSP plant in Nigeria, which started commercial operations in 2012. In 2012, we also acquired the PET resin assets of PT Polypet Karyapersada which is located at Cilegon, Indonesia. In 2015, IVL has expanded its business into the Middle East following the acquisition of two PET plants in Turkey, one in the southern region and one in northern region of Turkey. In May 2015, the Group also acquired a stake in Bangkok Polyester Public Company Limited, a PET producer in Thailand which further consolidated PET production in the local

market. Recently, we acquired PET business of MICRO POLYPET Private Limited (MicroPet) and its two subsidiaries Sanchit Polymers Private Limited and Eternity Infrabuild Private Limited in India.

Expansion of Polyester Business Globally

In the first half of 2011, we expanded our polyester production footprint internationally into Indonesia and USA. Later in November 2011, we acquired the PET and Polyester fibers recycling businesses of Wellman International in Europe, which comprising of three production facilities in the Republic of Ireland, the Netherlands, and France. In January 2012, we acquired 100% of FiberVisions Holdings LLC, a global manufacturer of specialty mono and bi-component fibers based in Duluth, Georgia, USA.

Backward Integration into MEG

In 2012, we took another step upward to feedstock integration by the acquisition of Old World Industries I, Ltd. and Old World Transportation, Ltd. in the USA, which is the largest single EO/EG production facility in the U.S. Mono Ethylene Glycol (MEG) is one of our key feedstocks together with Purified Terephthalic Acid (PTA) in the manufacture of Polyethylene Terephthalate (PET) and Polyester Fibers and Yarns, both downstream products of IVL. Recently, the acquisition from Compañía Española de Petróleos ("CEPSA") which is PTA business in Canada and we also acquired 100% of Indorama Ventures Olefins Holding LLC, an old ethylene cracker in USA in September 2015 (under refurbishment).

Focus on Business Differentiation

Advancing towards High Value Added (HVA) Segments

As we grew to become an industry leader so did the importance of working more closely with our global customers in providing them with innovative and specialized solutions to meet their evolving needs. IVL has invested laterally into high value added products in PET, Polyester fibers and yarns, Polypropylene fibers and yarns, Nylon fibers and yarns and Purified Ethylene Oxide PEO. The expansion into HVA products has helped mitigate the weakness that our commodity sector has seen over the past two years allowing us to maintain healthy margins. We have made significant headway on the HVA front as a market leader and innovator of numerous products. Our specialty range has enhanced the brand value of IVL making the company a total global solutions provider. In 2015, our HVA portfolio represented 21% of production and 48% of consolidated core EBITDA. Core EBITDA is calculated as book EBITDA less inventory gains or losses less extraordinary items if any.

Recycling Business

Entering the recycling space in 2011 with the acquisition of Wellman International in Europe, at the beginning of 2014, we extended the know-how we obtained from Wellman International and commenced production of our recycled PET and fiber facility in Nakhon Pathom, Thailand. We expected to further leverage on Wellman's bottle to flake technology on a global scale. We have also

integrated three production sites in USA and Mexico with recycled PET and our objective is to continue to increase the use of recycled PET in our operations.

Success in Raising Capital

Our Initial Public Offering

Indorama Ventures Public Company Limited became a public company on September 25, 2009. As of December 31, 2014, the Company has registered capital of Bt 5,666,010,499 with paid-up capital of Baht 4,814,257,245 totaling 4,814,257,245 ordinary shares at par value of Bt 1 per share. The major shareholder of the Company is Indorama Resources Limited, owned 99.99% by Canopus International. (Canopus International is owned by Mr. Alope Lohia and his immediate family and Mr. Sri Prakash Lohia and his immediate family). Mr. Alope Lohia and his immediate family hold 49% with voting rights over 76% of total votes of Canopus International while Mr. Sri Prakash Lohia and his immediate family hold 51% with voting rights over 24.0% of total votes of Canopus International.

In January, 2010, Indorama Ventures Public Company Limited completed initial public offering of 400,000,000 ordinary shares at an offering price of Baht 10.20 per ordinary share. The total amount raised in cash from initial public offering of shares Baht 4,080 million. Simultaneously, the minority shareholders of Indorama Polymers Public Company Limited, subsidiary of IVL listed on the Stock Exchange of Thailand were offered under an exchange offer 582,727,137 ordinary shares of Indorama Ventures Public Company Limited. The ordinary shares of Indorama Ventures Public Company Limited were listed and commenced trading on the Stock Exchange of Thailand (the SET) on February 5, 2010. The ticker symbol is IVL. Indorama Ventures, during the course of 2010 became a member of the major indices, SET 50 Index, FTSE SET Large Cap Index and MSCI.

Rights Offering

In November, 2010, the Board of Directors passed a resolution to increase the authorized share capital from Baht 4,334,271,047 to Baht 4,815,856,719 and reserve the increase in authorized share capital of Baht 481,585,672 t for the exercise of Transferable Subscription Rights (TSR). The Board approved a rights issue of TSRs to existing shareholders at the ratio of one TSR for every nine existing ordinary shares held of IVL. The conversion ratio was 1:1. One TSR to one ordinary share and the exercise price of the TSR to ordinary shares is Baht 36 per ordinary share. On December 17, 2010, at the extraordinary general meeting of shareholders (EGM) the shareholders approved the issue, allocation and the terms and conditions of the TSR. On February 24, 2011 the subscription of TSRs was completed with 99.67% of TSRs being exercised into shares. Total new 479,986,198 shares started trading on the SET on March 3, 2011. The total amount raised in cash from this rights issue is Baht 17,280 million.

Tender Offer

Our PET business was listed on the SET as Indorama Polymers Public Company Limited IRP in 2005. On December 24, 2009 IVL offered to purchase up to 100% of IRP through a tender offer whereby IRP shareholders (other than IVL and its subsidiaries) were offered IVL shares in exchange

Changes and Important Developments

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Year	Event	Location	Business
	previously owned and operated by subsidiary of Eastman Chemical Company		
June 2008	Indorama Holdings Ltd. sold its shares representing 89.71% of Indo-Rama Chemicals (Thailand) Ltd., to an entity controlled by Mr. Alope Lohia and his immediate family	Thailand	Chemicals
August - October 2008	The Company acquired a 50.56% equity interest in TPT Petrochemicals PCL from various parties.	Thailand	PTA
September 2008	<ul style="list-style-type: none"> The Company acquired a 65.81% equity interest in Tuntex (Thailand) pursuant to Tuntex (Thailand)'s bankruptcy rehabilitation plan. 	Thailand	Polyester
	<ul style="list-style-type: none"> The Company acquired an additional 44.38% of the outstanding shares of Indo Poly (Thailand) Ltd. from Indorama International Finance PCL. As a result of the acquisition, the Company increased our direct and indirect shareholdings of Indo Poly (Thailand) Ltd. to 98.85%. 	Thailand	Polyester
September - October 2008	The Company acquired a 100% equity interest in Indorama Petrochem Ltd. from various parties	Thailand	PTA
October 2008	The Company acquired an additional 3.94% of the outstanding shares of Indorama Polymers PCL from DEG, thereby increasing our direct and indirect holdings of Indorama Polymers PCL to 69.29%.	Thailand	PET
December 2008	The Company acquired an additional 31.20% of the outstanding shares of Tuntex (Thailand) PCL (re-named Indorama Polyester Industries PCL)	Thailand	Polyester
July 2009	<ul style="list-style-type: none"> Indo Poly (Thailand) Ltd. transferred all of its assets and business to Indorama Polyester Industries PCL. (In August, 2009, Indo Poly (Thailand) Ltd. commenced action to liquidate itself, which consummated by August, 2011) 	Thailand	Polyester

Year	Event	Location	Business
	<ul style="list-style-type: none"> The Company acquired an additional 2.08% of the outstanding shares of TPT Petrochemicals PCL from International Finance PCL, thereby increasing our direct and indirect holdings of TPT Petrochemicals PCL to 52.64%. 	Thailand	PTA
August 2009	The Company and Indorama Holdings Ltd. jointly made a tender offer jointly to purchase all outstanding shares of Indorama Polyester Industries PCL that we did not own. After the tender offer, the Company and Indorama Holdings Ltd. increased our shareholdings of Indorama Polyester Industries PCL to 99.55% and delisted Indorama Polyester Industries PCL from the SET effective on November 9, 2009	Thailand	Polyester
October 2009	Startup of the AlphaPet PET plant in Decatur, Alabama	USA	PET
November 2009	TPT Utilities Co., Ltd. transferred all of its assets to TPT Petrochemicals PCL and subsequently completed the liquidation on October 29, 2011	Thailand	Others
December 2009	<ul style="list-style-type: none"> The Company acquired an additional 1.96% of the outstanding shares of TPT Petrochemicals PCL from International Finance PCL, thereby increasing our direct and indirect holdings of TPT Petrochemicals PCL to 54.60%. 	Thailand	PTA
December 2009	<ul style="list-style-type: none"> On December 24, 2009 Indorama Ventures Public Company Limited IVL announced a tender offer to purchase up to 100% of shares in Indorama Polymers Public Company Limited IRP with an intention to delist the shares of IRP from the Stock Exchange of Thailand "SET". 424,480,300 shares of IRP offered to be purchased through an exchange offer whereby IRP shareholder will receive IVL shares. 	Thailand	PET

Year	Event	Location	Business
February 2010	Listed and start trading of shares of IVL on the Stock Exchange of Thailand after completion of initial public offering of 400 million new shares for an initial offering price of Baht 10.20 and completion of exchange offer to minority shareholders of Indorama Polymers Public Company Limited IRP. Simultaneously delisting of IRP shares from the SET on the first day trading of IVL.	Thailand	Corporate
July 2010	Acquisition of 50% equity stake in a joint venture company UAB Ottana Polimeri Europe for the purpose of acquisition of an integrated PTA and PET plant in Ottana, Italy from Equipolymers. The joint venture partner is PCH Holdings which holds the balance 50% and is in the business of power and utilities.	Italy	PTA and PET
August 2010	<ul style="list-style-type: none"> Announced setting-up of a Greenfield project for PET polymers in Port Harcourt, Nigeria with an installed capacity of 75,000 tpa. Announced capacity expansion by 190,000 tpa for PET at existing site in Rotterdam, Netherlands by setting-up a new line of PET production. Europe is a net importer of PET resins and the expansion has helped to substitute imports and the demand growth. In addition, the PET expansion will result in full captive consumption of PTA produced at site and cost benefits from economies of scale. 	Nigeria	PET
		Netherland	PET
October 2010	Acquisition of additional shares in TPT Petrochemicals PCL from Tuntex Taiwan and other shareholders to increase equity stake from 54.60% to 99.96%	Thailand	PTA

Year	Event	Location	Business
November 2010	<ul style="list-style-type: none"> Announced approval of acquisition of business to make PET resins and Polyester polymers for fibers & yarns in Kaiping City, Guangdong Province, China, from Guangdong Shinda UHMWPE Company Limited. The total installed capacity of the plant is 406,000 tpa. The acquisition allows to expand the global footprint and to enter the high growth market in China. The acquisition was completed in January, 2011. 	China	PET
	<ul style="list-style-type: none"> Announced the signing of a definitive agreement with INVISTA S.a.r.l. to acquire their PET resins and Polyester staple business located in Spartanburg, South Carolina, USA and Queretaro, Mexico. The total installed capacity at Spartanburg site is 470,000 tpa and at Queretaro site is 535,000 tpa. The acquisition will allow to build on its expanding global platform making the company world's largest PET producer and give access to the new markets of Latin and Central America. The acquisitions completed in March, 2011. 	USA / Mexico	PET / Polyester
	<ul style="list-style-type: none"> Board of Directors Meeting No. 8/2010 dated 10 November 2010 approved the issuance of 481,585,672 free Transferable Subscription Rights (TSRs) to the company's existing shareholders and that the allocation ratio will be 9 existing shares to 1 new TSR. The conversion ratio of 1 TSR will entitle the TSR holder to purchase 1 newly issued share of the Company. The exercise price of TSR into ordinary shares to be determined prior to extraordinary general meeting of shareholders to approve the rights issue. 	Thailand	Corporate
December 2010	<ul style="list-style-type: none"> Announced the signing of a definitive agreement with SK Chemicals and SK Syntec to acquire their Polyester Filament yarns and PET resins business in Indonesia and PET resins business in Poland. The total installed capacity in Indonesia is 196,000 tpa and in Poland is 140,000 tpa. The acquisition will allow building on expanding global platform and reinforcing our focus on the polyester value chain. It gives access to the growth markets of Indonesia and Poland. 	Indonesia / Poland	Polyester / PET

Year	Event	Location	Business
December 2010	The acquisitions completed in March, 2011.		
	<ul style="list-style-type: none"> Board of Directors Meeting No. 9/2010 dated 16 December 2010 approved the exercise price at Baht 36 per share to subscribe for newly issued shares by each TSR holder 	Thailand	Corporate
	<ul style="list-style-type: none"> Extraordinary General Meeting of Shareholders No. 1/2011 approved the resolution for rights issue and allocate to existing shareholders through issue of TSRs, at the ratio of 9 existing shares to 1 TSR. 	Thailand	Corporate
March 2011	<ul style="list-style-type: none"> Listed and start trading of new 479,986,198 IVL shares on the Stock Exchange of Thailand after completion of the TSRs subscription at the exercise price of Baht 36 per share 	Thailand	Corporate
	<ul style="list-style-type: none"> Announced capacity expansion by 300,000 tpa for PET at existing site in Purwakarta, Indonesia. 	Indonesia	PET
April 2011	Announced a Brownfield expansion of PET polymers production with a capacity 220,000 tonnes per annum at the existing site in Poland.	Europe	PET
May 2011	Announced a Brownfield expansion of PTA production at the site of the existing plant in Rotterdam, with a new production line with an annual capacity of PTA of 250,000 tonnes per annum. This expansion is to enhance integration with a key raw material for production of PET polymers in Europe.	Europe	PTA
June 2011	The IVL Board approved the acquisition of a 50% stake in PT Polyprima Karyesreska (PT Polyprima), a PTA producer located in Cilegon, West Java, Indonesia and has an installed capacity of 465,000 Mts. per annum.	Indonesia	PTA
July 2011	Acquisition of 75% equity stake in a joint venture company Trevira Holdings GmbH for the purpose of acquisition of a 120,000 tonnes per annum polyester fiber plant in Germany and Poland. The acquisition of Trevira GmbH facilitated the entry of IVL into the branded specialist filament business and provide access to an outstanding	Germany/ Poland	Polyester

Year	Event	Location	Business
	research and development facility with accompanying intellectual property.		
August 2011	The Board approved investments in a new recycling plant in Thailand (now complete) and a high technology business in Polyester fibers and yarns in Thailand and Indonesia. These projects have higher value addition and margins to leverage on our existing assets.	Thailand/ Indonesia	Polyester
November 2011	The Board approved acquisition of 100% equity stake in the recycling business of Wellman International in Europe from WIT Beteiligungs GmbH and Wellman International Trading which is subsidiary of Aurelius AG. This business consists of three plants, a Polyester plant in Mullagh, Ireland with an installed capacity over 80,000 tonnes, a recycling plant in Spijk, Netherland with an installed capacity over 45,000 tonnes, and Verdun, France with an installed capacity of 28,000 tonnes	Ireland / France and Netherlands	Polyester
January 2012	The Board approved to acquire 100% of FiberVisions Holdings LLC, a global manufacturer of specialty mono and bi-component fibers based in Duluth, Georgia, USA. Its total global capacity was 221,000 tonnes per annum of specialties, with 117,000 tonnes per annum capacity in the United States of America, 90,000 tonnes per annum capacity in Europe and 14,000 tonnes per annum capacity in China.	USA	Polyester
February 2012	<ul style="list-style-type: none"> The Board of Directors approved the acquisition of 100% partnership interest in Old World Industries I Ltd., and Old World Transportation Ltd., (collectively called Old World), located in Clear Lake, Texas, USA. The largest single EO/EG production facility in the U.S. with Crude EO capacity of 435,000 tonnes per annum (which is equivalent to 550,000 tonnes per annum of equivalent MEG capacity). 	USA	EO/EG
	<ul style="list-style-type: none"> Acquisition of 51% Stake in a Packaging Business. Beacon Trading (UK) Limited has acquired 51% stake in Beverage Plastics (Holdings) Limited ("BPL") in Northern Ireland, United Kingdom. 	UK	Packaging

Year	Event	Location	Business
March 2012	100% acquisition of the PET resin assets of PT Polypet Karyapersada. The PET facility is located at Cilegon, Indonesia with a production capacity of 100,800 tonnes per annum.	Indonesia	PET
April 2012	Acquisition of 100% partnership interest of Old World Industries I, Ltd. and Old World Transportation, Ltd. in USA. Old World is in the business of production and sales of ethylene oxide EO and derivative products from ethylene oxide: purified ethylene oxide PEO, mono ethylene glycol MEG, diethylene glycol DEG, and triethylene glycol TEG.	USA	EO/EG
July 2012	Startup of Solid State Polymerization (SSP) Plant in Nigeria at a capacity of 84,000 tonnes per annum. The first PET investment of IVL in Africa and establishes its foothold in the estimated 450,000 tonnes PET market for the continent of Africa which currently has only one other PET producer.	Nigeria	PET
August 2012	Completion of the PET resin assets acquisition through its wholly owned subsidiary, PT. Indorama Polypet Indonesia with a capacity of 100,800 tonnes per annum at Cilegon, Indonesia	Indonesia	PET
November 2012	<ul style="list-style-type: none"> An announcement for the Greenfield expansion of PET production in North America by setting up a new plant with a capacity of 540,000 tonnes per year. With respect to the announced PET expansion at its Polish site, the Board decided to carry out a significant debottlenecking instead of setting up a new line as it would be more value accretive. This has now been completed. 	USA	PET
		Poland	PET
February 2013	<ul style="list-style-type: none"> 100% acquisition of a packaging company in Nigeria, Africa, a producer of PET Preforms. This acquisition will be a forward integration for PET segment which set up a PET bottle resin manufacturing unit in Nigeria and completed all the closing formalities and has taken charge of the plant effective April 3, 2013. 	Nigeria	Packaging

Year	Event	Location	Business
May 2013	<ul style="list-style-type: none"> The Board of Directors approved the formation of 50:50 Joint Venture Company with a global producer of non-woven fibers to set up a 14,500 tonnes per annum Bicomponent Fiber Plant at IPI in Rayong, Thailand. The plant started operation in Q2, 2015. 	Thailand	Polyester
	<ul style="list-style-type: none"> The Board also approved to expand the current Bicomponent Fiber capacity by 10,800 Mts. at the Covington, Georgia USA unit of wholly owned FiberVisions Manufacturing Company 	USA	Polyester
October 2013	<ul style="list-style-type: none"> Establishment of Indorama Ventures Packaging (Philippines) corporation to start a new packaging business in Philippines 	Philippines	Packaging
	<ul style="list-style-type: none"> The establishment of new subsidiaries: Indorama Ventures USA Holdings LP Indorama Ventures AlphaPet Holdings, Inc. Indorama Ventures Europe B.V. 	USA	Holding Company
	<p>The three holding companies have been formed as part of a restructuring exercise.</p>	USA Netherlands	
November 2013	An announcement for moth-balling of our PET plant at Indorama Polymers Workington Ltd., in the UK, as part of our business improvement plan and restructuring strategy of our European businesses.	UK	PET
December 2013	<p>The establishment of a new subsidiary:</p> <ul style="list-style-type: none"> Indorama Ventures Global Services Limited. Signing of a Joint Venture Agreement for Aromatics production of Abu Dhabi to develop the Tacaamol Aromatics Plant on Madeenat ChemaWEyaat Al Gharbia's (MCAG) site in the Western Region of Abu Dhabi. The plant is expected to have an annual capacity of about 1.4 Mts. of Paraxylene and 0.5 Mts. of Benzene. 	Thailand Abu Dhabi	Corporate PX

Year	Event	Location	Business
February 2014	<ul style="list-style-type: none"> Acquisition of PHP Fibers GmbH and its subsidiaries (PHP), where IVL holds 80% of PHP while the remaining 20% is held by Toyobo Co., Ltd., a leading Japanese manufacturer of high function products, including among others, automotive products. Acquisition completed on 30 April 2014. 	Germany USA China	Air bags & Tire cord yarns
	<ul style="list-style-type: none"> The establishment of a new indirect subsidiary company in the Republic of Ghana 	Republic of Ghana	Packaging
March 2014	The establishment of a new joint venture company in Thailand, 50% by Indorama Holdings Ltd., a subsidiary company of IVL and 50% by JNC Fibers Corporation, Japan	Thailand	Polyester
June 2014	Acquisition of 100% of Artenius TurkPET A.S. (Artenius) in Adana, Turkey. Artenius is a PET producer in Turkey with a capacity of 130,000 tonnes per annum. Acquisition completed on 2 June 2014.	Turkey	PET
October 2014	Reorganization of the Company's Subsidiaries in The Netherlands and the USA to improve operational and fiscal efficiencies, business workflows and to pool common resources, some of the businesses of its subsidiaries.	Netherlands & USA	Corporate
November 2014	The establishment of two new joint venture companies: <ul style="list-style-type: none"> Indorama Ventures EcoMex, S. de R. L de C.V. Indorama Ventures EcoMex Services, S. de R. L de C.V. 	Mexico	PET
December 2014	Announced the signing of a share purchase agreement to acquire 100% equity stake in Performance Fibers Asia (PF Asia) PF Asia is a leading producer of premium polyester tire cord fabric in Asia. PF Asia plants are located in Kaiping City, Guangdong province of China, with an annual capacity of 41,000 MT of Polyester Tire Cord Fabric and 48,000 MT of Polyester Tire Cord Yarn. It has completed all the closing formalities and has taken charge of the plants in China effective April 01, 2015.	China	Polyester

Year	Event	Location	Business
January 2015	The Establishment of a New Indirect Subsidiary Company in Myanmar. Indorama Ventures Packaging (Myanmar) Limited investment 100% by a wholly owned subsidiary, IVL Singapore Pte. Ltd.	Myanmar	Packaging
March 2015	<ul style="list-style-type: none"> Completed the Acquisition of 100% stake in Polyplex Resins San. ve Tic. A.S, Turkey. Polyplex Turkey owns a newly set-up greenfield PET plant with a planned capacity of 252,000 tons per annum located at Corlu, close to Istanbul, Turkey. 	Turkey	PET
	<ul style="list-style-type: none"> Acquisition of 100% stake in PTA business of CEPSCA Chimie Montréal s.e.c in Montreal, Canada. CEPSCA is the largest and the only PTA manufacturing facility in Canada with an annual capacity of 600,000 Mts. and one of the three merchant PTA producers in North America. 	Canada	PTA
May 2015	The completion of the acquisition of 94.91% stake in PET business in Thailand, BPC is a producer of PET polymers in Rayong, Thailand, with an annual capacity of 105,000 tons. Also acquired further shares from the minority shareholders, thereby taking its total shareholding in Bangkok Polyester PCL to 98.97%	Thailand	PET
June 2015	The Acquisition of CEPSCA Chimie Montréal s.e.c in Montreal, Canada has completed all the closing formalities and has taken charge of the plant in Canada effective June 01, 2015. IVL will rename the above Companies as Indorama Ventures Gestion Inc, Indorama Ventures Northern Investments and Indorama Ventures PTA Montreal respectively.	Canada	PTA
September 2015	The establishment of three new subsidiaries: <ul style="list-style-type: none"> Indorama Ventures Dutch Investments B.V. Indorama Ventures Investments USA LLC Indorama Ventures Olefins LLC 	The Netherlands USA USA	Holding Company Ethylene Cracker

Year	Event	Location	Business
November 2015	<ul style="list-style-type: none"> Acquisition of 100% CEPESA Business in Spain. CEPESA Spain is Europe's largest producer of IPA (Isophthalic acid) and is the 2nd largest producer in the World. With 220,000 tons of IPA capacity, 175,000 tons of PET, 325,000 tons of PTA business, the acquisition is expected to be completed within the first half of 2016. The Establishment of a New Indirect Subsidiary Company in USA 	Spain	IPA, PET & PTA
	Indorama Ventures Olefins Holding LLC	USA	Holding Company
December 2015	Completed the acquisition of 100% stake in the Polyethylene Terephthalate (PET) business of MICRO POLYPET Private Limited (MicroPet) and its two subsidiaries Sanchit Polymers Private Ltd and Eternity Infrabuild Private Ltd in India effective on 23 December 2015. MicroPet has an annual PET capacity of 216,000 Mts. and is situated in Panipat district, in the Northern Indian State of Haryana and has a virtual integration with a major refinery for its PTA and MEG feedstocks.	India	PET

In August, 2014, the Board of Directors of IVL passed a resolution to increase share capital and issue warrants through a rights issue to existing shareholders. Further, the Extraordinary General Meeting of shareholders No. 1/2014 held on 6 August 2014 considered and approved the rights issue of warrants to existing shareholders, terms of the warrants, increase in registered share capital and allocation of share capital for exercise of warrants. The key terms of issued warrants are;

Warrant	IVL W1	IVL W2
Term	3 Years	4 Years
Exercise Ratio	1 unit of warrant for 1 share	1 unit of warrant for 1 share
Exercise Price	THB 36 per share	THB 43 per share
Issue Date	25 August 2014	25 August 2014
Expiry Date	24 August 2017, 3 years from issue date	24 August 2018, 4 years from issue date
Warrant Issue Price	Baht 0 (at no cost)	Baht 0 (at no cost)

Warrant	IVL W1	IVL W2
Allocation	To existing shareholders at the ratio of 10 IVL existing shares to 1 IVL-W1	To existing shareholders at the ratio of 13 IVL existing shares to 1 IVL-W2
Exercise Period	Last business day of each month for every 3 months starting from 31 October 2014. The last exercise date is the 3 rd anniversary from issue date.	Last business day of each month for every 3 months starting from 31 October 2017. The last exercise date is the 4 th anniversary from issue date.

As of August 31, 2014, the Company has increased its registered share capital from Baht 4,815,856,719 to Baht 5,666,010,449 ordinary shares with par value of Baht 1 per share. The increase in registered share capital by Baht 850,153,730 is reserved for the exercise of warrants IVL-W1 and IVL-W2 into ordinary shares of IVL. As per terms of the issue if all warrants are exercised by the warrant holders into ordinary shares that IVL will raise on exercise of all IVL-W1 up to Baht 17.3 billion by September, 2017 and on exercise of all IVL-W2 up to Baht 15.9 billion by September, 2018.

In October 2014, the Company has successfully completed the offering of Subordinated Perpetual Debentures No. 1/2557 for Baht 15 Billion. The Perpetual Debentures carry a fixed rate coupon of 7.0% per annum for the first five years and after every 5 years coupon will be adjusted as per stated terms and conditions. The issuance has strengthened the capital structure, improved the liquidity and flexibility of the company. The Company rating was reaffirmed A+ stable in October, 2015 and the perpetual debentures have an issue rating of A- from the TRIS Rating Company Limited TRIS.

In October 2015, the Company has successfully issued its first overseas Senior Unsecured Bond to the amount of SGD 195 Million to institutional investors in Singapore through its wholly-owned subsidiary, IVL Singapore PTE Ltd. The Bond has been rated AA (Stable) by Standard and Poor's and has a tenor of 10 years with an interest rate of 3.73 percent per annum. It is guaranteed by Credit Guarantee & Investment Facility (CGIF), a trust fund of the Asian Development Bank and listed on the SGX-ST.

3. The Company's Shareholding Structure

IVL is a holding company conducting our business through investment in companies engaging in manufacture of integrated petrochemical products both domestic and international. Our headquarters are located in Bangkok. These companies are manufacturers and suppliers of polyethylene terephthalate (PET), polyester fiber and yarn, purified terephthalic acid ("PTA"), Mono Ethanol Glycols (MEG), wool worsted yarns, polypropylene fibers and yarns, nylon fibers and yarns and others.

Our core businesses are classified in business segments as follows:

PET

Name	Country	Type of business	% of Shareholding
Indorama Polymers PCL	Thailand	Manufacture of SSP Chips and PET	99.26
Asia Pet (Thailand) Ltd.	Thailand	Manufacture of Amorphous Chips	99.99
StarPet Inc.	USA	Manufacture of PET (bottle-grade resin chips)	100.00
UAB Orion Global Pet	Lithuania	Manufacture of PET (bottle-grade resin chips)	100.00
Indorama Polymers Workington Ltd.	United Kingdom	Manufacture of PET (bottle-grade resin chips)	100.00
Indorama Polymers Rotterdam B.V.	The Netherlands	Manufacture of PET (bottle-grade resin chips)	100.00
AlphaPet Inc.	USA	Manufacture of PET (bottle-grade resin chips)	100.00
Indorama PET (Nigeria) Ltd.	Nigeria	Manufacture of PET (bottle-grade resin chips)	90.00
Guangdong IVL PET Polymer Company Limited	China	Manufacture of PET (bottle-grade resin chips)	100.00
Auriga Polymers Inc.	USA	Manufacture of PET (bottle-grade resin chips) and Polyester Fibers	100.00
Petform (Thailand) Ltd.	Thailand	Manufacture of PET Preforms, Closures and Blown Bottles	60.00
Indorama Ventures Poland Sp.z.o.o.	Poland	Manufacture of bottle-grade resin chips	100.00

Name	Country	Type of business	% of Shareholding
Indorama Ventures Polymers Mexico, S. de R.L. de C.V.	Mexico	Manufacture of PET (bottle-grade resin chips)	100.00
PT Indorama Polypet Indonesia	Indonesia	Manufacture of PET	100.00
Beverage Plastics Limited	United Kingdom	Manufacture of PET preforms bottles and closures	51.00
Aurus Packaging Limited (Renamed to Indorama Ventures Packaging (Nigeria) Limited)	Nigeria	Manufacture of PET preforms bottles and closures	100.00
Indorama Ventures Packaging (Philippines)	Philippines	Manufacture of PET preforms bottles and closures	99.99
Indorama Ventures Packaging (Ghana) Limited	Republic of Ghana	Manufacture of PET preforms bottles and closures	100.00
Indorama Ventures Adana PET Sanayi Anonim Şirketi	Turkey	Manufacture of bottle-grade resin chips	100.00
Indorama Ventures EcoMex, S. de R. L de C.V.	Mexico	Manufacture of PET Recycled Flake	51.00
Indorama Ventures Packaging (Myanmar) Limited	Myanmar	Manufacture of bottle-grade resin chips	100.00
Indorama Ventures Corlu PET Sanayi A.Ş.	Turkey	Manufacture of PET	100.00
Bangkok Polyester Public Company Limited (BPC)	Thailand	Manufacture of PET	98.97
MICRO POLYPET Private Limited (MicroPet)	India	Manufacture of PET	100.00

Fibers and Yarns

Name	Country	Type of business	% of Shareholding
Indorama Polyester Industries PCL	Thailand	Manufacture of polyester fibers and yarns	99.97
PT Indorama Ventures Indonesia	Indonesia	Manufacture of polyester filament and yarns and PET	99.99
PT Indorama Polyester Industries Indonesia	Indonesia	Manufacture of Polyester Fibers and Yarns	99.97
PT Indorama Polychem Indonesia	Indonesia	Manufacture of Polyester Chips, Fibers and Yarns	100.00
Wellman International Limited	Ireland	Manufacture of Polyester Fibers and other Recycling Products	100.00
Wellman France Recyclage SAS	France	Manufacture of Flakes and other Recycling Products	100.00
FiberVisions Manufacturing Company	USA	Manufacture of polypropylene fibers and yarns	100.00
FiberVisions Products, Inc.	USA	Manufacture of polypropylene fibers and yarns	100.00
FiberVisions A/S	Denmark	Manufacture of polypropylene fibers and yarns	100.00
FiberVisions (China) Textile Products Limited	China	Manufacture of polypropylene fibers and yarns	100.00
Trevira GmbH	Germany	Manufacture of Polyester Fibers and Yarns	75.00
Indorama Holdings Ltd.	Thailand	Manufacture of Worsted Wool Yarns	99.81
PHP Fibers GmbH	Germany	Manufacture of Nylon fibers and yarns for Airbags & Tire Cords	80.00
ES Fiber Visions (Thailand) Company Limited	Thailand	Manufacture of Bicomponent Fibers	50.00

Name	Country	Type of business	% of Shareholding
Performance Fibers Asia	China	Manufacture of polyester tire cord fabric	100.00

Feedstock

Name	Country	Type of business	% of Shareholding
Indorama Petrochem Ltd.	Thailand	Manufacture of PTA	99.99
TPT Petrochemicals PCL	Thailand	Manufacture of PTA	99.97
Indorama Holdings Rotterdam B.V.	The Netherlands	Manufacture of PTA	100.00
Indorama Ventures (Oxide & Glycols) LLC	USA	Manufacture of EO and EG	100.00
CEPSA Chimie Montréal s.e.c	Canada	Manufacture of PTA	100.00
Indorama Ventures Olefins LLC	USA	Manufacture of Ethylene Cracker	76.00

2. Nature of Business

Revenue Structure

The details of our sales revenue structure according to our consolidated financial statements for the year ended December 31, 2013 to 2015 are as follows:

Details	Year Ended December 31,					
	2013		2014		2015	
	(Bt million)	%	(Bt million)	%	(Bt million)	%
Revenue breakdown by Business Segments						
PET	146,418	64	145,121	59	131,834	56
Fibers and yarns	47,968	21	70,274	29	73,219	31
Feedstock	70,391	31	64,477	26	59,960	26
Elimination	(35,657)	(16)	(35,965)	(14)	(30,315)	(13)
Consolidated revenue from sale of goods	229,120	100	243,907	100	234,698	100

Source: The Company's consolidated financial statements

Our sales are diversified into the major regional markets, which are serviced from manufacturing units inside the region and through exports, mainly from manufacturing units in Asia. Our sales by geographic segment for the year ended December 31, 2013 to 2015 are as follows:

Details	Year Ended December 31,					
	2013		2014		2015	
	(Bt million)	%	(Bt million)	%	(Bt million)	%
Revenue breakdown by Geographic Segments*						
Thailand	16,933	7	15,053	6	14,783	6
North America	87,515	38	84,361	35	83,023	36
Europe	58,840	26	70,657	29	70,624	30
Rest of the World	65,833	29	73,836	30	66,268	28
Consolidated revenue from sale of goods	229,120	100	243,907	100	234,698	100

*Geographical revenues breakup on customers' location

Source: The Company's consolidated financial statements

Business Overview

Indorama Ventures (SET: IVL) is a major global intermediate and downstream petrochemicals producer with 59 sites in 20 countries across four continents (as of December 31, 2015) providing value-added and differentiated products and services to the fast-moving consumer goods industry. Our management team has in-depth experience in the polyester and high value-added chains.

High value-added are various products, that we make, which are premium products and normally have higher margins over the pure staple commodity products.

IVL has integrated businesses that are aligned to create a sustainable value proposition. IVL's customer orientation, global reach and scale allow us to benchmark ourselves globally to enhance operational excellence.

The new factor that will provide a broader portfolio of products for customers is in innovation, high value-added products and recycling, where the bottom line can be grown and increase the sustainability of the business. Investment in research and development will provide customers with new products and services that will enhance our offering and complete the loop as a one-stop center for global requirements. In year 2011-15, we have acquired businesses manufacturing high value-added products (HVA). Our principal acquisitions in HVA products are:

Trevira, which is a manufacturer of polyester fibers and yarns for applications in apparels, home furnishings, automotive and industrial applications and whose principal operating units are based in Germany.

FiberVisions, a manufacturer of high value-added polypropylene fibers and yarns for hygiene applications. The principal operating unit is based in the USA.

PHP Fibers, a manufacturer of nylon 6.6 polyamide fibers and yarns for application in the automotive industry, commonly used for manufacturing air bags and tire cords. The principal operating unit is in Germany.

Performance Fibers, a manufacturer of premium polyester tire fabrics in China, Asia, which is the largest and fastest-growing market for polyester tire cord fabric.

Business Description

The term Polyester can be broken into poly, meaning many, and ester, a basic organic chemical compound. The principle ingredients used in the manufacture of polyester are purified terephthalate acid, derived from Paraxylene, a part of the aromatics chain leading backwards into crude oil, and monoethylene glycol, part of the olefins chain that leads backward to crude oil or natural gas. The chemical process that produces the finished polyester is called polymerization. Indorama Ventures Public Company Limited (IVL) is one of the world's foremost-integrated producers in the Polyester industry.

IVL is a bridge connecting the oil and gas industry with fast moving consumer goods (FMCG) producers. There is less volatility than up-stream manufacturers, with constant demand from downstream customers, as they are mostly FMCG companies.

The industry norm is to have long-term volume contracts with customers, normally of one to three years; however, the pricing is adjusted monthly, to compensate for upstream volatility according to an agreed mechanism. The system indicates IVL's ability to pass through price (not contractually) movements to the end customers.

This mechanism implies that crude oil and its derivative raw materials used to produce PET and Polyester fibers have low impact on the business except in the case that there is a sharp rise or fall in

the price of such materials within a short period, entailing an adjustment in the cost of inventory to reflect market prices. This mark-to-market effect is termed inventory gains or inventory losses.

Raw material prices have a modest effect on the price of a bottle of carbonated soft drinks. This is because the actual cost of the PET in a two-liter bottle is around 4% of the total. In addition, Polyester fiber is around 5% of the cost of a sports shirt, therefore fluctuations in price have a minor or insignificant effect on customers. Due to the undulating nature of the prices having little impact on the business, the Company instead maintains a spread, the difference between the price of the raw materials and the selling price. However, there could be volatilities in the spread when there is oversupply in the industry in the short term.

PET Business

PET Business Overview

Our PET business is part of our core polyester value chain business and comprised 49% of production volumes in 2015. Beginning with one manufacturing plant, we have grown today to operate across the four major consuming continents of North America, Europe, Africa and Asia. Our PET business comprises the production and sale of PET resin, a plastic polymer resin primarily used for beverage containers and food packaging, for packaging of pharmaceutical and household products and in industrial packaging applications. We also produce PET packaging in the form of preforms, bottles and closures through various production facilities including Petform, a joint venture with Serm Suk Pcl. In Thailand, Beverage Plastics in Ireland, Aurus Packaging in Nigeria, Indorama Ventures Packaging (Philippines) in Philippines etc.

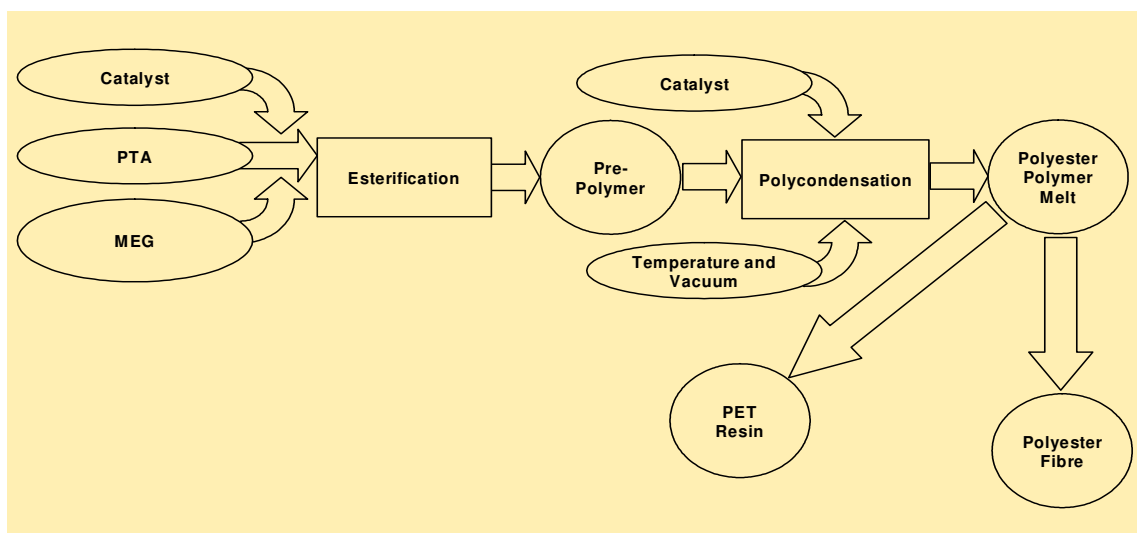
As of December 31, 2015, we are the largest PET resin producer in the world with an aggregate installed production capacity of 4.4 million tonnes per annum of PET.

PET Products

We produce a variety of PET resins, including hot-fill, high and low intrinsic viscosity, quick heat and general grade, to serve a variety of markets including carbonated soft drinks, bottled water, juices, other beverages, food and other applications.

PET Production Process

PET resin comes from polyester polymer melt. The chart below summarizes the polyester production process.



The melt is converted into PET resin, either through a conventional solid-state process or through a newer technology melt-to-resin process. Under the conventional solid-state polycondensation process, the melt is extruded in strands, which are cooled down quickly by water. After solidification, the strands are cut into small pellets, dried and further crystallized by heating in a reactor under specific temperature and pressure conditions under a nitrogen flow. Under the melt-to-resin process, the polycondensation process is completed during the melt phase, resulting in the formation of pellets without going through the solidification process. We have plants that uses either or of these technologies.

PET Production Facilities

The following table describes our PET production facilities as of December 31, 2015.

Production Facility	Location	Installed Capacity ⁽¹⁾ (‘000 tons per annum)
AlphaPet PET Facility	Decatur, Alabama, U.S.A.	445
StarPet PET Facility	Asheboro, North Carolina, U.S.A.	266
Orion Global PET Facility	Klaipeda, Lithuania	274
IRP Rotterdam PET Facility	Rotterdam, the Netherlands	426
IRP/AsiaPet PET Facilities ⁽²⁾	Lopburi, Thailand	181
Indorama Polyester Industries PET Resin Line	Map Ta Phut, Thailand	108
GIVL PET Facility	Kaiping, China	548
Arteva PET Facility	Queretaro, Mexico	484
Auriga Facility - PET Resin Line	Spartanburg, South Carolina, U.S.A.	323

Production Facility	Location	Installed Capacity ⁽¹⁾ (‘000 tons per annum)
IVL Wloclawek PET Facility	Wloclawek, Poland	230
IVL Tangerang Facility - PET Resin Line	Tangerang, Indonesia	91
Port Harcourt SSP Facility	Nigeria	80
PT Indorama Polypet Facility - PET Resin Line	Cilegon, Indonesia	102
Adana, Turket	Adana, Turkey	132
Polyplex, PET Facility	Istanbul, Turkey	252
Indorama Ventures Polymers (Rayong)	Rayong, Thailand	105
Micropet	India	216
Packaging Facility	Various site	110
Total		4,372

⁽¹⁾ We have re-rated plant capacity to reflect the de-bottlenecking projects taken-up by various plants from time-to-time. In addition, the capacity doesn't include two non-operating PET sites: IRP Workington and Ottana Polimeri S.R.L.

⁽²⁾ This comprises the Indorama Polymers PCL PET facility and the AsiaPet Amorphous PET facility, each with a capacity of 178 Kt per annum and together forming a single PET resin line. The AsiaPet (Thailand) Ltd. Amorphous PET facility produces amorphous PET, used in the Indorama Polymers PCL PET facility to produce PET resin.

PET Sales and Marketing

We have PET sales and marketing teams in each of the regions in which we operate. Our sales and marketing head office in Thailand oversees their work. We classify our main customers for PET into four main groups:

- Well-known brand name beverage companies with their own conversion plants to produce PET bottles;
- Well-known brand name beverage companies who sub-contract the production of PET bottle to converters using PET resin purchased by such beverage companies
- PET resin traders; and
- PET converters who use PET resin to manufacture preforms, bottles, sheets and other PET packaging to service the needs of end users.

We sell our PET resin primarily through direct sales to end-use customers. A small proportion of our sales take place through agents and traders.

We are the world's largest PET resin producer and the only PET resin producer with production facilities in Asia, North America, Europe and Africa, which allows us to market our PET resin products globally to customers for their world-wide PET requirements. Our marketing activities include regular meetings with our customers to understand their requirements and maintain good relationships as well as providing customer service.

PET Competition

We are the largest PET producer globally: No.1 in Europe, No.2 in North America and No.4 in Asia. Our principal competitors in the European market are Equipolymers and Neo Group. Our principal competitors in the North American market are Alpek (DAK Americas LLC) and the M&G Group. Our competitors in the Thai market are Thai Shinkong Industry Corp. and Thai PET Resin Co., Ltd. Although PET technology is available through commercial licenses, we believe the capital investment required to achieve profitability through economies of scale may inhibit new entrants to the market.

Fibers and Yarns Business***Polyester Fibers and Yarns***

Polyester was discovered in the 1940s and has been manufactured on an industrial scale since 1947. Polyester fibers are the first choice for apparel and are used in trousers, skirts, dresses, suits, jackets, blouses and outdoor clothing.

Blends with cotton and virgin wool are very popular. They are often referred to as the "classical blend".

Polyester fibers are formed from a chemical reaction between an acid and alcohol. In this reaction, two or more molecules combine to make a large molecule whose structure repeats throughout its length. Polyester fibers can form very long molecules that are very stable and strong.

Polyester fibers are produced by the melt spinning process. Raw materials are heated to a spinning mass, which is then pressed through spinnerets (similar to a sieve). Manufacturing techniques have developed to the point where they can produce round, oval or angular profiles, making them firm to the touch.

Polyester fibers are particularly resistant to light and weather, and can withstand climatic effects, being as light or as fine as weather demands. Polyester fibers have good moisture transport and dry quickly.

Major Uses of Polyester Fibers and Yarns

Polyester fibers are most commonly used for apparel, from sportswear to high fashion; home textiles, such as bedding and carpets; non-woven materials like surgical gowns; technical textiles like filters and automotive uses like carpets and insulation.

With the acquisition of Performance Fibers in China in 2015, IVL can now produce polyester yarns and Polyester Fabrics that are used in tires and supplies to various world-class tire companies.

Olefin Fibers and Yarns

The fiber forming substance is any long-chain synthetic polymer composed of at least 85% by weight of ethylene, propylene, or other olefin unit in these manufactured fibers. Italy began production of olefin fibers in 1957. U.S. production of olefin fibers began in 1960. The first commercial producer of olefin fibers in the United States was Hercules, Inc. (now FiberVisions, which we own).

Usually polymer granules are fed into an extruder that melts the polymer that is then pumped through a spinneret (think of a sieve). The filaments are cooled in an air stream before being wound on a package or collected in cans. Because the fibers are difficult to dye, colored pigments are often added to the polymer stream before extrusion to produce colored fibers.

Propylene, when polymerized, creates a crystalline polypropylene polymer. The fibers made with these polymers can be used in furnishing, apparel and industrial products. Olefin fibers provide warmth without much weight. Olefin is abrasion, stain, sunlight, fire and chemical resistant. It does not dye well, but has the advantage of being colorfast since pigments are added inside the fibers. Since Olefin fibers have a low melting point, they can be thermally bonded. One of the most important properties of Olefin fibers is its strength, which can be tailored for different applications. It keeps its strength in wet or dry conditions. Olefin fibers can be multi- or monofilament and staple, tow, or film yarns. The cross section is usually round, but can be modified for different end uses.

Major Uses of Polyolefin Fibers

Uses include nonwoven fabrics for diapers, feminine care and adult incontinence products (as top sheet, back sheet, leg cuffs, elastic waistband, transfer layers); in spun laced nonwoven products like medical disposable textiles, filtration products or in air-laid nonwoven structures as absorbent cores, and wet wipes.

In terms of apparel, olefin fibers are used in sports and active wear, socks, thermal underwear and as lining fabrics, while in the home they are often used by itself or in blends for indoor and outdoor carpets, carpet tiles and carpet backing. The fiber can also be used in upholstery, draperies, wall coverings, slipcovers, and floor coverings as well as heat-sealable paper like tea- and coffee-bags.

In heavier applications, the fibers are often used for interior fabrics, sun visors, arm rests, door and side panels, trunk and parcel shelves, while olefin creates carpets; ropes, geo-textiles that are in contact with the soil, filter fabrics, bagging and concrete reinforcement.

Bicomponent Fibers

Bicomponent fibers may be defined as "extruding two polymers from the same spinneret with both polymers contained within the same filament." A close relative is "co-spun fiber," which is a group of

filaments of different polymers, but with a single component per filament spun from the same spinneret. The term "conjugate fibers" is often used, particularly in Asia, as synonymous with bicomponent fibers. The main objective of producing bicomponent fibers is to exploit capabilities not existing in either polymer alone. Bicomponent fibers are commonly classified by their fiber cross-section structures as side-by-side, sheath-core, islands-in-the-sea and citrus fibers or segmented-pie cross-section types. Bicomponent fibers made of polyethylene sheath and polypropylene core are important fibers for the nonwoven fabric market.

How Worsted Wool is made

The name Worsted derives from Worstead, a village in the English county of Norfolk. Worsted wool fabric is typically used in the making of tailored garments such as suits, as opposed to woolen wool, which is used for knitted items such as sweaters. The essential feature of worsted yarn is straight, parallel fibers. Worsteds differ from woolens, in that the natural crimp of the wool fiber is removed in the process of spinning the yarn. IVL produces wool from Merino sheep. These sheep are sought after for their coats, which are said to produce the finest, softest wool available.

While many forms of wool require that the fiber undergo a spinning process, the production of worsted wool follows a slightly different path. Rather than going directly into a spinning process, the wool is first combed in a carding process. This is where wool fibers are separated and prepared for spinning to remove any short and brittle fibers from the wool, leaving only the longer strands of the fiber to undergo the spinning process, producing a smooth yarn that possesses a higher durability.

Owing to the strength of worsted wool, the fibers can be woven into a finer material that is more crease resistant than many other fabric choices making it an ideal choice for garments that need to hold their shape. Worsted wool has been a popular choice for men's trousers, pleated skirts for women, and both men's suits and sport jackets. Because worsted wool is so durable, it wears very well and drapes easily, making it an ideal fabric for all sorts of garments.

Major Uses of Worsted Wool Yarns

Worsted Wool produced by Indorama Ventures is used in high-end suiting for both men and women.

Nylon 6.6 tire cord, yarns and major usage

With the acquisition of PHP Fibers GmbH and its subsidiaries ("PHP"), IVL holds 80% of PHP while the remaining 20% is held by Toyobo Co., Ltd., a leading Japanese manufacturer of high function products, including among others, automotive products.

PHP is a globally recognized manufacturer of branded high-tenacity polyamide nylon 6.6 yarns and is one of the leading suppliers in Europe for the automotive safety supply chain. PHP Group production facilities are located in USA, Europe and China.

This acquisition of PHP significantly enhances the Company's High Value Add (HVA) product portfolio with the addition of high performance automotive and industrial products.

These yarns are extensively used in automotive sector in air bags and tire cords.

Fibers and Yarns Production Facilities

The following table describes our fibers and yarns production facilities as of December 31, 2015.

Production Facility	Location	Installed Capacity⁽¹⁾ (‘000 tons per annum)
Indorama Polyester Industries Nakhon Pathom Facility	Nakhon Pathom, Thailand	118
Indorama Polyester Industries Map Ta Phut Facility	Map Ta Phut, Thailand	190
Indorama Holdings Facility – Wool line	Lopburi, Thailand	6
Auriga Facility – Polyester line	Spartanburg, South Carolina, USA	66
IVL Karawang Polyester Facility	Karawang, Indonesia	36
IVL Tangerang Facility – Polyester line	Tangerang, Indonesia	71
Trevira – Polyester line ⁽²⁾	Bobingen and Guben, Germany	120
Arteva PET Facility	Queretaro, Mexico	58
Wellman International – Recycled Polyester	Mullagh, Ireland, Spijk, Netherlands and Verdun, France	163
FiberVisions – Polyolefin line	Duluth, Athens and Covington, USA, Varde, Denmark and Suzhou, China	204
Indorama Polyester Industries Map Ta Phut Facility - BICO	Map Ta Phut, Thailand	16
Indorama Polyester Industries Nakhon Pathom Facility – Recycled Polyester	Nakhon Pathom, Thailand	29
Polychem Facility (CP4) – Polyester line	Purwakarta, Indonesia	322
PHP Fibers – Nylon 6.6 tire cord and yarns	Germany, USA and JV in China	84
Performance Fibers	Guangdong, China	41
Total		1,523

⁽¹⁾ The capacity of plants has been re-rated to reflect the de-bottlenecking projects taken-up by the various plants from time-to-time.

⁽²⁾ 75% JV by acquisition of facility on July 1, 2011. From October 1, 2013, Trevira has been fully consolidated due to a revision in terms with the JV partner.

Fibers and Yarns Sales and Marketing

Our main customers for fibers and yarns products are companies producing textiles for apparel, fast moving consumer goods companies in hygiene, companies producing home textiles and industrial companies such as automotive companies and packaging film producers.

Fibers and Yarns Competition

Competition in the global fibers and yarns industry is characterized by the presence of large diversified industrial companies, as well as a large number of relatively small niche players with a capacity of sometimes even less than 10,000 tonnes per annum. Larger fibers and yarns producers usually focus on high-volume standard fibers for sale in domestic markets where the level of competition is high and predominantly based on price and, to a lesser degree, on consistency of product quality. The larger polyester producers of commodity polyester products continue to focus on increasing their production of non-commodity products. They comprise approximately half of our total output. China dominates the polyester production and has many companies involved in this business. There are few companies in Korea, China, Turkey and in the western markets where they make specialized fibers and yarns, which competes with our specialized fibers, and yarns.

Feedstock Business

Feedstock for Indorama Ventures means PTA, MEG, EO derivatives and by-products, which are raw materials for producing our major products.

In full, PTA is Purified Terephthalic Acid and it is an organic compound. This colorless powder is a commodity chemical, used principally in the manufacture of PET, which is generally used to make clothing and plastic bottles.

PTA Business

Terephthalic acid is an organic compound and a colorless solid. It is a commodity chemical, used principally as a precursor to the polyester PET, used to make clothing and plastic bottles.

IVL entered the PTA business in 2008 with the strategy of developing raw material integration to ensure an uninterrupted supply of raw materials and capture better margins in the Polyester value chain. This provides IVL with a cost competitive edge to the PET and Fiber businesses. The Company's PTA assets are strategically co-located with downstream facilities in Thailand, Indonesia, Canada and the Netherlands with a capacity of 2.3 million tonnes per annum (including our Indonesia joint ventures).

How PTA is made

Terephthalic acid is the result of the oxidation of Paraxylene (PX). The commercial process utilizes acetic acid as a solvent together with a catalyst composed of cobalt and manganese salts, with a bromide promoter.

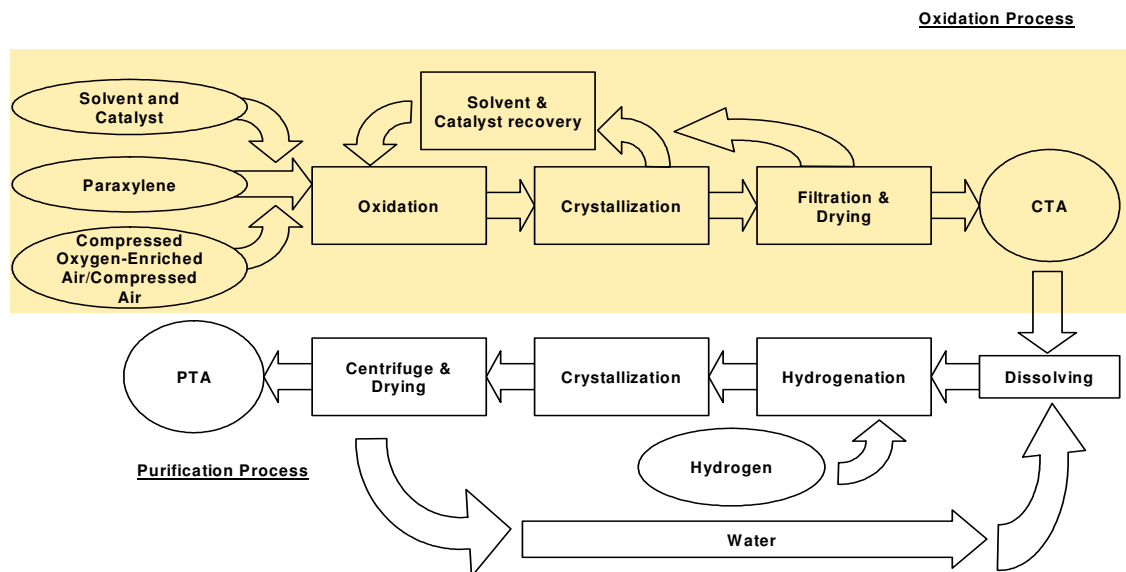
A radical chain reaction occurs in a series of intermediates, starting with the oxidation of Paraxylene and finally to terephthalic acid (TA). It is then further purified to make PTA.

Use of PTA

PTA is a major feedstock of PET and polyester fibers and yarns, however a few small niche uses occur, such as in the analgesic drug oxycodone, which occasionally comes as a terephthalate salt.

PTA Production Process

The chart below summarizes the PTA production process.



PTA Sales and Marketing

Our main customers for PTA are PET resin and polyester producers. Our downstream PET and polyester production facilities use a significant proportion of our PTA production. We sell the remaining PTA that we do not use within the group to third party customers. In 2013, 2014 and 2015, 62.4%, 63.7% and 53.8% respectively, of our PTA were sold to the group and 37.6% 36.3% and 46.2% respectively, of our PTA were sold to third party customers.

Our PTA sales and marketing head office is located in Thailand and is responsible for sales and marketing activities relating to our customers worldwide. Our marketing activities include regular meetings with our customers to understand their requirements and maintain good relationships as well as providing customer service.

PTA Competition

As PTA is a commodity product, competition relies mainly on price and, to a lesser extent on lead times to product delivery.

Manufacturers of PTA can be classified between merchant producers and integrated PTA producers. Merchant producers manufacture and supply PTA to third parties, whereas integrated PTA producers manufacture and use PTA for their own captive consumption partially or fully. We are an integrated PTA producer. Currently in China there are many new PTA plants using the latest technology and having lower conversion costs than previously. However, there are other competitors in Europe and North America.

MEG Business

The other major feedstock produced by Indorama Ventures is monoethylene glycol (MEG) which is an organic compound. In its pure form, it is an odorless, colorless, syrupy, sweet-tasting liquid.

How MEG is made

Monoethylene glycol comes from ethylene via the intermediate ethylene oxide. Ethylene oxide reacts with water to produce ethylene glycol.

Uses of MEG

The major end uses of ethylene glycol are in polyester industry and in antifreeze for automobile radiators. Besides automobiles, MEG is a medium in liquid-cooled computers, chilled water air-conditioning systems and geothermal heating/cooling systems.

Purified Ethylene Oxide Business

Purified Ethylene Oxide comes from the direct oxidation of ethylene in the presence of a silver catalyst.

Uses of PEO

Purified Ethylene Oxide is used in the production of detergents, thickeners, solvents, plastics and various organic chemicals such as ethylene glycol, ethanolamines, simple and complex glycols, polyglycol ethers and other compounds. Pure ethylene oxide is a disinfectant that is widely used in hospitals and the medical equipment industry to replace steam in the sterilization of heat-sensitive tools and equipment, such as disposable plastic syringes.

PEO derivatives are used to manufacture various products such as soaps, detergents, brake fluids, weed killer and urethane foam.

Ethylene oxide is one of the most important raw materials used in the large-scale chemical production. Most ethylene oxide is used for synthesis of ethylene glycols, including diethylene glycol and triethylene glycol that accounts for up to 75% of global consumption. Other important products include ethylene glycol ethers, ethanolamines and ethoxylates. Among glycols, ethylene glycol is used as antifreeze, in the production of polyester and PET, liquid coolants and solvents. Polyethylene glycols are used in perfumes, cosmetics, pharmaceuticals, lubricants, paint thinners and plasticizers. Ethylene glycol ethers are part of brake fluids, detergents, solvents, lacquers and paints. Other products of ethylene oxide include ethanolamines, used in the manufacture of soap and detergents

and for purification of natural gas. Ethoxylates are reaction products of ethylene oxide with higher alcohols, acids or amines. They are used in the manufacture of detergents, surfactants, emulsifiers and dispersants.

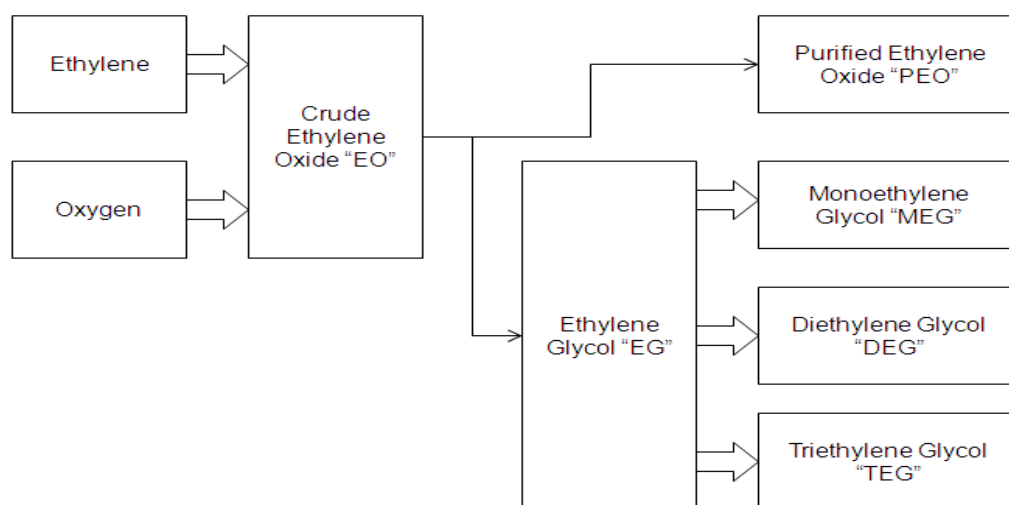
TEG and DEG Business

Diethylene Glycol (DEG) is a by-product made together with MEG through the processing of EO. DEG has broad applications and is used to manufacture polyester polyols, unsaturated polyester resins, buffet heaters, morpholine production, paints and coatings, plasticizers, liquid laundry detergent, cement grinding and as an intermediate for polyethylene glycol.

Triethylene Glycol (TEG) is a by-product made by processing EO. TEG is mainly used for natural gas dehydration. The other applications are air sterilizers, resin for windshield plate glass and as an intermediate for polyethylene glycol. It is used as a plasticizer for vinyl. It is also used in air sanitizer products. When aerosolized it acts as a disinfectant. It is an additive for hydraulic fluids and brake fluids and is used as a base for "smoke machine" fluid in the entertainment industry.

Oxide and Glycol Process

The chart below summarizes the EO/EG production process.



Oxide and Glycol Sales and Marketing

With IVL's acquisition of its first EO/EG plant in April 2012 has 100% of its sales in the North America. Sales and Marketing is overseen by the sales and marketing head office in Thailand and implemented by the US sales team. Sales of our products are broken into two main categories:

Purified Ethylene Oxide (PEO) is sold exclusively into the US merchant market. The product is used as a chemical intermediate in the manufacturing of PEO derivatives such as ethanolamines, polyols, ethers and surfactants which are used in the manufacture agricultural chemicals, rigid and flexible foams, cleaning solvents and the personal care and beauty care industries respectively.

There are currently many pure merchant consumers of PEO in the US and IVOG supplies many of these companies, a testimonial to our reliability and service excellence. IVOG has an approximate 30% of the US merchant market share of PEO sales.

In addition to PEO, the plant manufactures the glycol products, Monoethylene Glycol (MEG), Diethylene Glycol (DEG) and Triethylene Glycol (TEG) through a distillation process. The majority of the yield is MEG.

- IVLs' acquisition of the Clear Lake, TX plant was accompanied with a supply MEG agreement with the former owner who consumes MEG for the engine coolant market principally in the US.
- IVL's US Polyester and PET plants consume MEG as a raw material for their products. IVL's US plants have consumptive MEG capacity in excess of the Clear Lake, Texas plants production capabilities, allowing IVL the option to merchant MEG in the US and global markets or consume the MEG on a captive basis.

In 2014 and 2015, 21.7% and 31.0% respectively of our EO/EG were sold to the group and 78.3% and 69.0% respectively of our EO/EG were sold to third party customers.

Oxide and Glycol Competition

PEO Competition – Due to the hazardous nature of PEO, there are no imports or exports of PEO as a product. PEO derivatives are open to import-export. IVOG competes in the US PEO with global competitors, all of which primarily produce PEO to support internal production of PEO derivatives and sell the balance of their capacity to the merchant market. Unlike all of our competitors, IVOG does not produce any PEO derivatives, which competes with our merchant customers businesses.

Glycols Competition – The global market for MEG is highly competitive, involving a large number of producers located throughout the world. MEG is easy to transport and store. The US Shale Gas revolution has given the US producers advantaged ethylene as a feedstock material ensuring the US as a low cost region of MEG production. IVL's integration into MEG adds value to US PET and Polyester margin chain. The largest competitors in North America include Shell Chemical, MEGlobal, Equistar and Sabic, along with PEMEX in Mexico. The US is a largely mature consumer of MEG with demand growth driven by new PET capacity and an opportunistic export arbitrage platform based on the advantaged North American ethylene costs associated with shale gas.

US Olefin Cracker

IVL has acquired a controlling interest of 76% in a mothballed ethylene cracker located in Lake Charles, Louisiana, USA through its subsidiary, Indorama Ventures Olefins LLC. The project was original identified by the SP Lohia Group, owned by our Chairman. The SP Lohia Group has in the past successfully re-started a mothballed cracker in Nigeria. As Indorama Ventures is a major polyester producer in the USA with a previously well-publicized intention to build a greenfield cracker, and with good financial strength, it was prudent for the two parties to work together on this project.

This acquisition is a more cost effective proposition as the project cost plus the refurbishment cost is approximately \$400 million vis-à-vis a greenfield project would have cost over two and a half times more. By joining with the SP Lohia Group we have been able to receive their commitment to the project and their expertise in running such a plant. The cracker can use ethane or propane as a feedstock and will mainly produce ethylene and some propylene. The ethane comes from shale gas. This will be sold to our own Ethylene Oxide/Ethylene Glycol plant in Texas at the market price. North America has transparent pricing for these products. The Company will benefit as the project enhances integration, providing feedstock security. There are synergies across Indorama Ventures North America portfolio as we are a major player there.

Feedstock Production Facilities

The following table sets out the key figures for our feedstock production facilities as of December 31, 2015 (excluding US Gas Cracker as it is under restart process)

Production Facility	Location	Nameplate Capacity⁽¹⁾ (‘000 tons per annum)
Indorama Petrochem PTA Facility	Rayong, Thailand	775
TPT Petrochemicals PTA Facility ⁽²⁾	Map Ta Phut, Thailand	602
IRH Rotterdam PTA Facility	Rotterdam, the Netherlands	380
Polyprima ⁽³⁾	Indonesia	500
Cepsa PTA Facility	Montreal, Canada	600
Indorama ventures (Oxide and Glycol) EO/EG Facility	Texas, USA	550
Total		3,407

⁽¹⁾ The capacity of plants has been re-rated to reflect the de-bottlenecking projects taken-up by the various plants from time-to-time. However, the capacity does not include non-operating site: Ottana Polimeri S.R.L.

⁽²⁾ We own a 99.97% equity interest in TPT Petrochemicals

⁽³⁾ Joint Venture investment is 43% equity interest with IVL

Competitive Strengths

1. Industry Focus and Leading Market Positions

We are a leading global producer in the polyester value chain within the broader petrochemical stream and additionally offer various types of high value-added products. We have maintained a keen focus and commitment to the industry in which we participate. Since 2003, we have significantly sharpened our focus in the polyester value chain through various expansions and acquisitions, the disposal of a non-core chemical business, and by expanding our business portfolio and geographical presence. As a result, we have become a leading vertically integrated global manufacturer of polyester polymers.

We believe that we are one of the few petrochemical companies that focus more on the polyester value chain, compared with other important players who are organized in large divisions that, in turn, consist of many different businesses. We believe that the key advantages of being a focused player are:

- Better understanding of the key success factors for individual businesses;
- More efficient allocation of capital and human talent;
- Ability to make quick management and commercial decisions; and
- Reduction in overheads needed to manage a diverse set of operations and addition of more value due to the similarity of the businesses.

2. Global Sales and Manufacturing Footprint

We are a global company with 59 manufacturing facilities located in 20 countries (as of December 31 2015) and across four continents, namely Asia, North America, Europe, and Africa, supplying products to customers worldwide. We are the only PET resin producer with operations in Asia, North America, Europe and Africa.

We believe that our global presence enables us to:

- Capture volume growth;
- Widen our customer base;
- Increase our cost competitiveness by being closer to our customers and suppliers;
- Lower our logistical costs;
- Benefit from averting existing trade barriers; and
- Reduce the exposure to cyclicalities and dependence on any single market.

3. Integrated Business Model

Our polyester value chain business is integrated into MEG, PTA, PET resin, polyester fiber and yarn and in packaging at certain location. A significant proportion of our feedstock (PTA+MEG) requirements (49.6% in 2013, 53.2% in 2014 and 48.5% in 2015) for our downstream PET and polyester production facilities are sourced internally.

We believe that the key benefits from integration include:

- Security of feedstock supply for our PET and polyester operations during periods of market fluctuations, specifically in periods of high raw materials demand;
- Captive consumption for our PTA and MEG operations, resulting in the ability to maintain higher capacity utilization as compared to merchant suppliers, even in periods of increased industry supplies
- Cost savings through PTA and PET and polyester site co-locations due to reduction of logistics costs and the sharing of common services; and

- Cost savings through integration due to reduction of fixed costs associated with raw materials procurement, sales and marketing and administrative functions.

We believe that integration enhances our operating efficiency, competitiveness and responsiveness to customers and market developments, as well as allowing stability in volumes and profits.

4. **Strong Cost Position**

We have maintained an emphasis on cost and efficiency. We believe that we hold a strong cost position in the businesses and regions in which we operate. We believe this is achieved through the following:

We believe we have some of the **largest scale capacity and most efficient** production facilities in the PET resin, Polyester Fibers, HVA products, MEG and PTA industries. We operate the largest single-line PET resin plant in Europe at our Orion Global PET facility in Lithuania, which has a capacity of 274,000 tonnes per annum. We also operate the largest single-line PTA plant in Thailand at our Indorama Petrochem PTA facility, which has a capacity of 771,000 tonnes per annum. We have constructed a new PET resin plant in North America at our AlphaPet PET facility in Alabama, U.S.A., with a capacity of 432,000 tonnes per annum. The AlphaPet PET facility is one of the largest in this region and employs the latest generation PET technology. These large-scale, modern and efficient facilities enable us to achieve a competitive cost position in the industries where economies of scale are critical. In the polyester business, where we focus on the production of niche products, we have invested in fit-for-purpose, flexible assets that are ideally suited for the production of niche and value-added products. The gradual startup in 2014 of our flagship project PT. Indorama Polychem Indonesia (formerly called CP4) for polyester fibers and yarns in Indonesia has provided us more volumes, earnings and cash flows. The operations at the plant have stabilized and 2015 saw financial benefits from this site.

We believe we have **best-in-class manufacturing efficiency**, achieved through running our facilities at high capacity utilization rates with optimal levels of labor, low overhead costs as well as energy and utilities cost savings. We have enhanced our cost competitiveness by building efficient utility plants using coal or gas as feedstock at most of our facilities and, where possible, we sell excess electricity and steam to third parties to reduce our own cost of electricity and steam. We benchmark all of our facilities against each other in order to optimize performance.

We are able to achieve **advantageous raw material costs** due to our large purchasing volumes, proximity to raw material feedstock and long-term relationships with key suppliers. We benefit from significant buying advantage for PX, PTA and MEG. We are amongst the world's largest buyers of PX and MEG. By being a global producer of polyester polymers, we have an advantage over regional producers of being able to manage MEG procurement on a pan-global basis. We are one of the largest merchant PTA buyers in the U.S. market, which provides enhanced buying advantage. Our plants are well positioned, mainly through co-location or close proximity, for advantaged raw material logistics and infrastructure support.

We have been able to achieve a **low capital cost structure** by constructing large-scale plants and acquiring assets at a discount to their replacement cost. Our efficiency in buying businesses is in our financial statements as a "gain on bargain purchase." This arises if we buy any business below its fair value. An independent appraiser normally calculates fair value of an acquisition.

5. Experienced Management Team with a Proven Track Record of Successfully Growing and Managing the Business

Our management team is composed of highly experienced managers with longstanding leadership experience, as well as significant and diversified industry knowledge.

Our management team has a proven track record of successfully implementing capital-intensive projects to increase our production capacities as well as selecting attractive acquisition opportunities and successfully improving the operations and profitability of acquired businesses.

Raw Materials and Suppliers

The two principal raw materials used in the production of the polyester value chain are PX and MEG. However, we also purchase Ethylene to produce MEG in the USA. We also buy PTA at certain locations. Other additives and utilities that we require in our business include acetic acid, isophthalic acid, various catalysts and gases such as nitrogen and hydrogen, but in lower quantities compared to our major raw materials. We purchase these consumables from various suppliers typically under short-term contracts of one year.

PTA

We have vertically integrated a portion of our PET business and Polyester fibers and yarns to our PTA business to provide reliable and cost effective PTA supplies. Our IRP Rotterdam PET facility and our Indorama Polyester Industries Polyester fibers and yarns line and PET resin line are co-located with our IRH Rotterdam PTA facility and TPT Petrochemicals PTA facility, respectively, while our AlphaPet PET facility is co-located with the PTA production facility of BP with whom we have a long-term offtake agreements to purchase PTA. Our Poland PET facility is located next door to PKN Orlen PTA facility. Our Asia Pet/Indorama Polymers PET plant in Lopburi, Thailand and Indorama Polyester Industries, Nakhon Pathom facility, Thailand source PTA from Indorama Petrochem and TPT Petrochem plants in Thailand. In Indonesia, our PET and Polyester fibers and yarns facility source PTA from our joint venture unit PT. Polyprima.

MEG

We purchase MEG, a downstream derivative of ethylene, from large global producers through short- and medium-term contracts at a price linked to benchmark published prices. In order to obtain the best prices for the MEG that we purchase, we source for, and negotiate the prices of, these raw materials through an informal arrangement with the S.P. Lohia Group (which is controlled by our Chairman and his immediate family) and the O.P. Lohia Group (which is controlled by the brother of both our Chairman and our Chief Executive Officer). However, purchase contracts are entered into by the relevant subsidiary company according to such subsidiary's volume and specification

requirements. By being a global producer of polyester polymers, we are able to procure MEG on a pan-global basis. Major MEG suppliers are Sabic, MEGlobal, Shell, PTT Group etc.

Paraxylene

We are amongst the world's largest buyers of PX. We purchase our PX under long-term contracts with PTTGC, PTT Public Company Limited, Exxon Chemical Thailand Limited etc, typically through long-term contracts. Our Thai PTA plants are able to take delivery of PX either from Thai or international suppliers via their own Map Ta Phut pipeline, which runs directly from the Thai Tank Terminal (our raw material storage services) to their tank yard. In Rotterdam, Netherlands, Europe our PTA facility has its own jetty and Paraxylene arrives by barge. Our Canada PTA plant is sourcing PX from a nearby supplier.

Ethylene

We are the fourth largest non-integrated buyer of Ethylene in the USA and purchase Ethylene from various suppliers in USA like Exxon, ChevronPhillips Chemical, Ineos etc., and with access to other Ethylene pipelines.

Effects of operations to environment

Please refer to 10. Corporate Social Responsibilities (CSR) section

3. Indorama Ventures Potential Risk Factors

Risk monitoring and control mechanism at IVL:

IVL has an Enterprise Risk Management framework that uses both top-down and bottom-up approaches to identify and manage business risks at all levels at both corporate and subsidiary levels across the globe to identify and mitigate business risks at every level. This is led by the Board, the Committee and senior management. This covers the assessment and review of internal and external risks, including global risks and factors that may affect the company's operations. Respective business heads, who are also members of the Sustainability and Risk Management Committee, as well as Members of Business Core Committees, closely monitor key business risks and ensure adequate preventive measures and controls for mitigation. All significant risks identified are analyzed, recorded and reported. The risk management report together with the risk mitigation plan is reviewed quarterly by the various committees at the business segment and plant level. In addition, the Sustainability and Risk Management Committee reviews a sensitivity analysis of the business plan, Greenfield and M&A projects to ensure sustainability, especially the environmental and social impacts to business operations.

3.1 Emerging Business Risks

3.1.1 Climate Change Risk

Climate change has potentially serious implications for business. The impact of climate change is expected to become more severe in the future. This risk could be regulatory, reputational, physical or changes in consumer preferences.

IVL has studied the likely impact. As and when the risk threatens to exceed threshold limits under internal guidelines, they are escalated to a business level committee consisting of executive directors of the Board.

The management has nominated one senior staff member at corporate level who will report to all concerned, including the Sustainability and Risk management Committee (SRMC) which in turn reports to the Board.

IVL has 59 production sites in 20 countries (as of December 2015). Depending upon the scope of changes in regulations post COP 21 agreement execution, IVL could be directly and/or indirectly affected either through increased carbon taxes or cap and trade schemes.

Risk may arise from extreme weather; reputation related to consumer demands for more climate-friendly products with reduced GHG intensity.

IVL can mitigate by continuing to communicate that the GHG intensity of our products is not significant when compared to companies in other chemical, fertilizer and other highly polluting industries.

Changing consumer preferences for climate-friendly products and technologies may impact us. We will continue to lower our carbon footprint to mitigate such demand.

Risk Mitigation Actions:

IVL has increased its focus on efficiency improvement, adherence to GHG reduction goals and targets as defined and disclosed. Other risk mitigation measures taken include:

- Our membership of Project Mainstream, a global initiative to accelerate innovation and help develop a circular economy
- Lightweighting of bottles
- Increased focus on renewable (solar and wind) energy
- Strategic move to be in close proximity to our customers to avoid supply chain risks
- Post-consumer waste recycling
- Usage of bio-based raw materials
- Lifecycle assessment and analysis of our products to embrace emission reduction measures, including innovation to produce more environmentally-friendly products and process

3.1.2 Increasing Business and International Operations

IVL is a global business and our expansion into new countries, businesses and products exposes us to a variety of risks, many of them beyond our control, like political, social or economic developments and changes in legislation, regulations and standards.

Risk Mitigating Actions:

- IVL makes a sensitivity analysis, risk analysis, due diligence of every business opportunity before a decision is being taken by the Board and management to benefit from opportunities and reduce the risk of instability.
- We continuously and closely monitor the political, economic and legislative conditions of each country threats from antinational and terrorist activities, safety and security employees and asset of the company and business opportunity.
- All significant investments, and the countries and industry segments in which IVL conducts its business, are evaluated before a decision is taken.

3.2 Other Business Risks

3.2.1 We operate in highly competitive industries and the actions of our competitors could impact our profitability and market share.

The industries in which we operate are characterized by price and other competition. The majority of our products are commodities – necessities - with a growing number of high value-added (HVA) products, and it may be difficult to have product differentiation and pass on increased costs to customers. Other competitive factors include product quality, specifications or product performance, continuity and reliability of supplies to customers and sustaining long-term customer relationships. We compete with large multinational companies in each of our business segments as well as with numerous regional and/or specialized producers in the markets for our polyester fiber products. Margin pressure could arise from, for instance, limited demand growth and overcapacity in a market. An example is China, whose domestic demand for PET resin or PTA may fall short of current capacity increases; then there are price reductions by competitors, new industry players, industry consolidation and the ability of competitors to capitalize on their economies of scale and create excess product supply

3.2.2 How continuous demand growth of the PTA, the Oxide and Glycols, the PET resin, the Polyester fibers and yarns and the Non-Polyester fibers and yarns industries could result in overcapacity

Our operating results reflect the historical cyclical pattern of the PTA, MEG, PET resin, Polyester fibers and yarns and Non-Polyester fibers and yarns industries, with periodic overcapacity and resulting pressure on pricing. This cyclicity arises, in part, from investments made at the top of the cycle (when margins are high and funds are available), thereby shifting the balance of supply to demand as new capacity comes on-stream in large quantities. The industry has, from time to time, experienced periods of overcapacity, such as when new plants become operational, and there can be no assurance that this will not recur in future. In the absence of sufficient economic growth to generate increased demand, or the closure of facilities to mitigate the effect, new capacity causes a period of regional or global overcapacity often leading to downward margin pressure.

3.2.3 Our international presence naturally exposes us to various challenges such as macro-economic, political, legal and regulatory risks.

International operations present challenges related to operating under different business cultures and languages. We may experience increased difficulty in the collection of accounts receivable, including longer collection periods; we may have to comply with inconsistent, or unexpected changes in, foreign laws and regulatory requirements which could negatively impact our operations and ability to manage our global financial resources; export controls or other regulatory restrictions could prevent us from shipping our products into and from some markets or promoting local sourcing of raw materials, could have an adverse effect on our production costs; changes in currency control, tax regulation and international tax treaties could impact the financial performance of our international operations and their contributions to our overall financial performance. Similarly, events beyond our control, such as political instability or social unrest, could impact consumer demand in general and increase volatility in the price of raw materials and other costs. Similarly, the imposition of duty on imports or anti-dumping duties in a particular country might affect our margins adversely.

3.2.4 We may not be able to protect our intellectual property rights and should we infringe the intellectual property rights of others, it could impact us adversely.

Fibers and Yarns (both Polyester and non-Polyester) and PET resins operate in industries where our competitors have substantial intellectual property portfolios. The continued success of this business depends on our ability not only to protect our own technologies and trade secrets, but also to develop and sell new products that do not infringe upon existing patents or threaten existing customer relationships. Intellectual property litigation is very costly and could result in substantial expense and diversions of our resources, both of which could adversely affect our businesses and financial condition and results. In addition, there may be no effective legal recourse against infringement of our intellectual property by third parties, whether due to limitations on enforcement of rights in foreign jurisdictions or as a result of other factors. An unfavorable outcome in any intellectual property litigation could have a materially adverse effect on financial conditions and results of operations in Fibers and Yarns business and to a lesser extent in PET resins.

3.2.5 Our business could be affected by an information technology system failure.

We rely on information technology (IT) systems to handle our businesses. Any system failure due to computer viruses, internal or external security breaches, power interruptions, hardware failures, fire, natural disasters, human error, or other causes could disrupt our operations and prevent us from being able to process transactions with our customers, operate our manufacturing facilities, prepare internal MIS reports and properly report those transactions in a timely manner. A significant, protracted IT system failure may result in a materially adverse effect on our financial condition, operational results, or cash flows.

3.2.6 Crude oil price volatility affects the valuation of inventory and the capital employed distorting the reported performance to that extent.

Volatility of crude oil prices bring the risk of marked down or up of inventories that we carry at any point and can adversely or positively impact our reported performances. Similarly our reported capital employed might also be affected as working capital requirement changes with the movement in our products or raw material prices which normally follow the crude oil prices trend.

Similarly, Natural Gas price volatility affects the cash conversion costs in many countries where we operate. Volatility of natural gas prices can adversely affect or benefit if it goes up or down as we consume natural gas for our energy uses at various locations.

Risk Mitigating Actions:

The losses or gains due to mark to market of our inventories are largely mitigated by cash inflow respectively in our net working capital as the requirement in value terms goes down or up as the prices goes down or up

3.3 Production Risk

3.3.1 Our operations are dependent on the availability and cost of raw materials

Our operations are fundamentally dependent on the availability and cost of our primary raw materials: PTA (limited to merchant purchases primarily in USA) and MEG for our PET and Polyester fiber and yarn businesses, PX for our PTA business, Ethylene for our Oxide and Glycols business, other type of raw materials for our Non-Polyester fibers and yarns business and recyclable bottles and flakes for our recycling business. PTA and MEG are oil and natural gas derivatives, which are usually manufactured by large petrochemical companies. Thus, the costs of production of PTA, MEG, PET, Polyester and Non-Polyester are affected by the international and domestic prices of crude oil, natural gas and refined petroleum products. Our financial condition and operational results are thereby influenced by market prices for crude oil, natural gas and refined petroleum products, which are then subject to the forces of international, regional and domestic supply and demand, as well as other factors beyond our control.

The markets and prices for petroleum products may be influenced by aggregate demand for such products (which can fluctuate with changes in economic conditions and cycles, seasons and weather patterns), the level of domestic and regional production, the prices and availability of imports, the prices and availability of substitute fuels and the extent and nature of governmental regulation and taxation. Worldwide supply conditions and the price levels of crude oil may also be significantly influenced by international groupings, which control the production of a significant portion of the worldwide supply of crude oil, and by political developments. In addition, factors such as domestic and foreign government regulations, weather conditions, and competition from other energy sources also have an impact on crude oil and petroleum product prices.

Any increase in raw materials costs without a corresponding increase in selling price would reduce our operating results. Our ability to pass on raw materials price increases is dependent upon market conditions and our relative cost position compared to competitors. There may be periods of time in which we may not be able to fully recover increases in the cost of raw materials due to contractual arrangements or to weaknesses in demand for, or oversupply of, our products.

However, the Company intends to acquire its main raw materials, PX and Ethylene, mainly by entering into supply agreements with suppliers. The Company is able to secure volume and purchases at monthly market prices for ability to pass through prices to customers. In year 2014 the Company entered into supply agreements for partial PX and Ethylene requirements. The balance was purchased from spot markets at market prices.

3.3.2 Increases in our costs could adversely affect our operating results

We are unable to influence commodity prices directly, thus our competitiveness and long-term profitability are, to a significant degree, dependent upon our ability to reduce costs and maintain low-cost and efficient operations. Not being able to maintain our cost structure and efficiently operate our manufacturing facilities may increase our costs and adversely affect our operating results. Certain

non-controllable costs may increase by reason of external factors beyond our control, which may also reduce our operating results. Examples of non-controllable costs are energy costs, insurance costs, tax costs, pension costs etc.

3.3.3 Our ability to pass on increases in our costs to customers is dependent upon market conditions.

In addition, production in our fibers and yarns business is labor intensive. Consequently, inflationary pressures, changes in applicable laws and regulations or other factors might result in increased labor costs.

Shortages or disruptions of supplies to our customers due to unplanned production capacity decreases or shutdowns of production plants may reduce sales

Production at our manufacturing facilities or delivery of supplies to our customers could be adversely affected by technical failures, force majeure, strikes, natural disasters, regulatory rulings and other factors. Unexpected events, such as manufacturing problems, unplanned shutdowns or loss of supplies, could lead to reduced sales.

If the capacity of one or more material facilities is reduced or the manufacturing of material products is shut down for a prolonged period and we are unable to shift sufficient production to other plants, or draw on inventories, or , unable to run our production facilities at our typical utilization rates because of a disruption to our raw material supplies, we may not be able to fulfill our product delivery obligations and we could be exposed to claims for damages and suffer reputational harm.

The company has insurance policies that cover damage to inventories, property, plant and equipment and loss from business interruption caused by accidents and natural disasters. Additionally, the company has invested in fixed assets that protected potential vulnerable areas from natural disasters. For instance, an extra-high wall has been constructed at our Lopburi facility in Thailand to protect from floods. In addition, the company has diversified geographically to mitigate the risk of disruption from natural disasters or unexpected events which may impact one plant. The company has multiple plants to serve its customers.

3.3.4 Our production facilities are subject to operating risks that may adversely affect our operations

We are dependent on the continued operation of our production facilities. These production facilities are subject to hazards associated with the manufacturing, handling, storage and transportation of chemical materials and products, including pipeline leaks and ruptures, explosions, fires, inclement weather and natural disasters, mechanical failure, unscheduled downtime, labor difficulties, transportation interruptions, remediation complications, chemical spills, discharges or releases of toxic or hazardous substances or gases, storage tank leaks and other environmental risks. These hazards can cause personal injury and loss of life, severe damage to, or destruction of, property and equipment, environmental damage, fines and liabilities.

In addition, some of our production facilities, such as our AlphaPet PET facility, our IRP Rotterdam PET and IRH Rotterdam PTA facilities, our Indorama Polyester Industries' Map Ta Phut polyester facility, our TPT Petrochemicals PTA facility, our Indorama PET Nigeria Limited, our Guangdong IVL

PET Polymer Company Limited, our Indorama Ventures Poland Sp.z.o.o., our IVL Adana PET and others are co-located at sites where our neighbors face the same operational risks and, in some cases, they provide critical supplies and/or services, and any disruption in those supplies and/or services could affect our operations.

3.4 Management Risk

3.4.1 The costs and difficulties of integrating future acquired businesses and technologies could impede our future growth and adversely affect our competitiveness

As part of our strategy, we may seek further growth through acquisitions of other PET, Fibers and Yarns, Oxide and Glycols or PTA or other products in our value chain in order to maintain a competitive position within the industries in which we operate and to enhance our position in our core areas of operations. This strategy entails risks including:

- unidentified or unanticipated liabilities or risks in the operations of the companies which we may acquire;
- potential failure to achieve the economies of scale, synergies or other benefits sought;
- greater than expected costs and management time and effort involved in completing and integrating the acquisitions;
- inability to successfully integrate the services, products and personnel of the acquisitions into our operations or to realize any expected cost savings or other synergy benefits from the acquisitions;
- inability to retain employees, customers and supplier relationships;
- lack of return on our investment.

We may not be able to identify attractive acquisition opportunities or make acquisitions on attractive terms, or obtain financing necessary to complete and support such acquisitions. Regulation of merger and acquisition activity by the European Union, the United States, Thailand or other national regulators may also limit our ability to make future acquisitions or mergers.

3.4.2 The Indorama name is used by other companies that we do not control

The 'Indorama' wordmark belongs to Lohia Global Holdings Limited, a company controlled by Mr. M.L. Lohia, the original founder of the Indorama brand and father of both our Vice Chairman and Chairman. IVL has non-exclusive license for its use pursuant to a License Agreement with Lohia Global Holdings Limited and pays royalty fee to Lohia Global Holdings Limited for the use of 'Indorama' wordmark under the above said agreement. The businesses of two siblings, the S.P. Lohia Group in Indonesia and the O.P. Lohia Group in India also use the Indorama wordmark. We neither control nor know how the S.P. Lohia Group and the O.P. Lohia Group uses the Indorama wordmark and cannot assure you that their actions will not adversely impact the reputation associated with the Indorama wordmark. However IVL differentiates itself and presents the company as Indorama Ventures Group listed and is headquartered out of Thailand.

3.4.3 The risk of a shareholder group that holds the majority of outstanding shares

Lohia family holds around 67% of outstanding shares and can control voting results on significant agenda items.

3.5 Financial Risk

3.5.1 Significant capital investments including future development of new facilities have been, and may in the future continue to be, necessary to achieve our growth plans, which carry project and other risks

Our growth plans have required, and may continue to require, significant capital investments to expand, renovate, convert or upgrade existing facilities, develop new facilities or make major acquisitions or investment. Projects that require significant capital expenditure carry risks including:

- failure to complete a project within the prescribed project timetable and/or within budget; and
- failure of the project to perform according to prescribed operating specifications following its completion.

In addition, any significant increases in costs unforeseen in the project plan and any inability to sell the products produced at volumes and/or price levels envisaged in the project plan could affect the success of our projects. Due to the significant amount of capital required and the long lead time between planning and completion of such projects, project delays could have an effect on our business and prospects.

Acquisitions can provide meaningful opportunities to grow our business and improve profitability. Acquired businesses may not achieve expected levels of revenue, profit or productivity, or otherwise perform as we expect. Acquisitions involve special risks, including, without limitation, diversion of management's time and attention from our existing businesses, the potential assumption of unanticipated liabilities and contingencies and potential difficulties in integrating acquired businesses and achieving anticipated operational improvements. While our strategy is to acquire businesses that will improve our competitiveness and profitability, acquisitions may not be successful or accretive to earnings.

3.5.2 Exchange rate and/or interest rate fluctuations may have a significant adverse impact on our business, financial condition, results of operations and prospects

As a result of the global nature of our business, changes in foreign currency rates could have an adverse impact on our business, financial condition, results of operations and prospects. Currency fluctuations affect us because of mismatches between the currencies in which operating costs are incurred and those in which revenues are received. We sell products that are typically priced by reference to prices in U.S. dollars or Euros, while a portion of operating costs are incurred in local currencies, including the Baht, Pound Sterling pound, Lithuanian Litas, Mexican Peso, Chinese Yuan, Indonesia Rupiah, Polish Zloty, Nigerian Niara, Turkish lira, Indian Rupee and others.

Our reported earnings may also be affected by fluctuations between the Baht, which is our reporting currency, and the non-Baht currencies in which some of our overseas subsidiaries report their results of operations.

In order to minimize currency risks, the company primarily utilizes forward exchange contracts with maturities of less than one year to hedge certain financial assets and liabilities denominated in foreign currencies and our operating subsidiaries usually borrow in the principle currency. Generally, the long term loans are borrowed on floating interest rates and are linked to the benchmark interest rates for each currency. The floating interest rates are impacted by macro-economic conditions and the monetary policy of each region. Interest rate risk is the risk that future movements in market interest rates will affect the results of the company's operations and its cash flows. However, the company has mitigated the risk by using derivative financial instruments, principally interest rates swaps, contracting a fixed interest rate and the issuance of debentures including Perpetual Debentures in the Thai Bond market, to manage exposure to fluctuations in interest rates on borrowings. Further there is a natural hedge to large extent where foreign currency liabilities are supported by same currency assets wherever possible.

Credit risk is also the potential financial loss resulting from the failure of a customer or counterparty to settle its financial and contractual obligations to the company as and when they fall due. Management has a credit policy in place and the exposure to credit risk is monitored on an ongoing basis. Credit evaluations are performed on all customers requiring credit over a certain amount. Further, we do take credit insurance in specific regions to cover credit risk. Our exposure to credit risk is represented by the carrying amount of the receivables in the Statement of Financial Position.

The company monitors its liquidity risk and maintains a level of cash and cash equivalents deemed adequate by management to finance the Group's/Company's operations and to mitigate the effects of fluctuations in cash flows.

3.5.3 The Company is a holding company and is dependent on the receipt of dividends to make dividend payments on our shares

As a holding company, the Company is dependent on the receipt of dividends from its subsidiaries and associated companies, the payment of which will depend on their future financial performance, which in turn depends on successfully implementing their strategies and on financial, competitive, regulatory, technical and other factors, general economic conditions, demand and selling prices for their products and other factors specific to their respective industries or specific projects, many of which are beyond our control.

The subsidiaries have dividend policies to pay not over 80% of net profit after tax and legal reserve. However, the board of those subsidiaries will approve dividend paid from time to time by considering some factors i.e., cash reserved for loan repayment, expansion investment or support the cash flow of the company in case of impact by market condition change. The ability of our direct and indirect subsidiaries to pay dividends to their shareholders, including the Company, is subject to applicable

law. Although we intend to pay dividends with respect to the shares, our ability to pay dividends in the future will depend upon a decision of the Board of Directors and/or the approval of the shareholders at a general meeting, our results of operations, cash flows, financial condition, contractual restrictions and restrictions imposed by applicable law and other factors the Board of Directors deems relevant.

3.5.4 The risk that the Company cannot comply for debt covenant

As the Company has loans from financial institutions and issued debentures of Baht 32 billion, IVL needs to comply with debt covenants, which in most cases are a net debt to equity ratio of not over 2:1. As of December 31, 2015, Net Debt to equity ratio was 0.96:1. There are other covenants also and there could be a risk of not complying with the same in case of a significant deterioration in the financial position and/or performance of the company, however, the Company's financial position as at December 31, 2015 is favorable in regard to all covenants.

3.6 Other Risks

3.6.1 Indorama Petrochem PTA Facility may have adverse effect on our business

Lawsuit regarding improvement of project to increase production efficiency and improve the air pollution treatment system

On June 19, 2009, the Stop Global Warming Association and a number of other people living in Map Ta Phut, Ban Chang and Muang District, Rayong Province (the "Claimants") filed a lawsuit in the Thai Central Administrative Court (the "CAC") against various Thai governmental entities and Ministers (the "Respondents"). This lawsuit requests the CAC to render a judgment ordering the Respondents to revoke the environmental impact assessment reports (the "EIA Report") and to revoke their approvals of projects or activities required to prepare the EIA Report that are located in Map Ta Phut, Ban Chang and the surrounding area in Rayong Province, Thailand. The lawsuit alleges that 76 projects in such areas may cause serious impact on the community with regard to the quality of environment, natural resources and health. One of the projects named in the lawsuit is the improvement of project to increase production efficiency and improve the air pollution treatment system of Indorama Petrochem PTA facility, which was approved by the Minister of Industry.

On September 2, 2010, the CAC issued the judgment revoking the permission granted to the projects or activities which may cause serious impact on the community with regard to the quality of environment, natural resources and health and which have not completely complied with the provision of Paragraph two of Section 76 of the Constitution. According to the judgment, the project of Indorama Petrochem is not classified as a project for which permission to operate the projects is revoked.

However, on October 1, 2010, the Claimants filed an appeal to the Supreme Administrative Court (the "SAC") requesting the SAC to reverse the judgment of the CAC and not to rely on the Notification of the Ministry of Natural Resources and Environment, and to rule that the Respondents must revoke the environment impact assessment reports and permission granted to the projects or activities which have been approved or obtained from August 24, 2007 onwards until the study and assessment of

impact on the quality of environment and health has been completed as required by the Constitution. On December 7, 2010, the Respondents submitted the statement of defense against the appeal of the Claimants. As of December 2015, the SAC has not yet issued the judgment on this case.

During the appeal proceedings, since the project of Indorama Petrochem is not within a project in which the permission is revoked by the CAC, Indorama Petrochem therefore can operate the business of the PTA facility. However, the Company cannot ensure that the court proceedings and the judgment to be rendered by the SAC will not cause an impact on the project of Indorama Petrochem to the extent that the permission will be revoked or the construction of buildings or the business operation of Indorama Petrochem will be suspended. Indorama Petrochem's plant has never been affected by this lawsuit and the operation of the plant is continuing normally.

Lawsuit regarding improvement of the project to improve the reverse osmosis (RO) system

On March 10, 2010, the Claimants filed a lawsuit in the CAC against the Respondents. This lawsuit requests the CAC to render a judgment ordering the Respondents to revoke the EIA Report and to revoke their approvals of projects or activities required to prepare the EIA Report that are located in Map Ta Phut, Ban Chang and the surrounding area in Rayong Province, Thailand. The lawsuit alleges that 9 projects in such areas may cause serious impact on the community with regard to the quality of environment, natural resources and health. The Claimants also requested that the CAC suspend any current activities of such projects, activities or operations of applicants or owners because they may have breached relevant procedures specified under the Constitution and other relevant laws, including the commissioning of a HIA Report, the holding of a public hearing and the hearing of opinions from independent environmental organizations, prior to operating such projects or activities. One of the projects named in the lawsuit is the improvement of the project to improve the reverse osmosis (RO) system of Indorama Petrochem PTA facility, which was approved by the Minister of Industry.

On February 28, 2011, the CAC issued an order dismissing the petition for an injunction of the Claimants on the grounds that the facts claimed by the Claimants are not sufficient to issue a court injunction and there is no evidence to prove that the Claimants will be damaged by the operation of the projects. At present, the CAC has not yet issued the judgment on this case. The operation of the plant is continuing normally.

As of 31 December 2015, there is no material litigation against the Company or its subsidiaries which could have a negative effect on our assets exceeding 5% of shareholder's equity. In addition, there is no lawsuit, which could have a significant effect on our business. However, the following litigations could have an adverse effect on the respective subsidiaries of the Company, the impact of which cannot be estimated.

3.6.2 Lawsuits against our subsidiaries

Jay Easler Litigation in United States District Court for the District of South Carolina against several entities including Auriga Polymers Inc. (“Auriga”), and Indorama Ventures USA LLC¹ (“IVLUSA”)

On January 7, 2014 Jay Easler, on behalf of himself and a proposed class, filed an action in the United States District Court for the District of South Carolina against Hoechst Celanese Corporation, HNA Holdings, Inc., CNA Holdings, Inc., Hercules, Inc., Ashland, Inc., Hyston Fibers, Inc., Messer Greishiem, Inc., Arteva Specialties S.a.r.l d/b/a/ “KoSa”, Johns Manville Corporation, INVISTA S.a.r.l d/b/a “INVISTA”, Teijin Monofilament U.S., Inc., Teijin Holdings USA, Inc., Auriga Polymers Inc., Indorama Ventures USA, Inc.

The defendants are alleged to have owned or conducted industrial operations at the property on which Auriga Polymers Inc., currently operates on Dewberry Road, Spartanburg, South Carolina (the “Site”). The Complaint alleges that discharges on the Site beginning in the 1970s and through 2008, at least, created a plume of contamination that migrated off-site and contaminated the property of plaintiff and a class of all homeowners within a 2 mile radius of the Site.

However, the Complaint is a general allegation that all owners have routinely discharged into the adjoining creek during the period from 1970 to 2008, which occurred before Auriga Polymers purchased the Site on March 1, 2011.

Under a November 11, 2010 Purchase and Sale Agreement with INVISTA, Auriga has indemnification for certain Excluded Liabilities and Buyer Indemnifiable Liabilities.

Most of the discharges occurred while Hoechst Celanese Corporation or its successors (“Celanese”) operated on the Site. Auriga has asserted an indemnification demand, and will pursue its indemnification rights with INVISTA and insurance coverage for its costs of defense in the litigation and any liability found against it. On December 22, 2014, the Plaintiff’s counsel proposed a settlement offer to the defendants. As of October 26, 2015, the settlement agreement between the parties was under review.

Given the lack of allegations of discharges during Auriga’s ownership and the absence of any discovery, it is impossible at this time to determine whether Auriga will be found liable and, if so to what degree. It is unlikely that this action will order a cessation of plant operations.

3.6.3 Changes in laws and regulations relating to beverage containers and packaging could reduce demand for such end use products – Product Risk

Legal requirements have been enacted in various jurisdictions in the United States and elsewhere requiring that deposits or certain eco-taxes or fees be charged for the sale, marketing and use of certain non-refillable beverage containers. Other proposals relating to additional beverage container deposits, recycling, eco-tax and/or product stewardship have been or may be introduced in various

¹ Indorama Ventures USA Inc. was converted to a limited liability company under the name of “Indorama Ventures USA LLC” with effective from October 2, 2014.

jurisdictions in the United States and elsewhere. Consumers' increased concerns and changing attitudes about solid waste streams and environmental responsibility and related publicity could result in the adoption of such legislation or regulations. This has encouraged some of our PET customers to reduce the amount of PET resin they use in their bottle production process. This process, known as light weighting, has reduced the amount of PET resin used in each bottle and has impacted the demand for PX, PTA and PET resin. PET can be recycled; IVL has made investments in PET recycling projects in the Mexico, USA, Europe and Thailand.

3.6.4 Environmental regulations may cause us to incur costs and liabilities

Our operations are subject to environmental laws and regulations by central and local authorities in the countries in which we operate. These include laws and regulations pertaining to pollution, the protection of human health and the environment, air emissions, wastewater discharges, occupational safety and health, and the generation, handling, treatment, remediation, use, storage, release and exposure to hazardous substances and wastes. These requirements are complex, subject to frequent change and have tended to become more stringent over time. We have incurred, and will continue to incur, costs and capital expenditures in complying with these laws and regulations and in obtaining and maintaining all necessary permits.

We have procedures in place to allow us to comply with environmental laws and regulations; however, there can be no assurance that we will at all times be in compliance with all of our obligations in the future or that we will be able to obtain or renew all licenses, consents or other permits necessary to allow us to continue to operate our businesses. Any failure by us to comply with such laws and regulations could subject us to fines, penalties and other liabilities.

4. Business Assets

Property, Plant and Equipment

Indorama Ventures PCL had fixed assets as stated in consolidated financial statement are property, plant and equipment of subsidiaries. As of December 31, 2014 and December 31, 2015, we had net book value of plant and equipment of subsidiaries used in our operation after deducting of accumulated depreciation and other impairment as stated in our consolidated financial statement equal to Baht 97,822 million and Baht 120,366 million or 50.3 % and 54.3% of total assets. Details are as follows:

Unit: Baht million

Type	Net Book Value after Accumulated Depreciation	
	December 31, 2014	December 31, 2015
Land and land improvements	4,778	6,319
Buildings and building improvements	11,338	14,285
Machinery and equipment	75,886	86,741
Office furniture, fixtures, and equipment	468	477
Transportation equipment	82	81
Spare parts	622	706
Construction in progress	4,649	11,756
Total Net Book Value	97,822	120,366

Remark: As of December 31, 2015, mortgaged with financial institutions for Baht 42,877 millions

On-going Investment Projects

Major announcement & ongoing projects as on 31st Dec'2015 are as follows:

- Expected completion of announced M&A's of Cepsa Spain in 2016.
- Expansion of PTA assets at Rotterdam site in Europe.
- Restart and refurbishing of US Gas Cracker at Lake Charles, Louisiana
- Other minor expansions and debottlenecks at various locations.

Intangible Assets

Indorama Ventures PCL had net book value of intangible assets as of December 31, 2014 and December 31, 2015 equal to Baht 11,127 million and Baht 13,581 million or 5.7 % and 6.1 % of total assets, respectively. Details are as follows:

Unit: Baht million

Type	Net Book Value	
	December 31, 2014	December 31, 2015
Right Acquired	62	55
Supplier Contract and relationships	4,005	4,230
Software Licenses	101	100
Technology License and Knowhow	3,227	4,099
Customer Contracts and Relationships	2,539	3,139
Trade Name and Trademarks	890	1,340
Chemical Exchange Contract	282	290
Capitalised development expenditure	21	329
Total Book Value of Intangible Assets	11,127	13,581

Investments

Indorama Ventures PCL operates as a holding company; therefore our main assets are the investments. As of December 31, 2014 and December 31, 2015, we had net book value of our investments in subsidiaries as stated in our separate financial statement under the cost method equal to Baht 42,141 million and Baht 46,847 million or 45.0% and 47.0% of total assets in our separate financial statement, respectively. Details are as follows:

Unit: Baht million

Subsidiaries ¹	Ownership Interest ² (Direct) (%)	Net Book Value of Investment as of	
		December 31, 2014	December 31, 2015
Indorama Petrochem Ltd.	100.00	2,526	3,944
Indorama Holdings Ltd.	99.81	2,001	2,001
Indorama Polymers PCL	72.60	7,220	7,220
Indorama Polyesters Industries PCL	64.94	1,474	1,474
TPT Petrochemicals PCL	99.97	5,182	5,182
IVL Belgium N.V.	100.00	122	122
Indo Polymers Mauritius Limited	100.00	23,596	26,884
Indorama Ventures Global Services Limited	100.00	20	20
Total Book Value		42,141	46,847

Remarks: ¹ Only companies which are held directly by Indorama Ventures PCL







² As at December 31, 2015














Trademarks in connection with our business

The Company, subsidiaries and affiliates use a number of trademarks, trade names and service marks in connection with the business. We market our products under various brand names, which are registered in various countries as listed below.

The Indorama wordmark does not belong to us. We are a part of an informal Indorama Group, which consists of three independently managed associate groups, namely ourselves, the Sri Praksh Lohia Group in Indonesia and the Om Prakash Lohia Group in India. The Indorama Group was founded by Mr. Mohan Lal Lohia in 1976 in Indonesia, and each of the groups is currently managed by one of Mr. MohanLal Lohia's sons. We have a non-exclusive license for its use pursuant to a License Agreement with Lohia Global Holdings Limited, a company controlled by Mr. Mohan Lal Lohia. The Sri Praksh Lohia Group and the Om Prakash Lohia Group also use the Indorama wordmark.


As of 31 December 2015, we registered several trademarks both in domestic and international. Our major registered trademarks are shown below





Trademark	Owner	Country of Registration
	Indorama Ventures Pcl	Thailand, European Union, China, Mexico, Nigeria, USA, Turkey, Philippines, Myanmar, Indonesia
银都拉玛	Indorama Ventures Pcl	China
	Indorama Ventures Pcl	Mexico
INDORAMA	Indorama Ventures Pcl	China
RAMAPET	Indorama Ventures Pcl	China
	Indorama Ventures Pcl	Thailand
	Indorama Polymers Pcl	European Union, USA
	Indorama Ventures Pcl	Thailand
	Indorama Polyester Industries Pcl	Thailand

Trademark	Owner	Country of Registration
	Indorama Polyester Industries Pcl	USA
	Indorama Polyester Industries Pcl	USA
	Indorama Polyester Industries Pcl	USA
	Indorama Polyester Industries Pcl	Thailand
	Indorama Polyester Industries Pcl	Thailand
	Indorama Polyester Industries Pcl	Thailand
	Indorama Polyester Industries Pcl	Thailand
	Indorama Polyester Industries Pcl	Thailand
	Indorama Polyester Industries Pcl	Thailand
	Indorama Polyester Industries Pcl	Thailand
	Indorama Polyester Industries Pcl	Thailand
	Indorama Polyester Industries Pcl	Thailand
	Indorama Polyester Industries Pcl	Thailand
	Indorama Polyester Industries Pcl	Thailand

Trademark	Owner	Country of Registration
	Indorama Polyester Industries Pcl	Thailand
	Indorama Polyester Industries Pcl	Thailand
	Indorama Polyester Industries Pcl	Thailand
	Indorama Polyester Industries Pcl	Thailand
	Indorama Polyester Industries Pcl	Thailand
	Indorama Polyester Industries Pcl	Thailand
	Indorama Polyester Industries Pcl	Thailand
COMERAMA	Indorama Holdings Ltd.	European Union
	Indorama Ventures Polymers (Rayong) Pcl	Thailand
	PT. Indorama Polypet Indonesia	Indonesia
	PT. Indorama Polypet Indonesia	Indonesia
	PT. Indorama Ventures Indonesia	Indonesia
	Guangdong IVL Pet Polymers	China





Trademark	Owner	Country of Registration
OXYCLEAR	Indorama Ventures Polymers Mexico S. de R.L. de C.V	Mexico
POLYCLEAR	Indorama Ventures Polymers Mexico S. de R.L de C.V	Mexico
OXYCLEAR	Auriga Polymers Inc.	USA
POLYCLEAR	Auriga Polymers Inc.	USA, Canada, Argentina, Brazil, Chile, Honduras
PLANTPET	Auriga Polymers Inc.	USA, Brazil, China, European Union, Mexico, India
PERFORMANCE	Starpet Inc.	USA
BIO RAMAPET	Starpet Inc.	USA
FUTURE-PET	AlphaPet Inc.	USA, Mexico
	Trevira GmbH	European Union, North America, South America, Egypt, Algeria, Australia, New Zealand, China, WIPO
CARADOMO	Trevira GmbH	United Kingdom
CS	Trevira GmbH	India, Algeria, European Union , WIPO
LUXIRA	Trevira GmbH	Ireland
MICRONESSE	Trevira GmbH	European Union, WIPO
NOVALOFT	Trevira GmbH	United Kingdom
PEMOTEX	Trevira GmbH	European Union, WIPO
TREVIRA	Trevira GmbH	European Union, North America, South America, Africa, Australia, New Zealand, Asia, WIPO
TREVIRA	Hoechst Aktiengesellschaft	Bahamas, Malaya
TREVIRA (CHINESE)	Trevira GmbH	China, Hongkong, Taiwan
TREVIRA (HANGUL)	Trevira GmbH	South Korea
EVIRA (KATAKANA Version1)	Trevira GmbH	Japan

Trademark	Owner	Country of Registration
	Trevira GmbH	European Union, North America, South America, Africa, Australia, New Zealand, Asia, WIPO
TREVIRA + (ARUB)	Trevira GmbH	Syria
	Trevira GmbH	European Union, South America, Africa, Australia, New Zealand, Asia, WIPO
	Trevira GmbH	European Union, Australia, Asia, Montenegro, USA, WIPO
	Trevira GmbH	China
	Trevira GmbH	Germany
Trevira Fill Fibelle	Trevira GmbH	European Union, WIPO
	Trevira GmbH	European Union, Canada, Japan, WIPO
TREVIRA FINESSE (KATAKANA)	Trevira GmbH	Japan
	Trevira GmbH & Co KG	United Kingdom
	Trevira GmbH	European Union, WIPO

Trademark	Owner	Country of Registration
	Trevira GmbH	European Union, Egypt, South America, Australia, New Zealand, Asia, WIPO
	Trevira GmbH	European Union, WIPO
	Trevira GmbH	European Union, Algeria, Egypt, South America, Australia, New Zealand, Asia, WIPO
	Trevira GmbH	European Union
Fillwell Softflex®	Wellman International Limited	European Union
Dreamfil®	Wellman International Limited	European Union
Cirrus®	Wellman International Limited	European Union
Wellbond®	Wellman International Limited	European Union
Eco-Logic®	Wellman International Limited	European Union
Polysorb®	Wellman International Limited	European Union
Sensifil®	Wellman International Limited	European Union
Closed Loop Concept®	Wellman International Limited	European Union
Closed Loop System®	Wellman International Limited	European Union
eco-core™	Wellman International Limited	European Union
Wellman®	Wellman Inc.	United Kingdom
Fillwell®	Wellman Inc.	Ireland, European Union, United Kingdom

Trademark	Owner	Country of Registration
Fillwell II®	Wellman Inc.	United Kingdom, Ireland
Wellene®	Wellman Inc.	United Kingdom, Ireland
	Fibervisions, L.P.	China, European Union, Hong Kong, South Korea, Taiwan, USA
FiberVisions	Fibervisions, L.P.	Argentina, Brazil, Canada, China, Denmark, European Union, Germany, Hong Kong, Indonesia, Italy, Japan, South Korea, Singapore, Taiwan, United Kingdom, USA
	Fibervisions, L.P.	Argentina, Brazil, Canada, China, Denmark, European Union, Germany, Hong Kong, Indonesia, Italy, Japan, South Korea, Singapore, Taiwan, United Kingdom, USA
	ES FiberVisions L.P.	USA, Australia, EPO, France, Int'l Reg-Madrid Protocol only, Japan, Mexico, Russian Federation, Argentina
	ES FiberVisions L.P.	Canada, Indonesia, Hong Kong, Malaysia, Taiwan, Thailand, Brazil, China, South Korea
	Indorama Ventures Adana PET Sanayi Anonim Sirketi	Turkey
	Indorama Ventures Adana PET Sanayi Anonim Sirketi	Turkey
	Indorama Ventures Adana PET Sanayi Anonim Sirketi	Turkey
	Indorama Ventures Adana PET Sanayi Anonim Sirketi	Turkey
DIOLEN	PHP Fibers GmbH	Austria, Bulgaria, Benelux, Switzerland, China, Czech Rep., Germany, Ecuador, Egypt, Spain, France, Croatia, Hungary, Italy, Morocco, Montenegro, Macedonia, Portugal, Romania, Serbia, Slovenia, Slovakia, San Marino, WIPO

Trademark	Owner	Country of Registration
DIOLEN	Polyester High Performance GmbH	Australia, Canada, Chile, Colombia, Cyprus, Estonia, Finland, United Kingdom, Greece, Indonesia, Ireland, Israel, India, Italy, Jordan, South Korea, Lebanon, Latvia, Mexico, Malaysia, Norway, New Zealand, Peru, Poland, Russian Fed., Sweden, Syria, Tunisia, Turkey, Taiwan, Ukraine, USA
DIOLEN	Diolen Industrial Fibers GmbH	Brazil, Denmark, Hong Kong, Iran, Lithuania, Venezuela, South Africa
DIOLEN in CHINESE	PHP Fibers GmbH	China
Diolen Care	PHP Fibers GmbH	Benelux, Switzerland, Czech Rep., Germany, Denmark, Spain, France, Italy, Poland, WIPO
DIOLEN EUROFABRIC	PHP Fibers GmbH	Austria, Benelux, Switzerland, Czech Rep., Germany, Spain, France, Hungary, Italy, Montenegro, Romania, Serbia, Slovakia, WIPO
DIOLEN GARANT	PHP Fibers GmbH	Austria, Benelux, Switzerland, China, Czech Rep., Germany, Denmark, Spain, Finland, France, Great Britain, Croatia, Hungary, Italy, Liechtenstein, Latvia, Portugal, Sweden, Slovenia, WIPO
DIOLEN OCEANIC	Diolen Industrial Fibers GmbH	Brazil
DIOLEN OCEANIC	PHP Fibers GmbH	Germany
DIOLEN OCEANIC	Polyester High Performance GmbH	United Kingdom, Norway
Diolen Safe	PHP Fibers GmbH	Benelux, Switzerland, China, Czech Rep., Germany, Spain, France, WIPO
DIOLEN SUPERFEST	PHP Fibers GmbH	Germany
ENKALON	PHP Fibers GmbH	Austria, Canada, Switzerland, Czech Rep., Germany, Ecuador, Egypt, Spain, France, Croatia, Hungary, Italy, Morocco, Montenegro, Macedonia, Portugal, Romania, Serbia, Slovenia, Slovakia, Viet Nam, WIPO

Trademark	Owner	Country of Registration
ENKALON	Polyamide High Performance GmbH	Australia, Bulgaria, Brazil, Benelux, Chile, China, Colombia, Denmark, Estonia, Finland, United Kingdom, Greece, Hong Kong, Israel, India, Latvia, Norway, Russian Fed., Sweden, Turkey, Ukraine, South Africa, Zimbabwe
ENKALON	Acordis Industrial Fibers BV	Venezuela
STANYLENKA	PHP Fibers GmbH	Austria, China, Germany, Spain, France, Italy, Portugal, Viet Nam, WIPO
STANYLENKA	Polyamide High Performance GmbH	Benelux, Denmark, Finland, United Kingdom, Greece, Ireland, Japan, South Korea, Sweden, Taiwan
DSP	Performance Fibers, Inc.	Australia, Benelux, China, France, Germany, Italy, Japan, New Zealand
	Performance Fibers, Inc.	Philippines, South Korea, Spain, Taiwan
	Performance Fibers, Inc.	Turkey
PENTEC	Performance Fibers, Inc.	European Union, USA
	Performance Fibers, Inc.	Australia, Brazil, Canada, China, European Union, India, Indonesia, Malaysia, South Korea, USA
	Performance Fibers, Inc.	USA

Patents

We also have several Patents all over the world, which are owned by, or assigned to, the subsidiaries of the Company. Below is the information of Patents as of 31 December 2015.

Company/Owner	Patent Number	Expiry Date	Country
Trevira GmbH	US 5,871,845	February 16, 2016	USA
	US 5,804,303	May 31, 2016	USA
	EP 733 732	March 4, 2016	Germany
	DE 196 10 481	March 16, 2016	Germany
	EP 864 409	March 7, 2018	Germany
	EP 922 794	December 9, 2018	Germany
	EP 1 013 810	December 23, 2019	Germany, France
	DE 100 27 653	December 3, 2020	Germany
	EP 1 425 444	June 20, 2022	Germany, France, Italy, Portugal
	EP 1 425 444 (ES 2283582)	June 20, 2022	Spain
	EP 1 425 444 (TR 2007 04841 T4)	June 20, 2022	Turkey
	CN ZL 02812331.X	June 20, 2022	China
	JP 4190411	June 20, 2022	Japan
	KR 10-0906585	June 20, 2022	South Korea
	US 7,189,794	June 20, 2022	USA
	ID P 0023176	June 20, 2022	Indonesia
	IN 223675	June 20, 2022	India
	EP 1 543 187	July 26, 2023	Austria, Switzerland, Czech Republic, Germany, Denmark, France, United Kingdom, Ireland, Italy, Portugal
	EP 1 543 187 (TR 2006 05798 T4)	July 26, 2023	Turkey
	CN ZL 03803681.9	July 26, 2023	China
	IN 260867	July 26, 2023	India
	JP 4376185	July 26, 2023	Japan

Company/Owner	Patent Number	Expiry Date	Country
Trevira GmbH	KR 10-0906585	June 20, 2022	South Korea
	US 7,189,794	June 20, 2022	USA
	DE 101 16 751	April 4, 2021	Germany
	EP 1 383 947	March 6, 2022	Austria, Belgium, Switzerland, Germany, Denmark, Spain, Finland, France, United Kingdom, Ireland, Italy, Portugal, Sweden
	EP 1 383 947 (GR 3052196)	March 6, 2022	Greece
	EP 1 383 947 (TR 2005 00011 T4)	March 6, 2022	Turkey
	AU 2002311032	March 6, 2022	Australia
	CA 2,443,238	March 6, 2022	Canada
	CN ZL 02807786.5	March 6, 2022	China
	JP 4008822	March 6, 2022	Japan
	KR 10-0796336	March 6, 2022	South Korea
	MX 250362	March 6, 2022	Mexico
	NO 331085	March 6, 2022	Norway
	US 7,858,111	June 19, 2025	USA
	EP 1 340 845	February 26, 2023	Germany, United Kingdom, Italy, Sweden, Turkey
	US 7,833,447	May 13, 2024	USA
	US 8,277,790	February 24, 2023	USA
	JP 4357853	February 27, 2023	Japan
	EP 1 549 585	January 17, 2023	Austria, Belgium, Bulgaria, Switzerland, Czech Republic, Germany, Denmark, Estonia, Spain, Finland, France, United Kingdom, Greece, Hungary, Ireland, Italy, Netherlands, Portugal, Sweden, Slovenia, Slovakia, Turkey
	CN ZL03816535.X	January 17, 2023	China
	IN 261801	January 17, 2023	India

Company/Owner	Patent Number	Expiry Date	Country
Trevira GmbH	DE 103 43 032	September 16, 2023	Germany
	EP 1 723 273	March 5, 2025	Austria, Belgium, Czech Republic, Germany, Denmark, Spain, France, United Kingdom, Italy, Portugal, Turkey
	JP 4954055	March 5, 2025	Japan
	DE 10 2004 059 514	December 10, 2024	Germany
	EP 2 169 110	September 25, 2028	Austria, Belgium, Switzerland, Czech Republic, Germany, Denmark, France, United Kingdom, Ireland, Italy Netherlands, Poland, Turkey
	JP 5450631	September 23, 2029	Japan
	EP 2 177 651	October 8, 2029	Germany, Turkey
	DE G 20 2008 017 741	October 11, 2018	Germany
	US 8,389,426	February 1, 2031	USA
	US 8,895,459	April 1, 2030	USA
	EP 2 521 807 (PCT/EP2010/008001)	December 31, 2030	Austria, Belgium, Switzerland, Czech Republic, Germany, Denmark, Spain, Finland, France, United Kingdom, Ireland, Italy Netherlands, Poland, Sweden, Turkey
	CN ZL 201080060615.3 (PCT/EP2010/008001)	December 31, 2030	China
	JP 5678096 (PCT/EP2010/008001)	December 31, 2030	Japan
Auriga Polymers Inc.	5925710	June 9, 2017	USA
	9806497	May 29, 2018	Brazil
	2235486	April 21, 2018	Canada
	5913797	May 29, 2017	USA
	6503586	February 25, 2018	USA
	5948529	February 24, 2018	USA

Company/Owner	Patent Number	Expiry Date	Country
Auriga Polymers Inc.	5874517	December 23, 2017	USA
	6171536	April 10, 2018	USA
	6312503	October 13, 2019	USA
	6150454	November 3, 2018	USA
	9905884	October 29, 2019	Brazil
	6632917	June 2, 2020	USA
	6793083	June 2, 2020	USA
	6481279	November 21, 2020	USA
	6325922	May 9, 2020	USA
	6071612	October 22, 2019	USA
	6284864	May 31, 2020	USA
	6342578	December 6, 2020	USA
	113963	June 20, 2021	Brazil
	6551088	June 25, 2021	USA
	6607374	April 3, 2021	USA
	6554599	April 6, 2021	USA
	6670035	May 2, 2022	USA
	6926961	August 15, 2021	USA
	2464646	January 22, 2022	Canada
	6544611	January 31, 2023	USA
	7919159	August 5, 2024	USA
	7943216	August 5, 2024	USA
	7087706	February 6, 2025	USA
	7473755	August 23, 2025	USA
	7879930	August 12, 2025	USA

Company/Owner	Patent Number	Expiry Date	Country
Auriga Polymers Inc.	5922828	August 13, 2017	USA
	5925710	June 9, 2017	USA
	9806497	May 29, 2018	Brazil
	8647728	February 17, 2030	USA
	7816436	November 8, 2024	USA
	8097671	November 8, 2024	USA
	8436086	November 8, 2024	USA
Indorama Ventures Polymers Mexico, S. de R.L. de C.V.	216265	June 8, 2018	Mexico
	214233	January 4, 2019	Mexico
	214728	November 3, 2019	Mexico
	244623	October 20, 2020	Mexico
	262137	June 20, 2021	Mexico
	277206	August 5, 2024	Mexico
	260886	December 14, 2024	Mexico
	299694	November 22, 2024	Mexico
	269318	August 17, 2025	Mexico
	290134	November 1, 2025	Mexico
Indorama Ventures (Oxide & Glycols) LLC	US 8858075 B2	October 3, 2031	USA
FiberVisions, L.P.	6177191	September 17, 2016	USA
	5972497	October 9, 2016	USA
	5985193	March 29, 2016	USA
	6458726	March 29, 2016	USA
	5948334	July 31, 2017	USA

Company/Owner	Patent Number	Expiry Date	Country
FiberVisions, L.P.	6752947	June 16, 2018	USA
	6682672	June 28, 2022	USA
	6811716	October 23, 2016	USA
	5958806	September 28, 2016	USA
	0891433	March 27, 2017	Germany
	1540051	September 17, 2023	Germany
	1525341	June 9, 2023	Germany
	3802073	October 23, 2017	Japan
	0891433	March 27, 2017	Denmark
	1525341	June 9, 2023	Denmark
	101001042	June 9, 2023	South Korea
	03815389	June 9, 2023	China
	1295698	June 10, 2023	Taiwan
FiberVisions Corporation	200680032495	October 2, 2026	China
ES FiberVisions Co., Ltd. ES FiberVisions Hong Kong Ltd. ES FiberVisions LP ES FiberVisions ApS	5557365	June 28, 2027	Japan
	2049715B	August 10, 2027	European Patent Office (EPO)
	602007021327.4	August 10, 2027	Germany
	2405869	August 10, 2027	Russia
	ZL200780029972.	August 10, 2027	China
	10-1108638	August 10, 2027	South Korea
	5037964	February 13, 2027	Japan
	2111490B	February 13, 2028	European Patent Office (EPO)

Company/Owner	Patent Number	Expiry Date	Country
ES FiberVisions Co., Ltd. ES FiberVisions Hong Kong Ltd. ES FiberVisions LP ES FiberVisions ApS	602008012879.2EP	February 13, 2028	Germany
	ZL200880004586.1	February 13, 2028	China
	10-1187219	February 13, 2028	South Korea
	5040405	April 4, 2027	Japan
	8236291	April 14, 2029	USA
	2132376B	April 4, 2028	European Patent Office (EPO)
	602008019447.7	April 4, 2028	Germany
	10-1224094	April 4, 2028	South Korea
	TWI410548	October 2, 2028	Taiwan
	8541323	October 14, 2030	USA
	2148947B	October 14, 2030	European Patent Office (EPO)
	5272229	May 23, 2028	Japan
	2436878	May 23, 2028	Russia
	ZL200880014991.1	May 23, 2028	China
	10-1223951	May 23, 2028	South Korea
	TWI393808	November 7, 2028	Taiwan
	5150975	April 18, 2028	Japan
	2183415B	September 1, 2028	European Patent Office (EPO)
	602008017663.0EP	September 1, 2028	Germany
	ZL200880112285.0	September 1, 2028	China
	10-1162595	September 1, 2028	South Korea
	TWI426060	November 11, 2028	Taiwan

Company/Owner	Patent Number	Expiry Date	Country
ES FiberVisions Co., Ltd. ES FiberVisions Hong Kong Ltd. ES FiberVisions LP ES FiberVisions ApS	5535911	December 15, 2028	Japan
	ZL200880126529.0	December 15, 2028	China
	10-1259968	December 15, 2028	South Korea
	TWI367967	December 10, 2028	Taiwan
	5168467	December 25, 2027	Japan
	5535911	December 15, 2028	Japan
	2126169B	March 19, 2028	European Patent Office (EPO)
	602008010594.6EP	March 19, 2028	Germany
	ZL200880008840.5	March 19, 2028	China
	KR1387000	March 19, 2028	South Korea
	TWI428484	September 30, 2028	Taiwan
	5233053	May 19, 2028	Japan
	2279293B	May 19, 2029	European Patent Office (EPO)
	602009016881.9DE	May 19, 2029	Germany
	ZL200980118065.3	May 19, 2029	China
	10-1242449	May 19, 2029	South Korea
	TWI374206	April 30, 2029	Taiwan
	5444681	October 15, 2028	Japan
	8147956	October 20, 2028	USA
	2220273B	October 20, 2028	European Patent Office (EPO)
	2390389B	October 20, 2028	European Patent Office (EPO)
	602008020493.6	October 20, 2028	Germany
	602008020526.6EP	October 20, 2028	Germany
	EP2220273	October 20, 2028	United Kingdom, Denmark

Company/Owner	Patent Number	Expiry Date	Country
ES FiberVisions Co., Ltd. ES FiberVisions Hong Kong Ltd. ES FiberVisions LP ES FiberVisions ApS	EP2390389	October 20, 2028	United Kingdom, Denmark
	2443806	October 20, 2028	Russia
	2279293B	May 19, 2029	Spain
	ZL200880120344.9	October 20, 2028	China
	10-1259967	October 20, 2028	South Korea
	TWI359218	October 16, 2028	Taiwan
	5396855	December 26, 2028	Japan
	10-1260715	December 25, 2029	South Korea
	TWI410542	December 23, 2029	Taiwan
	EP2401429	February 26, 2030	European Patent Office (EPO), Germany
	CNZL201080017486.X	February 26, 2030	China
	5535555	August 27, 2029	Japan
	EP2470696	August 27, 2030	European Patent Office (EPO)
	DE602010019026.9	August 27, 2030	Germany
	5096602	June 6, 2031	Japan
	KR10-1427192	June 6, 2032	South Korea
Polyamide High Performance GmbH	695386	April 19, 2016	Australia
	EP 0738793	April 17, 2016	Belgium, Germany, Spain, France, United Kingdom, Italy, Netherlands, Portugal, Sweden
	2174711	April 22, 2016	Canada
	NI200072	April 17, 2016	Taiwan
	5657798	April 22, 2016	USA
	2291971	December 10, 2019	Canada
	EP 1008688	November 29, 2019	Germany, Spain, France, United Kingdom, Italy, Portugal, Sweden
	683423	December 10, 2019	South Korea

Company/Owner	Patent Number	Expiry Date	Country
Polyamide High Performance GmbH	NI 51575	March 1, 2022	Taiwan
	6258414	December 10, 2019	USA
	EP 1161581	March 16, 2020	Belgium, Germany, France
	117802	March 16, 2020	China
	4518359	March 16, 2020	Japan
	6450211	March 16, 2020	USA
	ZL200410029645.4	March 26, 2024	China
	4490145	March 23, 2024	Japan
	10-1144065	March 26, 2024	South Korea
	7316843	January 18, 2024	USA
	EP 1728904	June 2, 2025	Belgium, Switzerland, Czech Republic, Germany, Spain, France, United Kingdom, Italy, Poland, Romania, Slovakia, Turkey
	2,580,654	May 13, 2026	Canada
	ZL200680019365.2	May 13, 2026	China
	5114390	May 13, 2026	Japan
	10-1266878	May 13, 2026	South Korea
	1-2007-502710	May 13, 2026	Philippines
	7538049	August 26, 2026	USA
	8510	May 13, 2026	Viet Nam
	ZL 200880125428.1	December 18, 2028	China
	EP 2234801	December 18, 2028	Germany, France, United Kingdom, Italy, Netherlands, Slovakia, Turkey
	5425098	December 18, 2028	Japan
	10-1498915	December 18, 2028	Korea
	2480338	December 18, 2028	Russian Federation

Company/Owner	Patent Number	Expiry Date	Country
PHP Fibers GmbH	EP 1462547	February 18, 2024	Belgium, Germany, France, Netherlands, Portugal
	EP 2582875	May 20, 2031	Belgium, Germany, France, Netherlands, Portugal
	8850785	July 21, 2031	USA
	202012008550.6	September 7, 2022	Germany
Diolen Industrial Fibers GmbH (Assigned to PHP Fibers GmbH)	EP 1458911	November 21, 2022	Germany
	EP 1501969	April 15, 2023	Germany , France, United Kingdom,
	ZL03809106.2	April 15, 2023	China
	10-957461	April 15, 2023	South Korea
	7407518	April 15, 2023	USA
Polyester High Performance GmbH	EP 1863958	March 14, 2026	Germany
	5260274	March 14, 2026	Japan
Performance Fibers (Kaiping) Company Limited	CN 203393327 U	June 17, 2023	China
	CN 203350093 U	June 19, 2023	China
	CN 203346653 U	June 26, 2023	China
	CN 203346569 U	June 17, 2023	China
	CN 203345846 U	June 17, 2023	China
	CN 202881460 U	September 18, 2022	China
	CN 202881467 U	September 18, 2022	China
	CN 202877085 U	September 18, 2022	China
	CN 202988406 U	November 15, 2022	China
	CN 202989449 U	November 1, 2022	China
	CN 202983988 U	November 1, 2022	China
	CN 202989536 U	November 1, 2022	China

Long Term Lease Agreements

As at 31 December 2015, the Company has entered into certain lease agreements for a period over 3 years for business purposes. The following summarizes the long-term lease agreements:

PET Business

Lessee	Details of Lease Assets	Purpose of Lease	Lessor	Expiration
Petform (Thailand) Ltd.	2 Rai 1 Ngan 62.50 square Wah	Packaging Facility	Industrial Estate Authority of Thailand	8 October 2042
Indorama Ventures Packaging (Myanmar) Limited	15,124 square meters	Packaging Facility	Myanmar Japan Thilawa development Ltd.	4 June 2064
AlphaPet, Inc.	40 acres	PET Facility	BP Amoco Chemical Company	31 August 2027
Indorama Ventures Polymers Mexico S.de R.L de C.V	89.372875 acres	PET Facility	Indorama Ventures Polycom S.de R.L de C.V	2019
Indorama Ventures ECOMEX, S. DE R.L. DE C.V.	46,538 square meters	PET Facility	Mario Martinez and Wife	2040
UAB Orion Global Pet	4.7651 hectares	PET Facility	UAB Klaipeda Free Economic Zone Management Company	8 June 2098
Indorama Ventures Europe B.V.	478,640 square meters	PET & PTA Facility	Port of Rotterdam	28 February 2093
Indorama Ventures Poland Sp.z.o.o.	79,093 square meters	PET Facility	Ministry of Treasury, the Government of Poland	4 December 2089
Guangdong IVL PET Polymer Co., Ltd.	136,782.60 square meters 12,529.10 square meters 4,828.38 square meters	PET Facility	Bureau of Land and Resource of Kaiping	6 February 2057 28 November 2052 18 September 2061
Indorama PET (Nigeria) Ltd.	15,000 square meters	PET Facility	Indorama Eleme Petrochemicals Ltd.	31 December 2025
Indorama Ventures Packaging (Nigeria) Ltd.	10,000 square meters	Packaging Facility	Indorama Eleme Petrochemicals Ltd.	31 December 2025
Indorama Ventures Packaging (Ghana) Ltd.	2,388 square meters	Packaging Facility	Davenport Developers Ltd.	31 March 2024

Lessee	Details of Lease Assets	Purpose of Lease	Lessor	Expiration
Indorama Ventures Packaging (Philippines) Corporation .	4,335 square meters	Packaging Facility	<i>Southern Luzon Int'l Business Park Corp.</i>	31 August 2018
PT.Indorama Polypet Indonesia	47,580 square meters	PET Facility	<i>Government of Indonesia</i>	13 June 2034
	5,690 square meters			21 September 2034
	10,100 square meters			13 June 2034
	165 square meters			31 January 2034
	10,440 square meters			24 September 2026
	1,720 square meters			24 September 2026
	1,630 square meters			24 September 2026
	910 square meters			24 September 2026
Indorama Ventures Adana PET Sanayi Anonim Sirketi	33,255 square meters	PET Facility	<i>Sasa</i>	30 September 2055

Polyester Fiber and Yarn Business

Lessee	Details of Lease Assets	Purpose of Lease	Lessor	Expiration
Indorama Polyester Industries Pcl.	177 Rai 1 Ngan 48.50 square Wah	Polyester & Yarn Facility	<i>Industrial Estate Authority of Thailand</i>	12 May 2018
ES FiberVision (Thailand) Co.,Ltd.	20 Rai 89 square Wah	Polyester & Yarn Facility	<i>Industrial Estate Authority of Thailand</i>	14 December 2044
PT.Indorama Polychem Indonesia	83,164 square meters	Polyester & Yarn Facility	<i>Government of Indonesia</i>	18 December 2043
	20,160 square meters			18 December 2043
	3,394 square meters			2 October 2043
	4,480 square meters			2 October 2043
	98,380 square meters			2 October 2043
	14,816 square meters			2 October 2043
	39,000 square meters		<i>PT Indorama Synthetics Tbk (PTIRS)</i>	December 2026
PT.Indorama Ventures Indonesia	8,206 square meters	Polyester & Yarn Facility	<i>Government of Indonesia</i>	7 April 2028
	240,051 square meters			4 October 2033
	26,575 square meters			7 April 2028
	1,913 square meters			13 November 2042
PT.Indorama	40,840 square meters	Polyester &	<i>Government of</i>	25 May 2025

Lessee	Details of Lease Assets	Purpose of Lease	Lessor	Expiration
Polyester Industries Indonesia		Yarn Facility	Indonesia	
FiberVisions Manufacturing Company	6,438 square feet	Polyester & Yarn Facility	GCC Partners, LLC	30 November 2020
FiberVisions (China) Textile Products Ltd.	45,000 square meters	Polyester & Yarn Facility	Suzhou New District Economic Development Group Corporation	17 January 2045
FiberVisions Products, Inc.	17,196 acres	Polyester & Yarn Facility	Athen-Clarke County Industrial Development	1 December 2020
ES FiberVisions (Suzhou) Co.,Ltd.	16,000 square meters	Polyester & Yarn Facility	FiberVisions (China) Textile Products Ltd.	30 April 2033
Wellman International Ltd.	46,545 square meters	Polyester & Yarn Facility	MJR Recycling B.V.	31 December 2020
	2,197 square meters		Swanenberg Beheer B.V	under renewal process
Wellman France Recyclage SAS	32,670 square meters	Bottle Recycling Plant	Societe Albertus	under renewal process
PHP Fibers GmbH	192 square meters	Polyester & Yarn Facility	Mainsite GmbH & CO.KG	Upon the termination of agreement
	535 square meters			
	118,570 square meters			
	646 square meters			31 December 2017
Safe Tweave Inc.	150,000 square feet	Polyester & Yarn Facility	PHP Inc.	Upon the termination of agreement

Feed Stock Business (PTA & EG/EO)

Lessee	Details of Lease Assets	Purpose of Lease	Lessor	Expiration
TPT Petrochemicals PCL	150 Rai	PTA Facility	Industrial Estate Authority of Thailand	6 February 2022
	37 Rai 91.50 square Wah			10 November 2039
Indorama		Piping	Eastern Fluid	8 January 2021

Lessee	Details of Lease Assets	Purpose of Lease	Lessor	Expiration
Petrochem Limited		System	Transport Co., Ltd.	
		PX and acetic acid Storage	Thai Tank Terminal Limited	7 December 2018
PT.Indorama Petrochemicals	76,090 square meters	PTA Facility	Government of Indonesia	13 June 2034
	19,850 square meters			18 August 2034
	15,710 square meters			21 September 2034
	47,090 square meters			13 June 2034
	1,720 square meters			24 September 2026
	100,000 square meters		PT.Pelindo	under renewal process
Indorama Ventures (Oxide & Glycols) LLC U.S.(D.E.)	963,850 acres	EG/EO Facility	Celanese Ltd.	5 December 2098
	23,688 acres			

Others (Holding Business, Trading & Service Business)

Lessee	Details of Lease Assets	Purpose of Lease	Lessor	Expiration
Beverage Plastic (Holding) Limited	204,161 square feet	Warehouse & Office	Silverwood Business Park Limited	20 March 2031
Grupo Indorama Ventures S.de R.L. de C.V.	1,352 square meters	TPA equipment facilities	IVPolycom	2029
TTI GmbH	1,768 square meters	Technical Center	Immomeile	Upon the termination of agreement
	1,193 square meters	Laboratory	Immomeile	
	860 square meters	Storage	Immomeile	
	110 square meters	Storage	Immomeile	
	600 square meters	Storage	Buenger	

Thai Board of Investment Tax Incentives

Under the Industrial Investment Promotion Act B.E. 2520, the Company and certain subsidiaries incorporated in Thailand have been Granted privileges by the Board of Investment at various times relating to manufacturing of worsted wool yarn, wool top, polyester fiber, PTA, PET resin, PET preforms and closures, amorphous resin and the operation of the TPT Petrochemicals cogeneration plant (the “promoted operations”). The privileges Granted, subject to compliance with the terms and conditions prescribed in the relevant promotional certificates, include:

- (a) exemption from payment of import duty on machinery approved by the Board of Investment;

- (b) exemption from payment of income tax on net profit from promoted operations for a period of eight years from the date on which income is deemed to be first derived from such operations;
- (c) a 50% reduction in the normal income tax rate on the net profit derived from promoted operations for a period of five years, commencing from the expiry date in (b) above;
- (d) a five-year carry forward period for losses for tax purposes from promoted operations during the period in (b) above;
- (e) income exclusions and additional deductions in computing the taxable income for promoted operations during the period in (b) above;
- (f) exemption from income tax on dividend paid to the shareholders from the profit of the promoted operations during the corporate income tax exemption period; and
- (g) double deduction of the cost of transportation, electricity and water supply for corporate income tax purposes for a period of ten years, from the date on which income is deemed to be first derived from the promoted operations.

The table below summarizes the expiry dates of our BOI tax incentives got by the subsidiary as of 31 December 2015.

Subsidiary	Year of Expiry for Full Exemption from Tax	Year of Expiry for 50% Reduction in Tax
Asia Pet (Thailand) Ltd. (BOI Certificate No. 5089(2)/2556)	2021	-
Indorama Polymers PCL (BOI Certificate No. 5090(2)/2556)	2021	-
Indorama Petrochem Ltd. (BOI Certificate No. 1123(2)/2547)	2014	2019
TPT Petrochemical PCL (BOI Certificate No. 1121(2)/2549)	2014	2019
TPT Petrochemical PCL (BOI Certificate No. 1965/Or.Or./2552)	-	-
Indorama Polyester Industries PCL (BOI Certificate No. 1271(2)/2552)	2017	2022
Indorama Polyester Industries PCL (BOI Certificate No. 1969(2)/2554)	2021	2026
Petform Thailand Ltd (BOI Certificate No. 1764 (2)/2546)	2012	-
Petform Thailand Ltd	2014	-

Subsidiary	Year of Expiry for Full Exemption from Tax	Year of Expiry for 50% Reduction in Tax
(BOI Certificate No. 1766 (2)/2548)		
Petform Thailand Ltd (BOI Certificate No. 1971 (2)/2548)	2014	-
Petform Thailand Ltd (BOI Certificate No. 2170 (2)/2548)	2014	-
Petform Thailand Ltd (BOI Certificate No. 1853 (2)/2550)	2016	-
Petform Thailand Ltd (BOI Certificate No. 1334 (2)/2550)	2015	-
Petform Thailand Ltd (BOI Certificate No. 1095 (2)/2554)	2020	-
Petform Thailand Ltd (BOI Certificate No. 1057 (2)/2553)	2018	-
Petform Thailand Ltd (BOI Certificate No. 1812 (2)/2552)	2017	-
Petform Thailand Ltd (BOI Certificate No. 1414 (2)/2553)	2018	-
Petform Thailand Ltd (BOI Certificate No. 1811 (2)/2552)	2018	-
Petform Thailand Ltd (BOI Certificate No. 2556 (2)/2554)	2020	-
Petform Thailand Ltd (BOI Certificate No. 1213 (2)/2555)	2020	2025
Petform Thailand Ltd (BOI Certificate No. 2142 (2)/2555)	2020	2025
Petform Thailand Ltd (BOI Certificate No. 5137(2)/2556)	2021	-
Petform Thailand Ltd (BOI Certificate No. 5138(2)/2556)	2021	-
Petform Thailand Ltd (BOI Certificate No. 5139(2)/2556)	2021	-
Petform Thailand Ltd (BOI Certificate No. 2094(2)/2556)	2021	2026
Petform Thailand Ltd (BOI Certificate No. 1199(2)/2557)	2022	-
Petform Thailand Ltd (BOI Certificate No. 2453(2)/2557)	2023	-

Subsidiary	Year of Expiry for Full Exemption from Tax	Year of Expiry for 50% Reduction in Tax
Petform Thailand Ltd (BOI Certificate No. 2435(2)/2557)	2023	-
Indorama Ventures Global Services Ltd (BOI Certificate No. 1236/2557)	-	-
ES FiberVisions (Thailand) Ltd (BOI Certificate No. 2412(2)/2557)	2025	2030
Indorama Holdings Ltd (BOI Certificate No. 2111 (1)/2553)	2019	2024
Indorama Holdings Ltd (BOI Certificate No. 1289 (2)/2555)	2020	-

Policy on Investment in Subsidiaries and Associated Companies and Policy on Management of Subsidiaries and Associated Companies

The Company will have investments in subsidiaries and associated companies aggregating not less than 75 percent of the Company's total investment in securities. In case, if the Company wishes to make any material change to the policy or scope of investments, such as lowering the proportion of investment in subsidiaries and associated companies in relation to the Company's total investments in securities to less than 75 percent, the Company will obtain prior approval from the shareholders meeting.

The Company has a policy on investment in subsidiaries and associated companies of the Company that the Company will invest in business with a high potential of growth and long-term profitability. Moreover, the Company will send its representative to be a director of such subsidiaries and associated companies; such representative might be the Chairman of the Board of Directors, Chief Executive Officer, Managing Director, directors, the high level managers of the Company or any third person who has the qualifications and experience suitable for such business with no conflict of interest directly with the business of those subsidiaries. Such representative shall manage and administer the business of such subsidiaries according to the regulations and procedures provided in the Articles of Association of the Company and of such subsidiaries and relevant laws.

5. Legal Disputes

As of 31 December 2015, there is no material litigation against the Company or its subsidiaries which could have a negative effect on our assets exceeding 5% of shareholder's equity. In addition, there is no lawsuit, which could have a significant effect on our business. However, the following litigations could have an adverse effect on the respective subsidiaries of the Company, the impact of which cannot be estimated.

Lawsuit of our subsidiaries

Law Suits as at 31 December 2015:

Jay Easler Litigation in United States District Court for the District of South Carolina against several entities including indirect subsidiaries of the Company, namely Auriga Polymers Inc. ("Auriga"), and Indorama Ventures USA LLC* ("IVLUSA")

**Indorama Ventures USA Inc. was converted to a limited liability company under the name of "Indorama Ventures USA LLC" with effective from October 2, 2014.*

On January 7, 2014 Jay Easler, on behalf of himself and a proposed class, filed an action in the United States District Court for the District of South Carolina against Hoechst Celanese Corporation , HNA Holdings, Inc., CNA Holdings, Inc., Hercules, Inc., Ashland, Inc., Hyston Fibers, Inc., Messer Greishiem, Inc., Arteva Specialties S.a.r.l d/b/a/ "KoSa", Johns Manville Corporation, INVISTA S.a.r.l d/b/a "Invista", Teijin Monofilament U.S., Inc., Teijin Holdings USA, Inc., Auriga Polymers Inc., Indorama Ventures USA, Inc.

The defendants are entities that are alleged to have owned or conducted industrial operations at the property on which Auriga Polymers Inc. currently operates on Dewberry Road, Spartanburg, South Carolina (the "Site"). The Complaint alleges that discharges on the Site beginning in the 1970s and through 2008, at least, created a plume of contamination that migrated off-site and contaminated the property of plaintiff and a class of all homeowners within a 2 mile radius of the Site.

However, the Complaint only includes a general allegation that all owners have routinely discharged into the adjoining creek during the period from 1970 to 2008 which occurred before AuAuriga Polymers purchased the Site located on the dispute area. Auriga Polymers has purchased the Site on March 1, 2011.

The Complaint asserts claims under the Resource Conservation and Recovery Act ("RCRA"); public nuisance, private nuisance and negligence. The relief sought includes injunctive relief are to stop the contamination, to implement a prompt full investigation and remediation of the contamination, and to establish a medical monitoring fund; and damages, both compensatory and punitive.

Under a November 11, 2010 Purchase and Sale Agreement with Invista, Auriga has indemnification for certain Excluded Liabilities and Buyer Indemnifiable Liabilities. Auriga can seek indemnification under this Agreement for the claims asserted in the Complaint. For Excluded Liabilities, Auriga is entitled to 100% indemnification. Excluded Liabilities relate to specifically identified environmental issues, many of which are identified in the Complaint. For Buyer Indemnifiable Liabilities, the

Agreement provides a lowering percentage of indemnification based on when the claim arose. For claims arising within 2 years of the closing (March 1, 2011), the indemnification is 100%. Claims arising thereafter are indemnified at 75% or less as the time between assertion of the claim and the time of closing increases. Auriga gave notice of the claims asserted in the Complaint in September, 2012, within 2 years of the closing, and expects 100% indemnification for the Buyer Indemnifiable claims in the Complaint. Under the Agreement, Buyer Indemnifiable Liabilities are subject to an Environmental Deductible and an Environmental Indemnity Cap.

Auriga intends to vigorously defend against the claims in the Complaint. The allegations in the Complaint assert that most of the discharges occurred while Hoechst Celanese Corporation or its successors ("Celanese") operated on the Site. Auriga is considering a request from Celanese that defendants enter into a joint defense agreement to conserve defense costs and coordinate on common issues. Auriga has asserted an indemnification demand, and will pursue its indemnification rights, under the Purchase and Sale Agreement with Invista and Auriga will pursue insurance coverage for its costs of defense in the litigation and any liability found against it. On December 22, 2014, the Plaintiff's counsel proposed a settlement offer to the defendants. As of October 26, 2015, the settlement agreement between the parties is under review by the parties.

Given the lack of allegations of discharges during Auriga's ownership, the substantial allegations of discharges during Celanese ownership of the Site and the absence of any discovery, it is impossible at this time to determine whether Auriga will be found liable and, if so to what degree. Further, it is extremely unlikely that this action will order a cessation of plant operations.

6. General Information and Other Information

General Information

Name	: Indorama Ventures Public Company Limited
Symbol	: IVL
Head Office	: 75/102 Ocean Tower 2, 37 th Floor, Sukhumvit 19 (Wattana), Asoke Road, Klongtoey Nuea, Wattana, Bangkok 10110 Tel: 0-2-661-6661 Fax: 0-2-661-6664-5 www.indoramaventures.com
Type of Business	: Holding Company
Company Registration No	: 0107552000201
Registered Capital	: Baht 5,666,010,449 divided into 5,666,010,449 common shares of par value at Baht 1
Paid-Up Capital	: Baht 4,814,272,115 divided into 4,814,272,115 common shares of par value at Baht 1

Other Information

Share Registrar	: Thailand Securities Depository Company Limited 93 Ratchadapisek Road, Dindaeng, Bangkok 10400, Thailand Tel: 0-2-009-9000 Fax: 0-2-009-9001
Debenture Registrar	: Bangkok Bank Public Company Limited 333 Silom Road, Bangrak, Bangkok 10500, Thailand Tel: 0-2-230-1136 Fax: 0-2-626-4545-6
Debenture Holders' Representative	: Bank of Ayudhya Public Company Limited 1222 Rama III Bang Phongphang, Yan Nawa, Bangkok 10120, Thailand Tel: 0-2-296-3582 Fax: 0-2-296-2202
Auditor	: KPMG Phoomchai Audit Limited 195 Empire Tower, 50 th – 51 st Floor, South Sathorn Road, Yannawa, Sathorn, Bangkok 10120, Thailand Tel: 0-2-677-2000 Fax: 0-2-677-2222
Legal Advisor	: Weerawong, Chinnavat & Peangpanor Ltd. 540 Mercury Tower, 22 nd Floor, Ploenchit Road, Lumpini, Pathumwan, Bangkok 10330, Thailand Tel: 0-2-264-8000 Fax: 0-2-657-2222

Investments of the Company

As of 31 December 2015

EG&EO Business				
No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
1	Indorama Ventures (Oxide & Glycols) LLC Corporation Service Company, 2711 Centerville Rd, Ste 400, Wilmington, Delaware 19808, USA Tel: +1 847 943 3100 Fax: +1 847 607 9941	-	-	100.00%
Ethylene Cracker Business				
No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
1	Indorama Ventures Olefins LLC 2711 Centerville Road, Suite 400, Wilmington, New Castle County, Delaware 19808, USA Tel: +1 302 636 5401 Fax: +1 302 636 5454	-	-	75.99%
PTA Business				
No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
1	TPT Petrochemicals Public Company Limited 75/116-117, Ocean Tower 2, 41 st Floor, Soi Sukhumvit 19 (Wattana), Asoke Road, Klongtoey Nuer, Wattana, Bangkok 10110, Thailand Tel: +66 2 661 6661 Fax: +662 661 6664 – 5	Common Share	492,500,000	99.97%
2	Indorama Petrochem Limited 75/93, Ocean Tower 2, 35 th Floor, Soi Sukhumvit 19 (Wattana), Asoke Road, Klongtoey Nuer, Wattana, Bangkok 10110, Thailand Tel: +66 2 661 6661 Fax: +66 2 661 6664 – 5	Common Share	614,616,651	99.99%
3	PT Indorama Petrochemicals Graha Irama, 16th Floor, Jalan H R Rasuna Said, Blok X-1, Kav. 1-2, Kuningan Timur, Setiabudi, Jakarta Selatan 12950 - Indonesia Tel: +62 21 526 1555 Fax: +62 21 526 443	Common Share Class B1 Class B2 Class C Class D	1,833,743 166,257 50,000 200,000 250,000	47.16%
4	Indorama Ventures PTA Montreal LP 10200 rue Sherbrooke E., Montreal-Est, Quebec H1B 1B4, Canada Tel: +1 514 645 7887 Fax: +1 514 645 9115	Partnership	290,000,000	100%
PTA & PET Business				
No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
1	Indorama Ventures Europe B.V. Markweg 201, 3198NB Europoort, Rotterdam, Netherlands Tel: +31 181 285 400 Fax: +31 181 285 405	-	-	100.00%
PET Business				
No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
1	Indorama Polymers Public Company Limited 75/102, 103 Ocean Tower 2, 37 th Floor, Soi Sukhumvit 19 (Wattana), Asoke Road, Klongtoey Nuer, Wattana, Bangkok 10110, Thailand Tel: +66 2 661 6661 Fax: +662 661 6664 – 5	Common Share	1,382,197,870	99.64%

PET Business				
No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
2	Asia Pet (Thailand) Limited 75/102 Ocean Tower 2, 37 th Floor, Soi Sukhumvit 19 (Wattana), Asoke Road, Klongtoey Nuer, Wattana, Bangkok 10110, Thailand Tel: +66 2 661 6661 Fax: +662 661 6664 - 5	Common Share	45,000,000	99.99%
3	Indorama Ventures Polymers (Rayong) Public Company Limited 75/93 Ocean Tower 2, 35th Floor, Soi Sukhumvit 19 (Wattana), Asoke Road, Klongtoey Nuer, Wattana, Bangkok 10110, Thailand Tel: +66 2 661 6661 Fax: +66 2 661 6664-5	Common Share	20,201,356	99.997%
4	Guangdong IVL PET Polymer Company Limited No.1 Meihua Road, Shuikou Town, Kaiping City, Guangdong, People's Republic Of China Tel: +86 750 220 9680	-	-	100.00%
5	UAB Orion Global pet Metalo G.16, Klaipeda, Republic of Lithuania, LT-94102 Tel: +370 846 300684 Fax: +370 846 300749	Common Share	776,880	100.00%
6	Indorama PET (Nigeria) Limited East West Expressway, Eleme, Port Harcourt, Rivers State, Nigeria	Common Share	450,000,000	90.00%
7	Indorama Polymers Workington Limited Siddick, Workington, Cumbria, CA14 1LG, United Kingdom Tel: +44 1900 609375 / +44 1900 609342 Fax: +44 1900 609317	Common Share	1	100.00%
8	PT. Indorama Polypet Indonesia JL. Raya Anyar Km.121, Kel. Kepuh, Kec. Ciwandan, Cilegon 42445 (Banten), Indonesia Tel: +62 254 602300 Fax: +62 254 602940	Common Share	3,500	100.00%
9	Indorama Ventures Adana PET Sanayi Anonim Sirketi Yolgecen Mah. Turhan Cemal Berikar Blv., Turkey Tel: +90 322 441 1973 Fax: +90 322 441 0110	Common Share	5,489,505,865	100.00%
10	Indorama Ventures Corlu PET Sanayi Anonim Sirketi Karamehmet Mahallesi, Avrupa Serbest Bölgesi, 3. Sokak No: 2 Ergene/Tekirdag - 59860, Turkey Tel: +90 282 691 1100	Common Share	16,217,649	100.00%
11	Indorama Ventures Poland Sp.z o.o. ul. Krzywa Gora 19, 87-805 Wloclawek, Poland Tel: +48 54 4166442 Fax: +48 54 4166449	Common Share	993,988	100.00%
12	Ottana Polimeri S.R.L. Strada Provinciale 17, Km 18, Ottana (NU)-08020, Italy	Quota	1	50.00%

PET Business				
No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
13	Indorama Ventures Ecomex, S. DE R.L. DE C.V. Carretera Libre a Colotlan 6800. Colonia Extramuros. Zapopan, Jalisco, Mexico Tel: +52 5533 1561 3732	Equity Quota Class I	2	51.00%
14	Indorama Ventures Polymers Mexico S. de R.L. de C.V. Prolongacion Paseo De La Reforma 1015 A-Piso 2 Desarrollo Santa Fe Distrito, Federal 01376 Mexico, D.F. Tel: +52 55 91775700 Fax: +52 55 52924919	Equity Quota Class I	2	100.00%
15	Alphapet, Inc. 1301 Finley Island Road, Decatur, Alabama, AL35601, USA Tel: +1 256 308 1180 Fax: +1 256 341 5926	Common Share	4,400	100.00%
16	Auriga Polymers Inc. 1550 Dewberry Road, Spartanburg, SC 29307, USA	Common Share	5,000	100.00%
17	Starpet Inc 801 Pineview Road, Asheboro, North Carolina 27203, USA	Common Share	5,000	100.00%
18	Micro Polypet Private Limited 303-305, Gopal Heights, Netaji Subhash Place, New Delhi-110034 India Tel: +91 11 4111 7777 Fax: +91 11 4111 7717	Common Share	10,000,000	100.00%
Packaging Business				
No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
1	Petform (Thailand) Limited 85 Moo 11, Bangnga-Thaklong Road, Khao Samorkorn Sub-district, Thawoong District, Lopburi Province, Thailand Tel: +66 36 489 116 Fax: +66 36 489 115,117	Common Share	7,500,000	59.99%
2	Beverage Plastics Limited Silverwood Business Park, 70 Silverwood Road, Lurgan, Craigavon, County Armagh, BT66 6LN, Northern Ireland Tel: +44 283 831 1800 Fax: +44 283 831 1888	Common Share	600,000	51.00%
3	Indorama Ventures Packaging (Nigeria) Ltd. Eleme Petrochemicals Complex, East-West Expressway, Eleme, Rivers State, Nigeria Tel: +234 805 250 1268	Common Share	150,000,000	100.00%
4	Indorama Ventures Packaging (Ghana) Ltd. Plot 234 Meridian Ed. COMM.2 Accra, Greater Accra, BOX CO PMB 350 TEMA GA/R, Ghana	Common Share	500,000	100.00%

Packaging Business				
No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
5	Indorama Ventures Packaging (Philippines) Corporation Building 1, Southern Luzon Comple, Brgy. Baranggay Batino, Calamba City, Laguna, Philippines Tel: +63 495 303 592 / +63 495 340 036	Common Share	1,075,005	99.99%
6	Indorama Ventures Packaging (Myanmar) Limited Lot No. A11-1, Thilawa Special Economic Zone A, Yangon Region, Myanmar	Common Share	2,194,307	99.99%
Polyester Business				
No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
1	Indorama Polyester Industries Public Company Limited 75/92, Ocean Tower 2, 35 th Floor, Soi Sukhumvit 19 (Wattana), Asoke Road, Klongtoey Nuer, Wattana, Bangkok 10110, Thailand Tel: +66 2 661 6661 Fax: +66 2 661 6664 - 5	Common Share	2,202,850,000	99.55%
2	ES Fibervisions (Thailand) Co., Ltd. 75/64 Ocean Tower 2, 28 th Floor, Soi Sukhumvit 19 (Wattana), Asoke Road, Klongtoey Nuer, Wattana, Bangkok 10110, Thailand Tel: +66 2 661 6661 Fax: +66 2 661 6664 - 5	Common Share	41,000,000	49.99%
3	PT Indorama Polychem Indonesia JL. Desa Kembang Kuning, Kecamatan Jatiluhur, Purwakarta(Jawa Barat) Indonesia Tel: +62 264 207727 Fax: +62 264 211260	Common Share	60,000	100.00%
4	PT. Indorama Ventures Indonesia Desa Cihuni, RT/RW 002/004, Cihuni, Pagedangan, Tangerang, Banten, 15820 Indonesia Tel: +6 221 5371111 Fax: +62 21 5378811	Series A Series B	80,000 2,812,500	99.99%
5	PT. Indorama Polyester Industries Indonesia JL. Surya Lestari Kav. 1-16A, Kawasan Industry Surya Cipta, Desa Kutamekar, Kec Ciampel, Karawang, 41361, Jawa Barat, Indonesia Tel: +66 267 440501 Fax: +66 267 440764	Common Share	20,000	99.98%
6	Trevira GmbH Max-Fischer-Strasse 11, 86399 Bobingen, Federal Republic of Germany Tel: +49 8234 9688 2100 Fax: +49 8234 9688 5355	-	-	75.00%
7	PHP Fibers GmbH Industrie Center Obernburg, 63784 Obernburg, Germany Tel: +49 6022 81 2552 Fax: +49 6022 81 31 2552	Common Share	25,001	80.00%

Polyester Business				
No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
8	Shenma-PHP (Pingdingshan) Air Bag Yarn Manufacturing Co., Ltd. Pingdingshan City, Henan Province, China Tel: +86 49 6022 81 2552 Fax: +86 49 6022 81 31 2552	-	-	39.20%
9	Polyamide High Performance Inc. 300 Serrano Way, Scottsboro, AL 35768, USA Tel: +1 49 6022 81 2552 Fax: +1 49 6022 81 31 2552	Common Share	1,000	80.00%
10	SafeTweave, Inc. 302 Serrano Way, Scottsboro, AL 35769, USA Tel: +1 49 6022 81 2552 Fax: +1 49 6022 81 31 2552	Common Share	1,000	80.00%
11	FiberVisions A/S Engdraget 22, Varde Denmark, DK-6800 Denmark Tel: +45 7994 2200 Fax: +45 7994 2201	Class A Class B	122,949,441 29,117,600	100.00%
12	FiberVisions (China) Textile Products Ltd. No. 29 Heng Shan Rd., New District, Suzhou, China Tel: +86 512 6823 1099 Fax: +86 512 6823 0021	-	-	100.00%
13	ES FiberVisions (Suzhou) Co., Ltd. No. 29 Hengshan Rd. Suzhou New District 215011 China Tel: +86 512 6823 1099 Fax: +86 512 6823 0021	-	-	50.00%
14	FiberVisions Manufacturing Company The Corporation Trust Company, 1209 Orange St., Wilmington, DE 19801, USA Tel: +1 302 658-7581 Fax: +1 302 655-2480	Common Share	100	100.00%
15	FiberVisions Products, Inc. CT Corporation System, 1202 Peachtree St., Atlanta, GA 30361, USA Tel: +1 800 241 8922 Fax: +1 404 888 7795	Common Share	25,000	100.00%
16	Wellman France Recyclage S.A.S. Zone Industrielle de Regret 55100 Verdun, France Tel: +33 971 002 005 Fax: +33 329 843 104	Common Share	500	100.00%
17	Wellman International Limited Mullagh, Kells, Co.Meath, Ireland Tel: +353 46 9280200 Fax: +353 46 9280300	Common Share	1,100,850	100.00%
18	Performance Fibers (Kaiping) Company Limited 3 Hongqiao Road, Changsha, Kaiping, Guangdong Province, People's Republic Of China Tel: +86 750 2278000 Fax: +86 750 2218093	-	-	100.00%
19	Performance Fibers (Kaiping) No.2 Company Limited 1 Huan Cui Road West, Cuishan Lake New Region, Kaiping, Guangdong Province, People's Republic Of China Tel: +86 750 2278000 Fax: +86 750 2218093	-	-	100.00%

Wool Business				
No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
1	Indorama Holdings Limited 75/64, 65 Ocean Tower 2, 28 th Floor, Soi Sukhumvit 19 (Wattana), Asoke Road, Klongtoey Nuer, Wattana, Bangkok 10110, Thailand Tel: +66 2 661 6661 Fax: +66 2 661 6664 - 5	Common Share	77,446,800	99.81%
Holding Company Business				
No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
1	Indo Polymers Mauritius Limited Les Cascades, Edith Cavell Street, Port Louis, Republic of Mauritius	Common Share	867,240,558	100.00%
2	Indorama Netherlands Cooperatief U.A. Markweg 201, 3198NB Europoort, Rotterdam, Netherlands Tel: +31 181 285 400 Fax: +31 181 285 405	-	-	100.00%
3	Indorama Netherlands B.V. Markweg 201, 3198NB Europoort, Rotterdam, Netherlands Tel: +31 181 285 400 Fax: +31 181 2850 405	Common Share	18,000	100.00%
4	Beacon Trading (UK) Limited 23 Northiam, Woodside Park, N 12 7 ET, London, United Kingdom	Common Share	70,000	100.00%
5	Beverage Plastics (Holdings) Limited Silverwood Business Park, 70 Silverwood Road, Lurgan Craigavon, County Armagh, BT 66 6 LN, Northern Ireland Tel: +44 2838311800 Fax: +44 2838311888	Class A Class B Class C	5,100 2,450 2,450	51.00%
6	KP Equity Partners Inc. Lot 2&3, Level 3, Wisma Lazenda, Jalan, Kemajuan, 87000 F.T. Labuan, Malaysia Tel: +60 87 414 073 Fax: +60 87 413 281	Common Share	10,000	100.00%
7	PHP Overseas Investments GmbH Industries Center Obernburg, 63784, Obernburg, Germany Tel: +49 6022 81 2552 Fax: +49 6022 81 31 2552	Common Share	2	80.00%
8	Trevira Holdings GmbH Max-Fischer-Strasse 11, 86399 Bobingen, Federal Republic of Germany	Common Share	25,000	75.00%
9	Indorama Ventures Recycling Netherlands B.V. Markweg 201, 3198 NB Europoort, Rotterdam, Netherlands Tel: +31 181 285 400 Fax: +31 181 2850 405	Common Share	18,000	100.00%
10	Indorama Ventures Holdings LP Corporation Service Company, 2711 Centerville Rd, Suite 400, Wilmington, Delaware 19808, USA	-	-	100.00%

Holding Company Business				
No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
11	Indorama Ventures USA Holdings LP Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington, Delaware 19808, USA	-	-	100.00%
12	Indorama Ventures Performance Fibers Holdings USA, LLC Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington, Delaware 19808, USA Tel: +1 302 636-5401 Fax: +1 302 636-5454	Partnership	100	100.00%
13	FiberVisions Corporation 3700 Crestwood Pkwy, Suite 900, Duluth, GA 30096, USA Tel: +1 678 578 7240 Fax: +1 678 578 7276	Common Share	1,000	100.00%
14	FiberVisions (China) A/S Engdraget 22, Varde Denmark, DK-6800, Denmark Tel: +45 7994 2200 Fax: +45 7994 2201	Common Share	100,000	100.00%
15	ES FiberVisions Holdings Aps Engdraget 22, Varde Denmark, DK- 6800, Denmark Tel: +45 7994 2200 Fax: +45 7994 2201	Common Share	48,500	50.00%
16	ES FiberVisions Hong Kong Limited Unit No. 2810. 28/F, The Metropolis Tower, 10 Metropolis Drive, Hung Hom, Kowloon, Hong Kong Tel: +852 2970 5555 Fax: +852 2970 5678	Common Share	616,010	50.00%
17	Indorama Ventures OGL Holdings LP Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington, Delaware 19808, USA	-	-	100.00%
18	FiberVisions, L.P. 3700 Crestwood Pkwy, Suite 900, Duluth, GA 30096, USA Tel: +1 (302) 658-7581 Fax: +1 (302) 655-2480	-	-	100.00%
19	ES FiberVisions, Inc. 3700 Crestwood Pkwy, Suite 900, Duluth, GA 30096 U.S.A. Tel: +1 302 636 5401 Fax: +1 302 636 5454	Common Share	100	50.00%
20	IVL Holding S. de R.L. de C.V. Prolongacion Paseo De La Reforma 1015 Torre A-2 Desarrollo Santa Fe Distrito, Federal 01376, Mexico, D.F. Tel: +52 55 91775700 Fax: +52 55 52924919	Equity Quota Series A	2	100.00%
21	Grupo Indorama Ventures S.de R.L. C.V. Prolongacion Paseo De La Reforma 1015 Torre A-2 Desarrollo Santa Fe Distrito, Federal 01376 Mexico, D.F. Tel: +52 55 91775700 Fax: +52 55 52924919	Equity Quota Class I	2	100.00%
22	Indorama Ventures Alphapet Holdings, Inc. Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington, DE 19808, USA	Common Share	100	100.00%

Holding Company Business				
No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
23	Indorama Ventures Polyholding LLC 2711 Centerville Road, Suite 400, Wilmington, USA	Partnership	100	100.00%
24	Indorama Polymers (USA) LLC 1301 Finley Island Road, Decatur, Alabama, AL 35601, USA Tel: +1 256 308 1180 Fax: +1 256 341 5926	-	-	100.00%
25	Indorama Ventures USA LLC 2711 Centerville Road, Suite 400, Wilmington, New Castle County, Delaware 19808	Partnership	100	100.00%
26	IVL Belgium N.V. Jules Bordetlaan 160, 1140 Evere, Belgium	Common Share	30,615	99.99%
27	UAB Ottana Polimeri Europe Metalo G.16, Klaipeda, Republic of Lithuania, LT-94102	Common Share	21,072,080	50.00%
28	Performance Fibers Holdings Finance, Inc. 874 Walker Road, Suite C, City of Dover, Country of Kent, State of Delaware 19904, USA Tel: +1 678 578 7247 Fax: +1 678 578 7276	Common Share	1,000	100.00%
29	Performance Fibers Asia Holdings, LLC Corporation Trust Center, 1209 Orange St., Wilmington, Delaware 19801, USA Tel: +1 678 578 7247 Fax: +1 678 578 7276	-	-	100.00%
30	Performance Fibers Asia, LLC Corporation Trust Center, 1209 Orange St., Wilmington, Delaware 19801, USA Tel: +1 678 578 7247 Fax: +1 678 578 7276	-	-	100.00%
31	Indorama Ventures Northern Investments Inc. 10200 rue Sherbrooke E., Montreal-Est, Quebec H1B 1B4, Canada Tel: +1 514 645 7887 Fax: +1 514 645 9115	Class A Class B Class C	10,401 149,889,750 256,766,500	100.00%
32	Indorama Ventures Gestion Inc. 10200 rue Sherbrooke E., Montreal-Est, Quebec H1B 1B4, Canada Tel: +1 514 645 7887 Fax: +1 514 645 9115	Common Share	100	100.00%
33	Indorama Ventures Dutch Investments B.V. Markweg 201, 3198NB Europoort, Rotterdam, Netherlands Tel: +31 181 285 400 Fax: +31 181 285 405	Common Share	8,914,320	51.00%
34	Indorama Ventures Investments USA LLC 2711 Centerville Road, Suite 400, Wilmington, New Castle County, Delaware 19808, USA Tel: +1 302 636 5401 Fax: +1 302 636 5454	-	-	100.00%
35	Indorama Ventures Olefins Holding LLC 2711 Centerville Road, Suite 400, Wilmington, New Castle County, Delaware 19808, USA Tel: +1 302 636 5401 Fax: +1 302 636 5454	-	-	100.00%

International Headquarter Business

No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
1	Indorama Ventures Global Services Limited 75/80-81 Ocean Tower 2, 32 nd Floor, Soi Sukhumvit 19 (Wattana), Asoke Road, Klongtoey Nuer, Wattana, Bangkok 10110, Thailand Tel: + 66 2 661 6661 Fax: + 66 2 661 6664 - 5	Common Share	2,000,000	99.99%

Trading & Services Business

No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
1	IVL Singapore Pte. Ltd. 17 Phillip Street#05-01, Grand Building, Singapore (048695)	Common Share	59,000,000	100.00%
2	UAB Indorama Polymers Europe Metalog.16, LT-94102 Klaipeda, Republic of Lithuania Tel: + 370 46 300749 Fax: + 370 46 314323	Common Share	725,088	100.00%
3	UAB Indorama Holdings Europe Metalog.16, LT-94102 Klaipeda, Republic of Lithuania Tel: + 370 46 300749 Fax: + 370 46 314323	Common Share	1,173,952	100.00%
4	Indorama Trading (UK) Limited 23 Northiam, Woodside Park, N 12 7 ET, London, United Kingdom	Common Share	10,000	100.00%
5	Indorama Trading AG Strengelbacherstrasse 1, CH 4800 Zofingen, Switzerland	Common Share	100	100.00%
6	PHP-Shenma Air Bag Yarn Marketing (Shanghai) Co. Ltd. China Merchants Plaza, East Building, Room 1107, No 333 Cheng Du Road (North), Shanghai 200041, China Tel: +49 6022 81 2552 Fax: +49 6022 81 31 2552	Common Share	200,000	40.80%
7	TTI GmbH Kasinostr. 19 – 21, 42103 Wuppertal, Germany Tel: +49 6022 81 2552 Fax: +49 6022 81 31 2552	Common Share	25,100	40.00%
8	Trevira North America, LLC 5206 Leonardslee CT, Charlotte, Mecklenburg County, North Carolina, 28226, USA	-	-	75.00%
9	ES FiberVisions Company Limited 3-3-23 Nakanoshima, Kita-Ku, Osaka 530-0005, Japan Tel: +81 6 6441 3307 Fax: +81 6 6441 3347	Common Share	200	50.00%
10	ES Fiber Visions LP Entity Services (Nevada) LLC, 2215- B Renaissance Dr., Suite 10, Las Vegas, NV 89119, USA Tel: +1 706 357 5100 Fax: +1 706 966 4247	-	-	50.00%
11	ES FiberVisions ApS Engdraget 22, Varde Denmark, DK- 6800 Tel: +45 7994 2200 Fax: +45 7994 2201	-	-	50.00%

Trading & Services Business

No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
12	ES FiberVisions China Limited No. 305, 7Sone, Trade Bldg., GuangBao Rd., Guangzhou, Free Trade Zone, China Tel: +86 20 8220 9018 Fax: +86 20 8220 9973	-	-	50.00%
13	Indorama Ventures Ecomex Services, S. DE R.L. DE C.V. Carretera Libre a Colotlan 6800. Colonia Extramuros. Zapopan, Jalisco, Mexico Tel: +52 5533 1561 3732	Equity Quota Class I	2	51.00%
14	Indorama Ventures Polycom S. de R.L. de C.V. Avenida Prolongacion Paseo De La Reforma 1015 Torre A 2 Piso Desarrollo Santa Fe, Distrito Federal 01376 Mexico, D.F. Tel: +52 55 91775700 Fax: +52 55 52924919	Equity Quota Class I	2	100.00%
15	Indorama Ventures Servicios Corporativos, S. de R.L. de C.V. Prolongacion Paseo De La Reforma 1015 Torre A 2 Piso Desarrollo Santa Fe, Distrito Federal 01376 Mexico, D.F. Tel: +52 55 91775700 Fax: +52 55 52924919	Equity Quota Class I	2	100.00%
16	Performance Fibers (Hongkong) Limited Room 2701, Olympia Plaza, 255 Kings Road, North Point, Hongkong Tel. : + 852 25661063 Fax: + 852 21100033	Common Share	1,000	100.00%
17	4200144 Canada Inc. 3400 First Canadian Centre, 350 - 7th Avenue SW, Calgary, Alberta T2P 3N9, Canada Tel: +1 514 645 7887 (229) Fax: +1 514 645 9115	Class A	100	100.00%

Transportation Business

No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
1	Indorama Ventures Logistics LLC Corporation Service Company, 2711 Centerville Rd, Ste 400, Wilmington, Delaware 19808, USA Tel: +1 847 943 3100 Fax: +1 847 607 9941	-	-	100.00%

Non-Operating Business

No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
1	Indorama Polymers Rotterdam B.V. Markweg 201, 3198 NB, Europoort, Harbour No.6347, Rotterdam, Netherlands Tel: +31 181 285 400 Fax: +31 181 285 405	Common Share	18,000	100.00%
2	Indorama Holdings Rotterdam B.V. Markweg 201, 3198 NB, Europoort, Rotterdam, Netherlands Tel: +31 181 285 400 Fax: +31 181 285 405	Common Share	18,000	100.00%

Non-Operating Business

No.	Company Name/Address	Type of Shares	Shares Issued	Shareholding
3	MJR Recycling B.V. Tengnagelwaard 5, NL-6917 AE Spijk(Gld), Netherlands Tel: +31 656 6250 Fax: +31 656 6251	Common Share	18,100	100.00%
4	Wellman International Handellsgesellschaft GmbH Konrad-Zuse-Strabe 4a, 59174 Kamen, Germany Tel: +49 2307 96789 0 Fax: +49 2307 96789 10	-	-	100.00%
5	FiberVisions vermögensverwaltungs mbH Local Court of Dusseldorf Werdener Straße 1, 40227 Düsseldorf Germany Tel: +49 211 8306 0 Fax: +49 211 87565 116 0	Common Share	3,000,000	100.00%
6	Indorama Ventures North America LLC 2711 Centerville Road, Suite 400, Wilmington, New Castle County, Delaware 19808 USA Tel: +1 302 636-5401 Fax: +1 302 636-5454	-	-	100.00%
7	Eternity Infrabuild Private Limited 303-305, Gopal Heights, Netaji Subhash Place, New Delhi-110034 India Tel: +91 11 4111 7777 Fax: +91 11 4111 7717	Common Share	2,000,000	99.99%
8	Sanchit Polymers Private Limited 303-305, Gopal Heights, Netaji Subhash Place, New Delhi-110034, India Tel: +91 11 4111 7777 Fax: +91 11 4111 7717	Common Share	2,000,000	99.99%