

INDORAMA
VENTURES

SUSTAINABILITY REPORT

2014

www.indoramaventures.com

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Indorama Ventures Public Company Limited

Moving towards
SUSTAINABILITY

An emphasis on
RECYCLING
Business

Business growth with
POSITIVE
ENVIRONMENTAL
and SOCIETAL DEVELOPMENT

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Recycled PET Flakes

Every year, 1.6 billion post consumer PET bottles are delivered to our flake manufacturing facilities across the world. This volume is equivalent to 200,000 barrels of oil and 300,000 tons of harmful emissions saved annually.



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ABOUT THIS
REPORT

About This Report

This is Indorama Ventures
Fifth Annual Sustainability Report.



▲ A two-megawatt solar farm in Indorama Holdings, Thailand.

As part of our commitment to transparency and to strengthen our engagement with stakeholders regarding our sustainability efforts, we publish our sustainability report annually. This report provides insight into our approach to sustainability, objectives, strategy and performance.

Our Sustainability Report for 2014 covers our operations on four continents and 17 countries worldwide for the 12 month-period of calendar year 2014. The report is prepared in accordance with Sustainability Reporting Guidelines of Global Reporting Initiative Generation 4 (GRI G4). Our sustainability report is available on our website at www.indoramaventures.com/sustainability.

Indorama Ventures' (IVL's) Fifth Annual Sustainability Report

We declare this report to be in accordance with the Core option of the GRI G4 Guidelines. The key elements of the G4 approach that we have focused on in this report, in keeping with the intent of the guidelines, are described below.

Principles for Defining Report Content

We conduct a materiality assessment as a method to screen the contents that are significant to our business operations and our stakeholder decisions, making it focused on economic, environmental and social aspects. The GRI G4 principles on defining report content are applied throughout. The process consists of three steps as shown below.

1. Content Selection:

The process involves the analysis and identification of sustainability-related materiality aspects. Materiality aspects of significance to the Company's business strategy and operation occur in the economic, environmental and social areas of the business and are identified based on business opportunities, level of risk and possible impacts to our long term sustainable growth. Materiality issues may affect our external stakeholders, such as customer relationship management, supply chain management, etc. The process involves the evaluation of external trends relating to our business. Furthermore, stakeholders' points of view arising from our stakeholder engagement process are used as inputs to identify the issues that are important to them.

2. Materiality Assessment:

We conducted a survey internally across all operations, businesses and key functions, we identified eight material issues that could have significant impact on the company and our stakeholders. These have been broadly grouped. The materiality assessment enables IVL to prioritize what we need to manage. The results of the assessment are used to prepare a materiality matrix. Please see details of the matrix on page 43.

3. Internal Control and External Assurance:

We believe in accurate and transparent reporting. Content and data disclosed in our sustainability report is independently verified by external assurance. Indicators were selected for assurance based on the issues and indicators that are most significant to the sustainability performance of the business, as well as the key risks identified by the whole group. The assured data is indicated in the index in the GRI section.

4. Stakeholder Engagement

Engagement means bringing stakeholders into decisions that affect or interest them. At a group level, the Sustainability Steering Committee

oversees engagement and brings potential gaps to the Sustainability Committee's attention. To develop an understanding of our stakeholders, we communicated with stakeholders about their expectations, interests, benefits and concerns then prioritize and determine how to engage them.

In the table shown in the chapter "What Sustainability Means to Us", we identify key stakeholders, outlining our approach to engage them, highlight issues and our response.

Acquisitions and Divestments

No significant acquisition and divestment that would alter the performance data presented in the previous report.

Reporting Boundaries

The reporting boundaries cover our disclosures across Indorama Ventures as a group, that is, including subsidiaries and factories under our operational control, within social, environmental and economic parameters. Unless otherwise stated, the boundaries exclude joint-ventures, subsidiaries, partners and contractors.

The data measurement methodology provided herein remains the same as in our 2013 report but are even more systematic. However, since we are a global company, facilities in different countries may have a different approach to data collection, and as part of our desire for continuous improvement, we are moving towards data collection that is more systemic and consistent going forward. We will be expanding the scope of our reporting in the future.

Information provided in this Sustainability Report has been verified and assured by an independent external auditor and an Assurance Statement is available in the Independent Assurance Statement section of this report. The verification of data is limited to sites located in Thailand only.

INDORAMA
VENTURES

GCEO

MESSAGE



THE POLYESTER VALUE CHAIN

The polyester value chain is comprised of PTA, PET resin, and Polyester, which are subsequently used in the production of numerous and varying products and markets



Dear Stakeholders,

I have the great pleasure to inform you that for Indorama Ventures, 2014 has been an excellent year in terms of our sustainability initiatives. Sustainability enhances our operational efficiency and makes us a more responsible corporate citizen. I am also proud to mention that this year marks 25 years of business for Indorama Ventures. From what started as one facility in Thailand, we have grown today to be a global leader in the intermediate petrochemicals industry.

The world around us is changing and we must continue to adapt along with it. We are refocusing and reshaping ourselves towards our shared strategic goal of playing a leading role in a sustainable economy. Our story transports us from where we are, from being a vital part of a process, to being right at the heart of what is happening today. You may know that we are a major resource of recycled raw materials. We source, we make, people consume and we recycle, to reshape the future out of the present by creating a vital virtual circle of strength.

What does Sustainability mean for Indorama Ventures – what are the material issues?

Sustainability encompasses every aspect of how we do business. It provides an opportunity to identify key material issues related to innovation, collaboration with stakeholders, governance and compliance, the supply chain, product stewardship, customers, health and safety, efficiency, the environment and climate change and human resources, all of which impact the organization and its stakeholders.

Strategic priorities, key topics for short, medium and long term

During the year we have undertaken materiality assessments focusing on identifying material aspects that reflect the organization's significant economic, environmental and social impacts.

As part of this process, inputs from relevant corporate functions, business groups, and operational sites have been obtained and have identified key material aspects that are mentioned in detail in this report.

Our sustainability highlights for 2014

As we move towards our goals, we are focused on enhancing our accountability and transparency. We completed several operational excellence measures throughout the year that have given good results. **We reduced the intensity**



We continue to integrate sustainability considerations across all our operations and throughout the lifecycle of our products.



per tonne of production for the following eco-efficiency indicators: greenhouse gas emissions by 9.7%, electricity consumption by 8.1%, water consumption by 4.2%, and fuel consumption by 9.5% compared to 2013. We are also proud that we made good progress in expanding our recycling business into Thailand and Mexico.

Innovation and Recycling

Our growth strategy is very much focused on innovation and recycling. Where innovation feeds invention, and bright ideas stimulate brilliant ideas, expect Indorama Ventures to be there. We have been working in collaboration with some of our key stakeholders, whose needs and priorities point the way to future innovation.

Respect for internationally recognized standards and how standards relate to strategies and success

Our corporate policies all stress the need to respect laws, rules and regulations globally. However, we also believe that internationally-recognized standards are a valuable means to benchmark ourselves and provide value to our stakeholders. Most of our companies are following ISO standards and certification lends credibility to, and confidence in, our business.

Trends affecting Indorama Ventures

The industry has largely passed through a cycle of lightweighting PET containers and packaging. Post-consumer waste recycling has been the next big trend over the past few years, and one that we have embraced. For this reason, at the global level, we are one of the steering board members of Project MainStream, spearheaded by the World Economic Forum, The Ellen MacArthur Foundation, and McKinsey & Company. It is a multi-industry, CEO-led global initiative to accelerate business driven innovation and help scale the circular economy.

Climate Change

As I mentioned during the Company's 25-year anniversary celebration, in January 2015, we are giving priority to climate change. The Company has growth but nowadays, that is not enough. Companies can't afford to just stand by and watch society going through its paces in ignorance of what is to come. We must look at growth that is responsible.

Focus on 2015 and beyond

We continue to integrate sustainability considerations across all our operations and throughout the lifecycle of our products. This includes a focus in 2015 and onwards on reducing our carbon footprint at facilities worldwide through measures such as our operational excellence initiatives, expansion of recycling business, use of bio MEG, use of natural energy, improvement of efficiency in supply chain management, logistics, etc.



Alok Lohia
Group CEO

Outlook on main challenges, targets and goals for 3-5 years

The Company plans to focus more on sustainability in 2015. We are in the process of establishing our targets for 2018, making sure our ongoing focus is in line with our ability to achieve the greatest impact. The challenges we face, such as continued global economic weakness, are offset by continuing demand for our products.

Key events, achievements, failures related to targets

Economically, 2014 was a continued period of industry weakness, but it was a terrific achievement to again outperform peers and prove our strategies will provide a sustainable future for the business. We achieved a greatly improved core net profit in 2014, an increase of 145% over the previous year, and thereby exceeded our targeted returns.

Other strategic approaches

Finally, none of this good work would be possible without the dedication of the IVL global family. Our approach has been to develop people first as the return on investment is corporate sustainability. This strategy to further integrate sustainability into our culture is a direct result of the outstanding work our team members do every day. I would like to thank all of them for their commitment to continuously look at ways to manufacture better products using fewer raw materials, consume less energy and reduce waste. I also would like to thank all our stakeholders, partners and business associates who wholeheartedly support us to achieve success and to reach higher altitudes.

Alok Lohia
Group CEO

HIGHLIGHTS

OF THE YEAR 2014

PHP Fibers, Obernburg, Germany



Highlights of the Year 2014

▶ Manufacturing facility of PHP Fibers in Obernburg, Germany. It is a leading producer of yarns for the automotive sector.



▲ Indorama Ventures Adana PET, a producer of PET resins located in a fast-growing market, Turkey.

IVL has extended its reach into specialized materials with the acquisition of PHP Fibers (“PHP”) with 80% shareholding. This is a globally-recognized manufacturer of branded, high-tenacity polyamide and polyester filament yarns and one of the leading suppliers in Europe for the automotive safety supply chain. PHP’s production facilities are located in USA, Europe and China. This acquisition significantly enhances the Company’s High Value-added (HVA) product portfolio with the addition of high-performance automotive and industrial products.

As part of our geographical coverage into fast-growing, emerging markets, the Company acquired 100% stake in Artenius TurkPET, a PET producer in Adana, Turkey, with a capacity of 130,000 tonnes per annum. The company has been renamed

Indorama Ventures Adana PET after acquisition. Turkey is a growing market with a deeply urbanized economy enjoying high PET demand growth. Its Eurasian location provides ease of access to Central Asia, Middle East, North Africa and Southern Europe via excellent land and sea infrastructure.

Some of the Company’s subsidiaries in the Netherlands and the USA have been restructured to improve operational and fiscal efficiencies, business workflows and to pool common resources.

Developing our focus on recycling, the Company entered the recycling business in Mexico by partially integrating flakes produced by a new joint venture entity there into our Recycled PET product, which is in line with our strategy to promote sustainability through recycling and reducing carbon footprint.



▲ PET preform manufacturing facility of Indorama Ventures Packaging (Philippines), Calamba, the Philippines.

Thought leadership

Thought leadership is an integral part of our culture. As a company, we demonstrate leadership through the quality and breadth of our competitive products and our contribution to advancing the sustainability. We believe that it is not enough to implement our sustainability-related policies but to demonstrate a leadership position in the way such policies are implemented and thought of. One significant benchmark is to achieve accolades of credible authorities, through active participation and receipt of awards and certificates, and Indorama Ventures has proven track record.

One of the most important strides taken forward by the company has been in the implementation of anti-corruption policies and activities. We have been recognized for our activities with CAC Certification, awarded to companies who demonstrate their commitment to fighting against corruption through the implementation of policies and effective mechanisms by Thailand's Private Sector Collective Action Coalition Against Corruption (CAC).

Since listing in the Thai Stock Market in 2010, rapid progress has been made in developing our sustainability report to meet the needs of stakeholders, and this success was signified by receipt of The Outstanding Sustainability Report Award in 2014 from The Thai Listed Companies Association, The Securities and Exchange Commission and Thaipat, a private company that is considered an expert on sustainability in Thailand. This recognition was accompanied by the CSR Recognition Award 2014 in the category of Rising Star from The Corporate Social Responsibility Institute.

Besides recognition for our corporate governance and social responsibility in Thailand, Forbes magazine recognized our rapid success and growth, naming us as one of Asia's Fabulous 50 companies (the Fab 50 for short). This was followed by the Company being named 47th in Chemical and Engineering's Global Top 50 ranking of the world's largest chemical producers for 2014.

Innovation: New product, new application

Auriga Polymers' latest product launch is Polyclear[®] EBM 5506 (an improved "second generation" EBM resin). This is an example of a product with Life Cycle Impact as the research data shows our product would perform exceptionally well in the PET recycle stream.

The Association of Post-consumer Plastic Recyclers ("APR") has recognized Auriga Polymers' Polyclear[®] EBM PET 5506 resin and bottles produced from this resin, as meeting or exceeding the APR PET Critical Guidance Document protocol. APR thanked Auriga Polymers for its cooperation in using this important protocol. The protocol is intended to improve the quality of recycled bottles by helping innovators to make informed decisions about the consequences of PET bottle innovations making this protocol beneficial to world-wide sustainable recycling efforts.

Auriga Polymers' Polyclear[®] EBM PET 5506 resin and bottles made from it, are recognised by APR as meeting or exceeding the APR PET Critical Guidance Document protocol

Contributed to Circular Economy by open Innovation with Ioniqa:

Indorama Ventures has been in cooperation with Ioniqa Technologies since 2011 for developing technology suitable for recycling colored PET waste into 'virgin' PET raw materials thereby contributing to the circular economy. Ioniqa has developed proprietary magnetic fluids and a process to separate colorants and other impurities from depolymerized, colored PET waste. This technology shows promise for upcycling colored PET flake and even fiber waste that has been historically very difficult to re-use in food packaging, and other high value applications for clear recycled PET.



▲ Polyclear[®] EBM 5506 (resins/bottles), the latest innovation from our Pet Producer, Auriga Polymers, North Carolina, USA.

Contribution to the Circular Economy by recycling and reusing colored PET waste into 'virgin' PET raw material.

Participating in Project MainStream:

We are a part of Project MainStream, a multi-industry, CEO-led global initiative to accelerate business driven innovation and help scale the circular economy. It is a collaboration led by the World Economic Forum and the Ellen MacArthur Foundation, with McKinsey & Company as a knowledge partner and IVL a member of the steering board. MainStream aims to address numerous issues such as landfills, litter, contamination of oceans by plastics, carbon emissions and accumulating toxicity. The global initiative is gathering commitments from key stakeholders and will establish proof of concept of the economic and environmental benefits of a circular economy that will accelerate the transition, and thereby establish it as the new norm. This could help businesses and cities save US\$ 500 million in materials and prevent 100 million tonnes of waste globally.

Participation in Project MainStream by the Company: a multi-industry, CEO-led global initiative.

Project Recycling:

In 2014, Indorama Polyester Industries Nakhon Pathom, Thailand has commissioned a new recycling plant in its existing plant premises for recycling of bottles and production of recycled hollow fiber and rPET resins.

Indorama Ventures Poland (IVP)

IVP has successfully executed state of the art technology for the first time in the world for enhancing the capacity from 430 tons per day to 630 tons per day PET resin capacity using innovative concepts in process engineering.

Our PET plant in Wloclawek, Poland, considerably reduced production costs through economies of scale and improvement in energy and

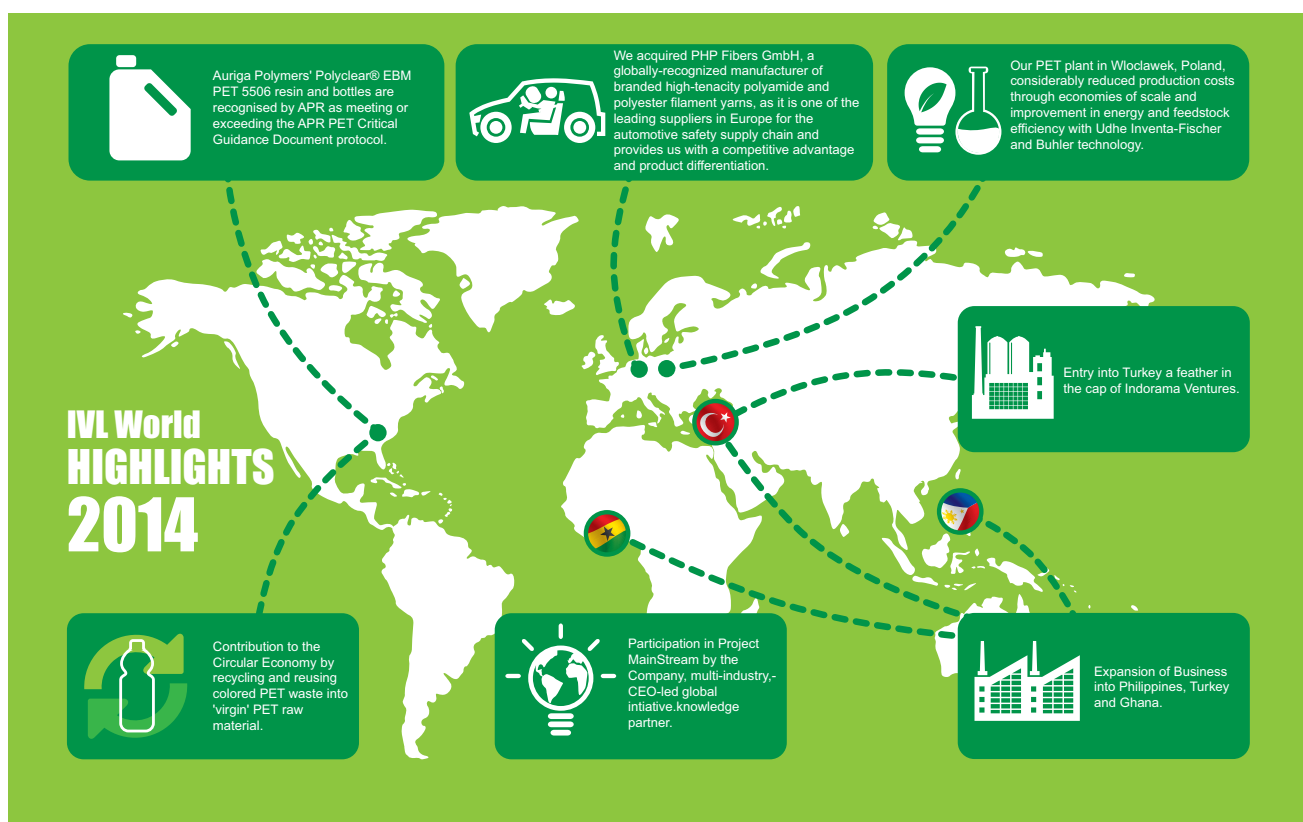
feedstock efficiency with Udhe Inventa-Fischer and Buhler technology.

Operational excellence initiatives

Significant value creation has been achieved in process optimization, packaging rationalization and energy conservation as a group. More details on operational excellence initiatives are given under various chapters in this report.

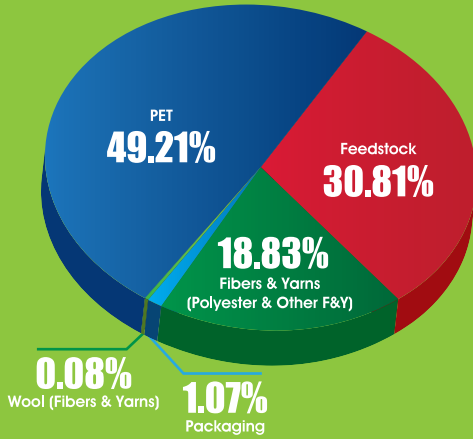
Renewable energy

In October 2014, a 1 MW solar roof project was commissioned for supplying power to the Provincial Electricity Authority of Thailand under the renewable energy scheme. We are presently commissioning additional 1.1 MW capacity solar roof Project at one of our plants in Lopburi, Thailand, which is expected to be operational in May 2015. This will be the largest solar roof project for captive consumption in Thailand.



2014 KEY HIGHLIGHTS

STRONG SUSTAINABILITY with Wide Product Portfolio



CHAMPIONING the Circular Economy



Total Production (in '000 Tons)

2013 5,804

2014 6,249

Net Sales (in USD Million)

2013 7,456

2014 7,509

Core Net Profit (in USD Million)

2013 67

2014 155

Operating Cash Flow (in USD Million)

2013 341

2014 690

SUSTAINABLE FUTURE GROWTH

6
R&D Centers Worldwide

PATENTS
250+

125
R&D Employees

USA

- Spartanburg Recycled PET
- Decatur Recycled PET

Ireland

- Mullagh Recycled Polyester Fibers

The Netherlands

- Rotterdam Bio-PET
- Spijk Bottle Flakes

Lithuania

- Klaipeda Solar Power
- Wind Power

China

- Guangdong Bio-PET

Thailand

- Nakhon Pathom Recycled Polyester Fibers
- Bottle Flakes
- Rayong Recycled Polyester Fibers
- Lopburi Solar Power

Mexico

- Queretaro Recycled PET
- Bio PET
- Zapopan Bottle Flakes

Germany

- Guben Solar Power
- Babingen Biodegradable Polymers

France

- Verdun Bottle Flakes

IVL BUSINESS

OVERVIEW



IVL Business Overview

Indorama Ventures Public Company Limited ("IVL") is one of the world's leading petrochemicals producers, with a global manufacturing footprint across Africa, Asia, Europe and North America. The Company's portfolio is comprised

of necessities (commodity products that are a necessary part of daily life) and *High Value-added* (HVA) categories of Polymers, Fibers, and Packaging. We use selectively self-manufactured Ethylene Oxide/Glycols and PTA where

economical. Our products serve major players in consumer products, i.e. beverages, hygiene, industrial and automotive verticals. We have 14,000 employees worldwide and consolidated revenue of USD 7.5 billion in 2014. IVL, the

USA

- StarPet
- AlphaPet¹
- Auriga Polymers^{1,6}
- Indorama Ventures (Oxide & Glycols)
- FiberVisions^{5,6}
- PHP Fibers

Mexico

- Indorama Ventures Polymers Mexico^{1,3}
- Indorama Ventures EcoMex

The Netherlands

- Indorama Ventures Europe³
- Wellman International

UK

- Beverage Plastics

Ireland

- Wellman International^{2,6}

France

- Wellman International

Germany

- Trevira^{4,6}
- PHP Fibers

Ghana

- Indorama Ventures Packaging (Ghana)



- PET
- Fibers & Yarns
- PTA
- EO/EG
- Packaging
- ♻️ Bottle Flakes

1) Recycled PET Resins
 2) Recycled Fiber
 3) Bio-PET
 4) Biodegradable Polymers
 5) Bi-co Fibers Technology
 6) R&D Center

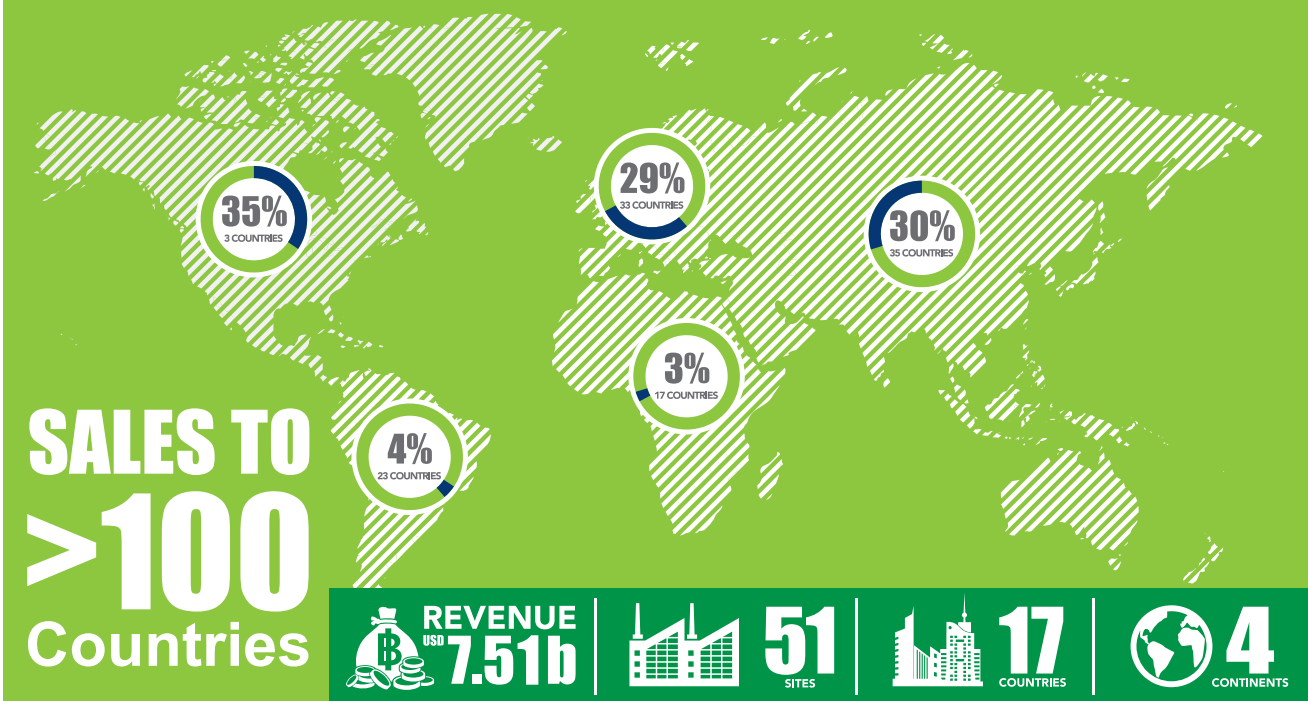
parent company of the group, is listed on the Stock Exchange of Thailand (Symbol: IVL) with its registered office in Bangkok, Thailand. In 2014 we had 51 operating sites in 17 countries on four major continents of the world - Asia, Europe, North America, and Africa.

Our corporate structure comprises of three key business segments Polyethylene Terephthalate (PET) resins, Fibers and Yarns, Purified Terephthalic Acid (PTA) and Ethylene Oxide / Ethylene Glycols (EO/EG). Our focus has always been on the polyester value chain and as

mentioned, we have divided this into necessity products, which are made to scale and have commodity pricing, and high value-added products where the investment and the selling prices are at a premium to necessities.



WORLD LEADER IN POLYESTER VALUE CHAIN PRODUCTS



IVL IS IN

Every **4th** airbag in the world
 Every **3rd** airbag in Europe

2:3 diapers produced in the US and in Europe, premium diapers produced worldwide.
1:2 diapers produced in Asia, diapers produced worldwide.

1:2 bottles in Europe and North America.

Feedstock Business

For us, Feedstock means PTA, or Purified Terephthalic Acid, and MEG or Monoethylene Glycol, both of which are used principally in the manufacture of Polyethylene Terephthalate (PET), which is commonly used to make apparel and plastic bottles.

PTA Business

Terephthalic acid is an organic compound and an odorless free-flowing white crystalline powder. It is a commodity chemical, used principally in making polyester. We entered this business in 2008, with the strategy of developing raw material integration so as to ensure an uninterrupted supply of raw materials while also capturing 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 and the Netherlands.

MEG Business

The other major feedstock produced by Indorama Ventures is Monoethylene Glycol (MEG), which is an organic compound. A major end use of Ethylene Glycol is as antifreeze for automobile radiators, which accounts for over 50% of Ethylene Glycol's commercial uses, but it is also used as raw material in the production of polyester, which accounts for 40% of total Ethylene Glycol consumption globally.

PET Business

PET is part of our core Polyester value chain business. 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

▶ Manufacturing process of polyester fibers and yarns at Indorama Polyester Industries, Nakhon Pathom, Thailand.



and in industrial packaging applications. We also produce PET packaging in the form of preforms, bottles and closures.

Fibers and Yarns

We manufacture a broad range of over 200 products and are one of the few companies present in all key market verticals such as non-wovens, home textiles, technical textiles, automotive and apparel. Indorama Ventures is recognized for its manufacturing consistency and reliability, product quality, use of best practices and processes and our experienced team of professionals. From hygiene to medical uses, geotextiles to home care, virgin to recycled fibers, Indorama Ventures has the production facilities around the world to ensure that our customers can make one order for global delivery.

IVL Group Corporate Structure

The Corporate Structure of the Company is available on our Company's website at www.indoramaventures.com.

Human Capital of the Organization

All of our people are considered to be valuable assets, critical to the growth and profitability of the Company, and striving to provide a conducive and quality oriented work environment with utmost emphasis on safety along with fair and equitable compensation compatible with similar businesses.

The Company gives importance to developing skills, knowledge and potential of its employees and strives to build a work environment that is rich in diversity and will attract and retain high performance employees.

Every new employee who joins the organization is provided with an Employee Induction Programme. The objective of this programme is to ensure that the new employee understands the company, company policies and organizational structure, his job, role and responsibilities, key deliverables, department and company goals and objectives. In addition to the employee induction program we provide skill based training.

The employees are also provided with development programs thereafter to develop and enhance their professional and leadership skills. The training also includes environmental issues to keep them abreast of industry best practices, introduction of new systems. Employees are encouraged to involve themselves in local environmental conservation and preservation projects in the local area they work and live in.



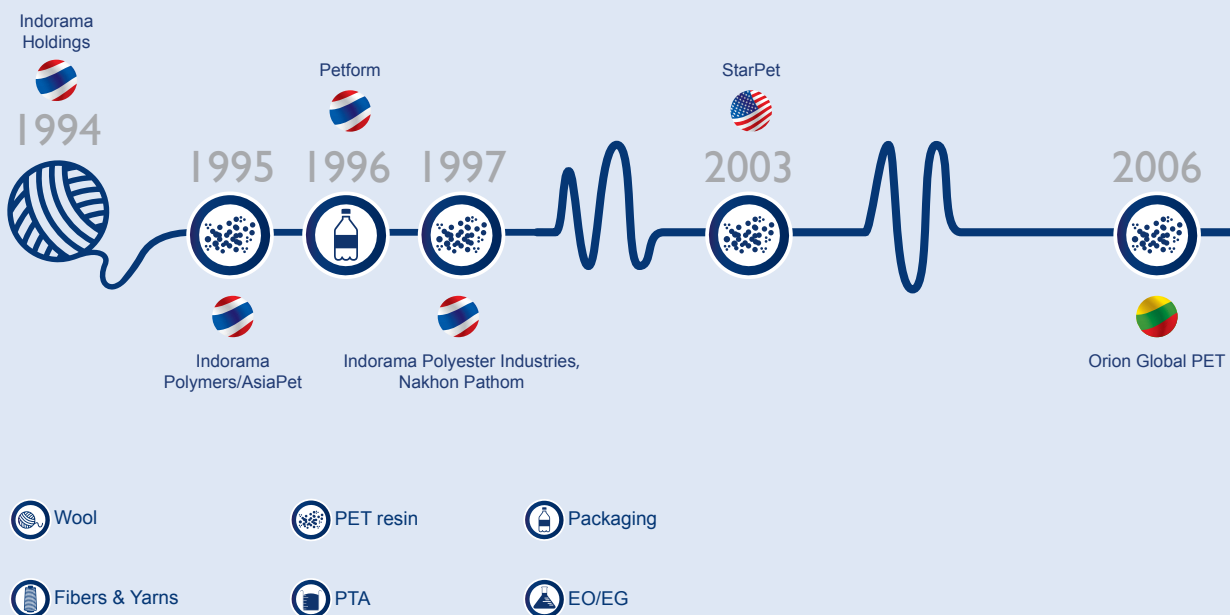
▲ Testing process in a laboratory of Trevira, Germany.



Leadership Skills Development

Corporate Head Office in Bangkok organized a training programme on development of Leadership Skills in 2014 and 49 employees had been trained under this training program to sharpen their leadership skills needed for both personal and professional growth. It provided an insight to the individual to understand his/her own Emotional Intelligence and to build effective relationships with all internal and external stakeholders. The training helped to identify individual's most effective style of leadership.

IVL Milestones



As the Company operates globally, each of its facilities has its own employee welfare policy, which is in line with local laws and regulations. The Company has comprehensive policies on compensation and welfare for employees across all its global locations. These follow the local rules and regulations of the country where they are situated.

We strongly believe that our employees are the foundation of our success and therefore their continued development is a key to our sustainability as a business. Among other issues, employees are developed to have a keener understanding of the environment and their impact on it.

The NCCG Committee of the Company has put into place a succession plan for the Group CEO and key management team in consultation with the Board of Directors. For all other employees, the Global HR department works with line management to create succession plans. To ensure that the succession plans are effective, Global HR implements

employee development and training and has a fast track process for those we believe have high potential.

Industry and Industry Associations

IVL is a member of business organizations and association, such as Project MainStream, the Committee of PET Manufacturers in Europe (CPME), RAL Gütezeichen, Germany, Chambers of Commerce, and participates in industry associations to share opinions and best practices within our industry. Constructive dialogue with authorities, local and national government bodies is best conducted with support of like-minded organizations such as industry or commercial associations.

The Company is politically independent however, and has never provided financial or in-kind contributions to political parties, politicians or related institutions as matter of policy. More details on Industry Associations are given in this report.



WHAT SUSTAINABILITY MEANS TO US



What Sustainability Means to Us



▲ A training program to IVL employees.

From our perspective, **sustainability means business growth with positive environmental and societal continuity**; managing the Triple P of Profits, Planet and People. This includes **Economical, Environmental** and **Social** risks, obligations and opportunities.

Here at Indorama Ventures, we believe in efficient resource utilization, recycling and reuse. We gauge our success not just by economic gain but also by our achievements in preserving the environment and society.

We endeavor to maintain a culture of corporate citizenship with strict adherence to environmental, health and safety standards, corporate governance, anti-corruption regulations, economic prosperity and assurance of the sustainability of all our stakeholders.

Our corporate citizenship stresses:

- Creating value for customers by supplying consistently high-quality products and services;

- Creating value for our investors with good returns;
- Providing a favorable working environment to be an admired company;
- Being a good community neighbor;
- Protecting the environment for future generations by minimizing the environmental footprint we leave behind.

In order to achieve environmental efficiency, our management provides the structures and processes that help embed environmental efficiency into our organization's culture and mitigate risks. Furthermore, the management encourages all our plants to obtain and achieve high standards as exemplified under ISO 14001 and other industry-specific and country-specific standards that exist. In this process, we are very much committed to meeting and surpassing environmental laws and regulations pertaining to each business and region, with periodic analysis and third party inspections conducted at each plant.

“VISION, MISSION, VALUES”

Our Vision/Mission/ Values/Strategy:

Indorama Ventures has a deep commitment to sustainability that serves as the foundation of our overall business strategy.

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.

Values

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 delight 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.

As part of good corporate governance, we have developed several corporate governance-related policies which are available on the Company website www.indoramaventures.com under the Corporate Governance section.

Seven Pillars for Sustainability

Our Sustainability Program is an overarching framework that supports our long-term business strategy and drives continual improvement across seven key areas covering environmental, economic and social aspects. We are committed to achieve the best practices, to secure a sustainable future for the company and its employees, to protect the environment and build a long-term relationship with society. We are committed to ensuring that our business decisions minimize our environmental footprint and contribute to more sustainable outcomes for the environment, our clients and society.



Recycling process of post consumer PET bottles, which become recycled polyester fibers, at Indorama Polyester Industries, Nakhon Pathom, Thailand.



Case Study :

The recycling of PET is a success story for the Company. It is the only example on large scale where the circle is closed at the highest level and where new high quality packaging can be made out of recycled resin. Recycled PET is used to make new bottles and thermoforms. This is especially true for PET thermoforms (mainly trays) which are produced with a content of r-PET (recycled PET) often above 70% and fully complying with food contact regulations.

1. Recycling

Recycling is one of the major sustainability issues for the plastic industry. As such, we make recycling one of the key factors in our business growth strategy to become a more sustainable company. We are promoting recycling activities to the public to raise awareness in society and encouraging fresh thinking and innovation with the use of recycled products.

Project Recycling:

- As part of our Green Initiatives, in 2014 the Company has commissioned a bottle recycling plant, recycled hollow fiber and rPET plant at the site of our subsidiary Indorama Polyester Industries, Nakhon Pathom, Thailand.
- IVL produces recycled fibers from post-consumer bottles across the USA, Europe and Asia that go into making a range of fibers used in hygiene applications, home furnishings, and automotive interiors.
- IVL uses office items such as pens and business cards that are made from 100% recycled PET.

We are a member of RAL Gütezeichen, a Germany-based institute that organizes and promotes the recycling of PET and gives its members a competitive edge over peers. Member companies are part of a strong network that ensures that innovative technological and environmental developments are integrated into a quality assurance process. Certification by RAL Gütezeichen strengthens the corporate image and the foundation of trust between manufacturer and clients. More information is available on the website:

www.wertsoff-pet.de/en

IVL is a member of The Committee of PET Manufacturers in Europe (CPME) which is a non-profit trade association based in Brussels. It represents all of the European PET resin producers who are collectively responsible for 3 million tonnes of production. CPME's mission is to ensure a sustainable PET manufacturing industry in Europe, the health and safety of staff and customers by the application of responsible care codes and strict monitoring and application of all health, safety and environmental legislation. More information is available at <http://www.cpme-pet.org/members>.



▲ New Effluent Treatment Plant of Guangdong IVL PET Polymer, China.



▲ Plants grown by using sludge as manure at Guangdong IVL PET Polymer, China.



A workshop about recycling of PET trays was organized in Brussels by Petcore Europe on The Recycling of Rigid PET Thermoforms. (For more information, see <http://www.petcore.org/news/petcore-europe-organised-workshop-recycling-rigid-pet-thermoforms-brussels>)

2. Waste Reduction

Our waste reduction efforts extend beyond waste and effluents. We focus on refining every step of our process, from reducing raw material input to improving performance through operational eco-efficiency in order to produce more products with less natural resources and energy consumption.

We acknowledge the importance of waste reduction in terms of solid waste and inefficient energy use and aim to control this issue through our management system at each factory, including the establishment of ISO14001 certification and other third-party certificates, taking steps to ensure that our operations are meeting international standards and each asset operates in an environmentally responsible manner.

3. Reusing Resources

The reuse of resources not only increases our business competitiveness through cost reduction, it also protects us against higher natural resource prices in the future.

Closed Loop System™

Wellman International, a wholly owned subsidiary of IVL in Europe, ("Wellman") can recover up to 100% of the polyester components from end-of-life products. Products developed from Wellman Fiber can be re-introduced into the raw material stream and once again made into Wellman Fiber.

Some key highlights of Wellman International's Recycling business:

- Actively engaged in 'Zero waste to landfill project' - an innovative national project which diverts waste from landfill to a 'waste to energy' facility.

- Used 71% of its raw material i.e. over 59,000 tons, which has come from post-consumer recycled materials. This is equivalent to 2.5 billion post-consumer PET bottles.
- Saved 300,000 tons of harmful emissions and 200,000 barrels of oil annually by using recycled versus virgin material.
- Recycles 1.6 billion post-consumer plastic bottles annually.
- Recycled PET fiber has 76% lower emissions than virgin polyester.
- Wellman fibers are made using 86% less energy than virgin PET.
- It has Europe's largest rPET fiber site.
- Wellman fiber demonstrates a low impact on the depletion of the Earth's non-renewable fuel.
- Wellman's closed loop system™ can potentially recover 100% of the polyester from plastic waste.
- The Company is targeting recycling levels similar to or better than 2014.
- Wellman is also targeting improvement opportunities at its waste water treatment plant.

As a commitment to our development plan for efficient water resource usage, several plants have enhanced the efficiency of water treatment plants, water usage at their plants. For instance, Guangdong IVL PET Polymer ("GIVL") a wholly owned subsidiary of the Company in China, has undertaken energy and eco efficient initiatives for reusing of resources during the year. It has upgraded an effluent treatment system 400 m³/day capacity to 1,200 m³/day capacity. With this facility all of the production effluent collected is treated in this facility. The quality of water discharged is also improved to comply with new standards of the local government by reducing Chemical Oxygen Demand (COD) to less than 90 mg/L and Biochemical Oxygen Demand (BOD) to less than 20 mg/L. In addition, GIVL has achieved green recycling by putting the sludge after effluent treatment into the soil to grow plants. The sludge is proven to be good manure. With this process GIVL could reduce the sludge disposal of 50 MT and could save approximately RMB 1 million per annum.

REUSE - REDUCE - RECYCLE: Our Green Initiatives

Innovation collaboration - We believe in Innovation in partnerships in the value chain with our suppliers, customers, industry experts, technology providers and beyond. We will continue to encourage collaboration up and down our value chain.

In 2015 we are committed to increasing the use of renewable feed stocks, expanding post-consumer recycling, reducing our carbon footprint and energy consumption per unit of product through innovative processes.

Our Targets:

- To increase share of recycled PET polymers from current 2% to 20% by 2020 by setting up recycling facilities in North America, Europe, and Asia.
- To increase share of recycled polyester fibers from current 10% to 20% by 2020 with continued focus on key premium segments of business (hygiene and industrial).

4. Renewable Energy

Oil is and will be one of the world's vital sources of energy for many years to come. In addition, climate change is expected to have a financial impact on fuel or new opportunities for alternative energy through incentives or emission taxes.

As energy user, generating green power from natural sources, like solar and wind power, are pursued at Indorama Ventures plants with the goal of reducing our carbon footprint. We want to use renewable and non-fossil fuel whenever possible. Solar photovoltaic (solar PV) energy is the technology we currently employ as it converts sunlight directly into usable electricity with no air or water pollution emissions in the process. In addition, no greenhouse gas is emitted throughout the electricity generation process, which simultaneously ensures IVL reduces its carbon footprint.

Our sites reduced energy consumption from 7.08 GJ/tonne in 2013 to 5.84 GJ/tonne in 2014 by replacing old equipment, upgrading processes and replacing lights with more energy-efficient LED lamps.

5. Employee Development

Our aspiration is to be one of the most admired companies in our sector and therefore we aim to be the chemical company of choice for top talent by providing people the opportunity to develop their careers via talent management programs and attractive benefits packages.

We believe that it is people who make all the difference. With "People First" as one of our four values, our global strategy for Human Resources (HR) is to help unleash this value across every area of our business. The HR function along with the leadership team acts as a catalyst to ensure that congruence of vision and values of IVL becomes the order of the day resulting in accelerating operational and functional excellence. This fosters inclusive and collaborative environment where our employees are well poised to address change.

Energy consumption efficiency improved by

18%
in 2014 over 2013

As a global company, our policy is to eliminate discrimination, not tolerate child or forced labor and uphold our workers' freedom of association and collective bargaining. We also consider diversity and equal opportunity in the workplace to ensure that every employee is recognized without discrimination against age, gender, race, nationality or religion. All these policies are publicly available on our website in several languages.

“

- In Europe, we are the number one manufacturer of rPET flakes and rPET fibers.
- In North America, we are the only producer of PET polymers with recycled content.
- In Thailand, we are the number one producer of rPET flakes and fibers. ”

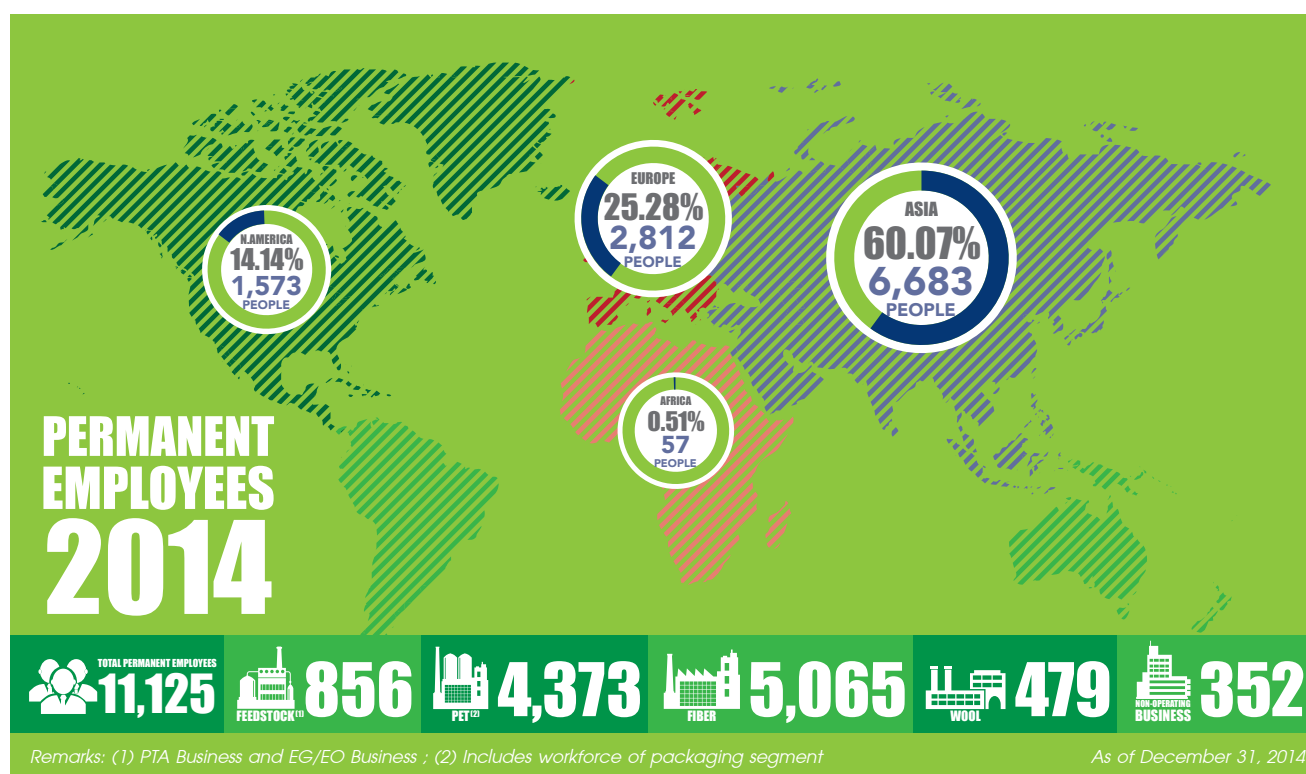
Our global workforce strength can be attributed to an optimal mix of fresh and experienced talent with diverse educational, cultural and national backgrounds. The diversity broadens the talent pool and at the same time, enriches the global views, skills, knowledge, working styles and cultures.

The key highlights of our global workforce in terms of numbers are given in the table.

Number of permanent employees, business segment wise:

Type of Business	As of December 31, 2014
Feedstock	856
PET	4,373
Fiber	5,065
Wool	479
Non-Operating Business	352
Total Permanent Employees	11,125

Remark: Includes part-time and temporary employees. The total is 14,000.



▲ A training program for employees.

Employee Management Strategy

The growth of employees is an important factor for the success and sustainability of IVL. We are a global company and we want our people to have a global outlook. With the Performance Management System (PMS), we identify employees who show a high score both in performance and competence. These employees are identified for career advancement. They are given exposure

to other units of IVL within or outside the country for short intervals initially and then are transferred permanently. These transfers are part of career path which makes them grow their knowledge and skills and enables them to the next level of the hierarchy.



▲ A training program on Safety during an orientation for our new employees at Indorama Ventures Packaging (Nigeria) plant.

Indorama Ventures' talent strategies are knitted with the business plan which includes actionable and segmented insights into talent strengths, needs, and economics. The future human capital risks are identified by pooling the insights from business and functional heads. These risks are mitigated by developing range potential successors for critical roles. Succession strategies like shadowing, insuring mobility/ deputation within and across the locations by giving special projects to fast-track employees ensures potential successors are available at each level. For example, foreseeing the future business opportunities in one of our European facilities, one of these employees was groomed and transferred to be a commercial head. Similarly, considering the scarcity of skills in the upstream business segments, potential engineers are groomed by deputing them in plants across the segment. Often, these high potential engineers are entrusted with the decision for emergency shutdowns, critical breakdowns and are on rotation across plants in different countries.

Training

We strongly believe that talent development is at the heart of building human capital. We view training as a holistic system and not a one-time event. This means that what happens before and after the actual training is just as important as the training itself. The focus is on following a multi-pronged approach embracing the development from technical to behavioral, from organizational to individual level, on-the-job training to e-learning platform.

- Organizational level programs are related to CSR, Safety, and Health & Environment.
- Functional level programs are grouped in Technical & Functional programs.
- Individual level training requirements are addressed through the programs which were related to Behavioral and Managerial related training.

A fire training at Indorama Ventures Polymers Mexico.



Workshop in Strategy Meeting, arranged for executives from all around the world.



Role of the Manager to Inspire Individuals and Teams

Our commitment to our workforce includes enabling managers and leaders to be levers for accelerating the company's growth. We invest in our leaders by providing learning and development opportunities that teach managers how to amplify their employees' talent, energy and capabilities. Being a "talent multiplier" is not about making people work harder, but about engaging them in a way that helps them produce better and more relevant work.

The senior management has four principles of managerial excellence: lead, coach, drive and inspire. These principles define how we reach our individual and collective potential. Managers are role models who inspire their teams, live the passion of our excellence and promote creative environment for best thinking and work.

We equip our leaders to plan, and grow individual talent, align strategy and manage team performance, celebrate and reward performance and drive excellence across the organization.

Succession Planning

The planned talent reviews play a key role in deepening the strength of our bench and help leaders make thoughtful choices about putting the right people to work in the right areas. In these reviews, leaders will be accountable for improving the performance, potential, diversity and continuity of their teams while ensuring the highest return on investments in our talent. This comprehensive career approach will strengthen our diverse global talent with the critical experience and leadership skills they need to achieve our business objectives and realize their own potential.

Rewards and Benefits

We measure our compensation packages against industry standards and seek to match or exceed them. The compensation system is designed to take care of country specific requirements in terms of prevailing statutory benefits, business needs and internal parity. We have devised business segment performance and individual performance linked incentive programs that link the performance to compensation at the individual level. The incentive goals vary by location, but the most prevalent are focused on profitability and operational measures. The incentives are structured to include a targeted level of performance and a variable component to reward executives for achieving superior performance.

Culture

Being a global company, we want an open and creative culture that harnesses diversity and inclusion to inspire ideas and ignite innovation. All units are unique in terms of their culture. However, Operation Excellence and innovation have brought a significant shift in the culture of cost saving and development of new products.

There is an emphasis for expats to learn the local language to help them to get integrated with the local culture easily. Learning of the local language by expats is given additional incentives in terms of remuneration. We recognize there is no single approach or finish line for this type of work. There are many factors that need to be in play to create high-performing, diverse and inclusive teams. Team composition, manager excellence and team culture are all critical to success. While we take an innovative approach to this work, we balance it with the need to offer the fundamentals through education and awareness programs. These basic principles of diversity and inclusion

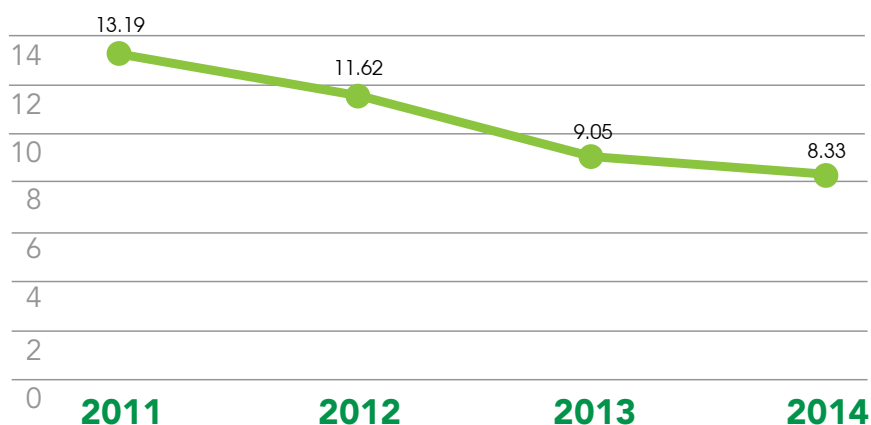
not only make us a better company, but provide the ability to contribute to making a better world. Another important aspect of this is gender diversity and hence the ratio of female employees is about 25% of the workforce.

Health and Safety

We promote and manage a healthy and safe working environment for employees. We offer everything from healthy-living pledges included in employee-benefit plans to risk-based safety assessments and tracking globally. We provide extensive safety training to employees based on the type of job they do and the level of risk associated with that job.

We track and assess recordable and lost-time injuries frequency rates against industry and benchmarked world-class averages. We use internal and external audits to assess facility performance, on a one- to three-year cycle based on performance and risk profile - targeting high-hazard and large-population facilities. We audit for compliance with our strict environmental, safety and health standards.

Total Recordable Injury Rate (TRIR) (injuries per million hours)



More details on Health & safety are given under Chapter Material Social Issues.



Material Labor Disputes in Past Three Years

Since its establishment, the Company has never had any material labor disputes.

6. Stakeholder Engagement

Stakeholder engagement is one of Indorama Ventures' Pillars for Sustainability. More details on Stakeholder Engagement are given under Chapter 7: What Matters.

7. Local Community Development

We are committed to strengthening local communities and contributing towards sustainable and long-term benefits in the areas where we operate. We strive to be a responsible neighbor globally and dedicate our knowledge and resources to building better communities and to grow together in a sustainable manner. Our local community development programs consist of six focus areas: philanthropy, arts and cultural programs and sponsorships, environment, education, community health and wellbeing, and employee volunteerism.

Corporate Social Responsibility

Corporate Social Responsibility with 'Seven Pillars' is the key area covering environmental, economic and social aspects that IVL commits to achieve the best practices not only to secure the sustainable future of the company and employees, but also to protect the environment and build a long-term relationship with society.

Philanthropy

We support organizations that improve the quality of life in the communities where we have our business. Each site has its own funds for charitable donations to support select national, nonprofit and nongovernmental organization (NGOs) as well as educational institutions that serve communities in which they operate. We do not provide direct aid to individuals or political groups or candidates. In order to help us make the greatest impact, we support charities that align with our CSR practices and are within the community. Our focus areas are education, health, the environment, arts and culture, natural disaster relief and community development.

We undertake many acts of philanthropy each year as citizens and members of the community. Here are some of the key contributions made.

Indorama Ventures donated money to Operation Smile Thailand to perform surgery on children with cleft lips and palates around the country.



25 scholarships were given to students with good grades at Wat Krok Yai Cha school, Wat Map Chalood school, Ban Map Ta Phut school, Wat Ta Kuan school and Maptaphut-phun-phitayakran school.

Indorama Ventures celebrated the 87th Birthday Anniversary of His Majesty the King of Thailand by providing free lunches and scholarship funds for children at the Mahamek home for boys.



Art and Culture:

Art and culture are an essential part of civilization and we want to encourage the continuation of the benefits provided by these factors of life.

A painting contest (Art Imagine) at schools in Maptaphut Municipality, Rayong, Thailand provided a scholarship to the winner who illustrated an "ECO Industrial Town".

All Thai factories participated in Songkran (Thai New Year). Our management, expats and Thai staff celebrated with ceremonies and participated with their local community to support local traditional activities and maintain long-term relationships between our plants and neighboring communities.



Health and Wellbeing:

As a business, we not only want our employees to be healthy, but as our employees often live in the local community, we have to ensure everyone is receiving the benefit of a healthy life.

Together with the Community Partnership Association (CPA), the Company arranged a "Mobile Medical Clinic" to offer physical checkups and medical treatment for people in the community.

We donated 10 "Port-A-Cath" devices to the Bangkok Breast Cancer Support Group, Thailand. The devices will be donated to breast cancer patients who are undergoing chemotherapy treatment.



Community:

Sometimes, we have to go further than others in promoting the lives of our communities. Assisting them to learn new skills is important as it allows them to stand up for themselves and create their own careers.

We organized a workshop teaching how to make woven plastic baskets in the nearby community. This workshop aimed to help create careers for local people.

Our staff taught people how to make items from post-consumer PET under the slogan "We Love the Earth" at Flat Din Daeng Community, Bangkok, Thailand.



We organized a DIY class as part of the "Eco Life" project for students in Wat Krok Yai Cha School, Rayong, Thailand. This project aims to help improve the financial status of nearby communities.



Education:

Education is an essential part of our lives. Without it, we may not get that essential start to a long and prosperous life. Therefore, we encourage our people to go out into the community and contribute their knowledge for the benefit of others.

Our factories in Thailand organized English training by management spouses and employees for children in the community. The purpose of this project was to strengthen English communication skills of the students.



Students from the Faculty of Public Health, Burapha University, Thailand, visited us to learn about our effective environmental management and safety management systems.

We taught Master Degree students under the AIESEC-Youth to Business Forum at Chulalongkorn University to learn how to run a sustainable business.



We held a seminar for investors called "Understanding IVL" at the Stock Exchange of Thailand, educating them about the company, its business, markets and strategy, providing them a basic understanding of petrochemicals and finance related to our business.

The Environment

Without a clean environment, health and other issues are created. We therefore want our communities to realize that there is an economic value to keeping the community clean.



We had set up a successful Waste Recycle Bank project in Ban Nong Fab School, Rayong in 2010 and added a second waste recycle bank project in Wat Krok Yai Cha School, Rayong in 2014. The banks help to create awareness and cleaner and healthier communities by educating students to reduce and better manage waste. Waste collected by students is weighed and a certain amount of money is credited to them based on the type of waste they provide. Money received is kept in a special school bank account for use as a scholarship.



No. of student members
(including community)

300
members

Total waste collected

4,569.10
Kilograms

Employee Waste Recycle Bank

A factory waste recycle bank (along the same principles as our school waste bank projects) was set up on World Environmental Day so that employees earn extra money, increase awareness and save the environment.



In Poland we joined with other chemical companies in Wloclawek in "A Tree for a Bottle" project organized by the Ministry of Environment. The campaign encourages kids in the area to collect discarded PET bottles. Each child then receives a tree in return for the collected bottles, which are later recycled.

Over 3,086,237 PET bottles from around Poland were collected and 2,380 trees planted. Our company sponsors two prizes, the 2nd prize in the category efficiency and the 2nd prize in the category quantity of collected bottles.

We planted Alexandrian Laurel trees and Portia trees at Aow-Takuan Beach in Rayong Province, Thailand, to help the environment and create a pleasant atmosphere for visitors.

Number of companies joined

28
companies

Total waste collected

5,652.02
Kilograms



RECO Young Designer Competition

We wanted to open the eyes of people to the possibility of using waste as a new material that can be used to create wonderful designs. That is why the RECO project was created, and it has proven to be very successful.

This is the first competition in Thailand to challenge young designers to create fashion and product designs from recycled PET and Polyester fibers and yarns. RECO Young Designer Competition is now in its fourth year. The competition aims to encourage students and freelance designers to create eco-friendly products.

The competitors attend a free design workshop conducted by industry professionals. We provide them a budget to create their designs. All finalists showcase their creations in the grand finale. We ensure winners are interviewed on television and magazines and promote them to help their careers.



▲ The award-winning product design "Creative Yourself", a combination of an old pottery and woven plastic wire made from PET bottles.

Employee Volunteer Work

We want to encourage all employees to play a part in the community and to care what happens to others. For this reason, employee volunteerism is an important part of our working life.



Our employees fixed electric equipment at Chumchon Wat Tubma School in Thailand.

Two of our U.S. companies joined the "March of Dimes Walkers for Babies," to raise funds in support of research aimed at preventing birth defects, premature birth and infant mortality.



APPROACH TO MANAGING **SUSTAINABILITY**



Approach to Managing Sustainability



▲ Mr. D.K. Agarwal, CEO of Feedstock and PET Business, addressed on organizational structure for sustainability.

1. Governance

Organizational Structure - supporting sustainability

Sustainability is vital to the future of business and can no longer be viewed as a separate function or effort. It is aligned with long-term business strategy and integrated into all business functions of the organization. There are many factors that affect the outcome of sustainability initiatives and properly managing these factors ensures optimal performance and return on investment. For this reason, we embed sustainability into our overall corporate strategy.

The structure of management and sustainability functions of the Company are given in 2014 Annual Report of the Company under section 'Management Structure' and 'Our Responsibility and Sustainability' respectively.

Sustainability Committee

The Board of Directors of the Company in 2013 formed the Enterprise Risk Management Committee (the 'Committee') comprising five members including two Independent Directors. The Committee is chaired by Mr. Alope Lohia, the Group CEO and Vice-Chairman of the Board. The names of Committee Members can be found on our website www.indoramaventures.com under Our Company section and the details of the Committee Members can be found in Board of Directors section of Annual Report of the Company. In November 2014, the Board renamed the Enterprise Risk Management Committee the "Sustainability Committee" (the 'Committee').



▲ Senior management attended Anti-corruption Training.

Sustainability Steering Committee

The Sustainability Steering Committee was formed in 2014 with senior executives having versatile experience in different functions and businesses. The Committee advances the objectives of sustainability and implements the sustainability practices across all entities in the group. More details on Steering Committee are given in Annual Report under section 'Our Responsibility and Sustainability'.

Our Approach and Sustainability Program

We have a deep commitment to sustainability that serves as the foundation of our overall business strategy.

Corporate Governance

Indorama Ventures PCL (IVL) is committed to the highest standards of corporate governance and strongly believes in striking a balance between economic, environment and social goals. Corporate governance is a key to create credibility for the company as it enables the company to a sustainable growth and increases long term value for its various stakeholders. The Board of Directors and management are committed to the implementation and practice of our Corporate Governance principles in all entities across the globe and this reflects our adherence to what is fair, right and legal in the most transparent and ethical manner.

Anti-corruption and Bribery

The Company's Code of Conduct for Directors and Employees explains among other things the Company's firm stance against bribery and corruption. The Company adheres to Anti-Corruption Policy, the UK Bribery Act and all local, national and international laws where appropriate.



▲ IVL Head Office arranged a training program on Anti-corruption for employees.



Case Study: Anti-corruption Policy implementation in 2014

Indorama Ventures embraces the values of being an anti-corruption-driven organization, therefore this is one of our key commitments to foster the ethics needed to counter corruption in our culture.

In January 2014, an anti-corruption policy was issued as part of the company's corporate governance policies to ensure that the Company and its subsidiaries have the appropriate systems and procedures to prevent bribery and corruption.

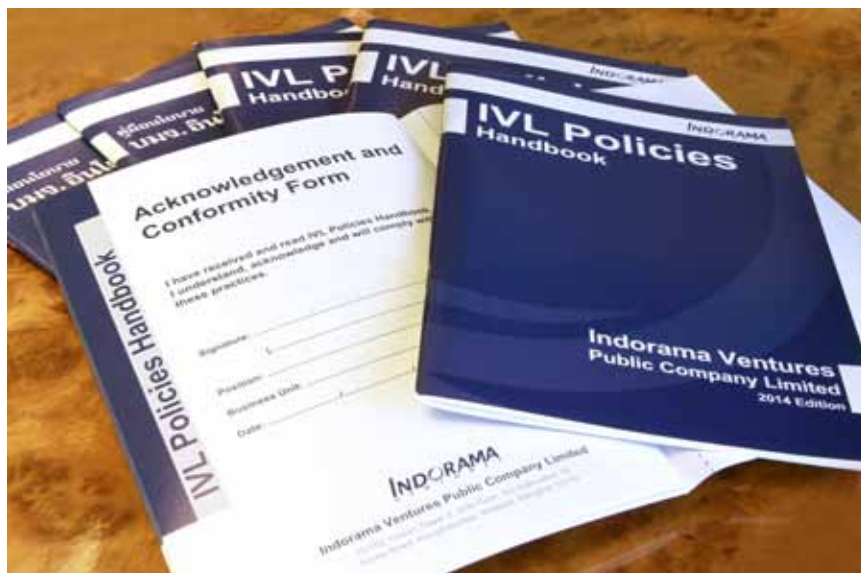
Our Anti-corruption Policy and other policies are available in 12 languages on our website www.indoramaventures.com under the Corporate Governance section.

To ensure that the policy is well communicated to our employees, the Company started a training program in July 2014. The training was conducted both at the Head Office and at Thai sites, and separately run in Thai and English languages to accommodate all of our employees. As part of our continuous global campaign, anti-corruption training video and brochure were disseminated to overseas units to ensure that our policies are communicated, and the same standard practice made available worldwide.

Having successfully implemented an anti-corruption campaign within our organization, we have expanded our policy through our supply chain.

IVL has received the Collective Action Coalition Against Corruption (CAC) certification from the Institute of Directors in October 2014. Anti-Corruption Policy and other policies are available on our website www.indoramaventures.com under the Corporate Governance section. ”

IVL Policies handbooks for employees. ▶



The publically available Corporate Governance Policy follows the guidelines set out by the Stock Exchange of Thailand (SET), Thai Institute of Directors (IOD) and the criteria of Corporate Governance of Organization for Economic Co-operation and Development (OECD) principles. The policies define the framework of duties and responsibilities of the Board of Directors, management and employees.

“**Indorama Ventures has been given the highest rating of “Excellent” by the Thai Institute of Directors (IOD) from 2013 - 2014. The criteria looked at by the IOD includes five categories: the rights of shareholders; equitable treatment of shareholders; role of stakeholders; disclosure and transparency; and Board responsibilities.**”

Corporate Governance Policy Awareness Campaign 2014

As part of the Company’s corporate governance framework, Corporate Governance Policy Awareness Campaign (CGPAC) was established in 2013, aiming at reinforcing all IVL employees understand and are aware of corporate governance policies. From the establishment of CGPAC, a set of activities including policy training program, policy communication, and induction have been continuously introduced, developed and undertaken throughout the organization, to ensure that the implementation is carried out in the spirit that they were created.

The policies and standards are periodically reviewed to keep it current with the requirement of good practices and ensure the effective implementation.

This initiative has ensured that new staff members are aware of the Company’s corporate governance policies and all IVL sites have fully implemented training courses that are either live seminars or online self-learning courses. The CGPAC Committee will facilitate further training courses and implement an online test of knowledge in 2015.

For the continued practice of good Corporate Governance in 2014 the Company has received the following awards:



CSR Recognition award from the Stock Exchange of Thailand



Top Corporate Governance Report 2014 award from the Stock Exchange of Thailand



Outstanding Sustainability Report award from the Stock Exchange of Thailand



Collective Action Coalition Against Corruption (CAC) certification from the Thai Institute of Directors.

2. Compliance

a. Governance in Subsidiary and Associated Companies

It is the Company's policy to have as a minimum one representative from Thailand to be a director of its subsidiaries and associated companies. That representative manages and administers the business of the subsidiary(s) according to the regulations and procedures provided in the Articles of Association of the Company and of the subsidiary(s) and relevant laws; the representative will implement the policies, procedures, guidelines and recommendations of Indorama Ventures, the parent Company.

b. Supplier and Contractor Procurement Policies

Indorama Ventures and its subsidiaries including affiliates are committed to conduct its business in accordance with all applicable laws, regulations and the highest ethical standards, and a strategic approach to corporate responsibility.

To ensure alignment across the supply chain, the Company has a 'Supplier Code of Conduct' in place. The Supplier Code of Conduct sets out the minimum standard of business behavior expected of the suppliers so that they act in a way that is ethical and responsible and aims to ensure compliance with applicable laws and regulations.

The provisions of this Supplier Code of Conduct set forth the company's expectations from all suppliers, regardless of their formal, legal status or relationship with the supplier, meaning that the Supplier Code of Conduct applies to employees, assigned consultants as well as workers who are engaged informally, on short-term contracts, or on a part-time basis.

In 2014, the Company rolled out the Supplier Code of Conduct to its tier-1 suppliers and all the suppliers will be informed by 2015 eventually to comply with said code in conformity with the Company's policies.

This Supplier Code of Conduct applies to any sub-contractor(s) of the supplier, providing goods or services to the supplier; it must be cascaded down to all subcontractors. The supplier is fully responsible for ensuring compliance by any sub-contractor(s) as if it were the supplier itself. To ensure compliance, Indorama Ventures reserves the right to audit the supplier and the supplier's sub-contractors.

c. Enterprise Risk Management, Internal Audit and Internal Controls

We believe in effective and transparent corporate governance and proper enterprise risk management, effective internal controls, to ensure ethical conduct and regulatory compliance, in delivering business benefits and sustainability through our organization.

Risk Management

IVL has an Enterprise Risk Management structure in place at both Company and subsidiary levels across the globe to identify and manage business risks. Our risk management process covers the assessment and review of internal and external risks and factors that may potentially affect the company's operations. Respective Business Heads who are also members of the Risk Management Committee closely monitor key business risks and ensure adequate preventive measures/controls are taken for risk 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 Committees at the Business segment and Plant level. In addition the Risk Management Committee reviews the sensitivity analysis of the business plan, Greenfield and M&A projects to ensure sustainability.

The main objectives of the Enterprise Risk Management are given in our 2014 Annual Report of the Company under the sub section of Enterprise Risk Management Committee - Corporate Governance section.

IVL operations identified having a low risk have an emergency preparedness and response plan in place, as part of OHSAS 18001 Occupational Health and Safety Management System. The company has OHSAS 18001 certification at Indorama Polyester Industries, Rayong and Indorama Polyester Industries, Nakhon Pathom, in both the fiber and PET facilities, TPT Petrochemicals and Indorama Petrochem in Thailand, PT Indorama Petrochem, Indonesia. Orion Global Pet in Lithuania and Wellman International in Europe are also OHSAS 18001 qualified.

Internal Audit and Monitoring

The Company has an in-house Internal Audit Department, Internal Audit Manual and Internal Audit Charter. The Internal Audit Department is entrusted to carry out internal audit activities reviewing the adequacy of internal control systems throughout various business processes across subsidiaries as per the annual Internal Audit Plan approved by the Audit Committee. The Audit Committee approves the Annual Internal Audit Plan and periodically reviews the internal audit findings with the Internal Audit Department.

As part of annual audit program, on-the-ground risk audits were conducted at several sites, plants. Audits evaluate performance in key areas, such as financial controls, business conduct and ethics. The audits are conducted by our internal audit team. Results of the audits



▲ A workshop to Senior Management on Risk Management.



▲ Executives working on internal controls at a workshop.

are used for improving policies, systems and processes.

More details on our Internal Audit are available in 2014 Annual Report of the Company under the section Internal Audit of Corporate Governance.

Internal Controls

The objective of internal control review is to ensure the existence of an effective system exists for internal control that provides reasonable assurance of the achievement of the Company's objectives.

The Company has a policy on Internal Information Control and Usage of Inside Information to outline confidentiality of the company's information and to ensure that employees will not disclose any confidential information with the aim of seeking benefit for themselves or other persons.

We have checks and balance systems in place to ensure the continuous reliability across all its subsidiaries and affiliates globally. The way we assure our performance, management assurance is provided by a combination of effective management processes and embedded risk and compliance procedures. The Board of Directors has assigned the Audit Committee to supervise the financial reporting process of the Company and its subsidiaries in accordance with generally accepted and consistently applied accounting standards and in line with the rules and regulations of the Thai Securities and Exchange Commission (SEC) and the Stock Exchange of Thailand (SET) as well as relevant legislations. The Company has in-house Internal Audit Department reporting directly to the Audit Committee. The Internal Audit Department is responsible for reviewing the adequacy of internal control systems on a global basis for the Company. Independent assurance is provided primarily by internal audit and independent external auditors.

Control Activities

All operating units of the Company have policies and procedures in place with regard to general management, procurement, sales and marketing and financial activities. Together with the financial authority manual, adequate controls and checks are exercised by the management to operate efficiently and to mitigate the risk of fraud or misappropriation. There is an adequate segregation of duties in respect of authorization, recording and custody of assets at all units.

The Company has a Whistleblower Policy in place to ensure effective reporting and investigation of allegations of unethical practices or improper activities. Various reporting channels which provide opportunity to lodge anonymous complaints can be accessed by both our employees and outsiders. The Company and management will not disclose the identity of the Whistleblower and/or initiate any unfair or punitive action, which includes, among others, changing his/her position, job description or work place; suspending, threatening, harassing or laying-off the whistleblower. The Whistleblower Policy and reporting channels are available on Company website.

d. Legal Compliance

The Audit Committee and the Risk Management Committees closely monitor the legal compliance status of each and every entity under IVL. The Company has developed a practice of obtaining a compliance certificate on a quarterly basis from each plant head confirming or informing the status of the compliance with all applicable laws and regulations, statutory filings and is reported to the Audit Committee on a quarterly basis and to the Board on an as-needed basis.



▲ Senior management working in group in the workshop.

e. Measuring and reporting performance - overall approach.

A step-by-step performance measurement at IVL has been assisting the management in selecting and designing appropriate performance indicators to strengthen current operations and strategy management. This procedure introduced further consistency across all entities in planning, as well as in measuring and evaluating performance. This approach outlines a method for identifying outcomes and relevant outputs, developing appropriate performance indicators and strengthening performance reporting - leading to more effective and efficient programs and strategies.

This forms part of a broader performance management process and it is integrated with planning, reporting, monitoring and evaluation.



▲ Our employees during a meeting in Nigeria.

f. Disclosure and Transparency

It is IVL's policy to deliver transparently all-important information relevant to the Company, both financial and non-financial that may have an impact on the interests of the shareholders or any decision to invest in the company or not. All such information is disclosed sufficiently, accurately, on a timely basis and transparently through easy-to-access channels that are fair and trustworthy and all comply with the SEC/SET.

The communication channels used are: the Annual Report, Form 56-1, Management Discussion and Analysis (MD&A), press releases, the SET's website, shareholders' meetings, analysts' meetings and the Company's own website. More details on disclosure and transparency are available in 2014 Annual Report under sub section 'Disclosure and Transparency', under 'Corporate Governance' section. The contact details are provided on our Company's website.

3. Determining what matters

IVL has identified key material aspects that matter to IVL and external stakeholders in the following manner.



Step 1: For our first GRI G4 Sustainability Report, we engaged all of our Site Heads, Business Heads and Corporate Level Heads to discuss and get feedback on their views on 28 identified Material Issues. Webinars were conducted to engage all relevant internal stakeholders globally and ensure consistent understanding across all IVL companies regarding the ratings of material issues. Material Issues' rankings were obtained from IVL's internal stakeholders through the use of a standardized questionnaire template. In total, data was collected from 41 sites, seven businesses and eight corporate functions. A total of 17 countries were represented in the questionnaire response.

Step 2: The Sustainability Steering Committee reviewed and assessed the key material issues and created a materiality assessment matrix. Following the collection of all site, business and corporate level data our Sustainability Steering Committee reviewed and assessed the matrix of key issues. The average of site level, business level and corporate level ratings was made, and the combined rating was made based on an average with equal weighting of the ratings of all three levels.

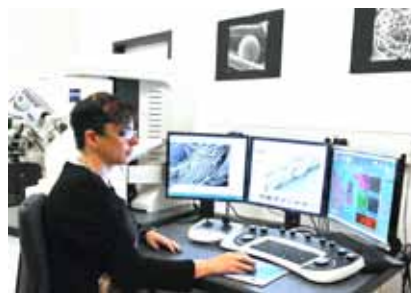
Step 3: Based on the assessment senior management agreed on eight key Material Issues that could have substantial impact on the organization and its stakeholders. We reviewed the GRI Aspects and, where relevant, assigned indicators, which are outlined in our GRI Content Index. ”

WHAT MATTERS



What Matters

Indorama Ventures has undertaken a materiality assessment process in alignment with the Sustainability Reporting Guidelines of the Global Reporting Initiative Version 4 (GRI G4) to identify key materiality issues that would have potential to significant impact on the organization's business operations in economic, environmental and social aspects as well as on stakeholders' interests.

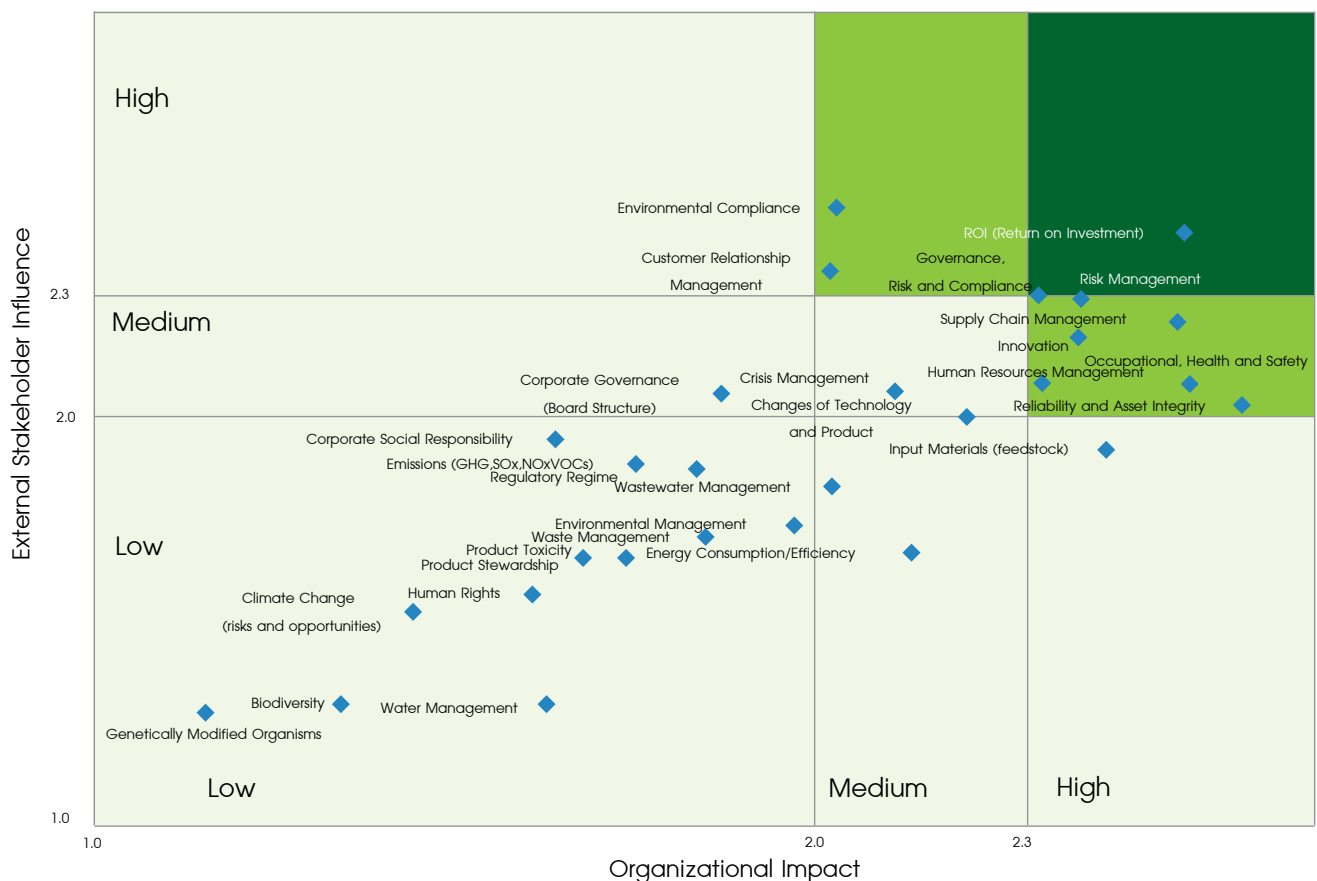


Principles for Defining Reporting Quality

The G4 Guidelines set out principles for defining reporting quality. There are a number of actions we have taken this year to meet these principles:

- We have improved data quality.
- We have taken steps to ensure the quality of the information contained in this report through an assurance process.
- A focus on materiality - we accomplish this by identifying and describing the issues that are important to stakeholders, and
- As we look forward, we are seeking to enhance the G4 approach by further strengthening our stakeholder engagement, improving our setting and reporting of target.

Materiality Matrix



Material issues

The following are eight key materiality issues identified as per above process which would have potential to significant impact on the organization's business and/or external stakeholders:

Material Analysis Report and Reporting Boundary:

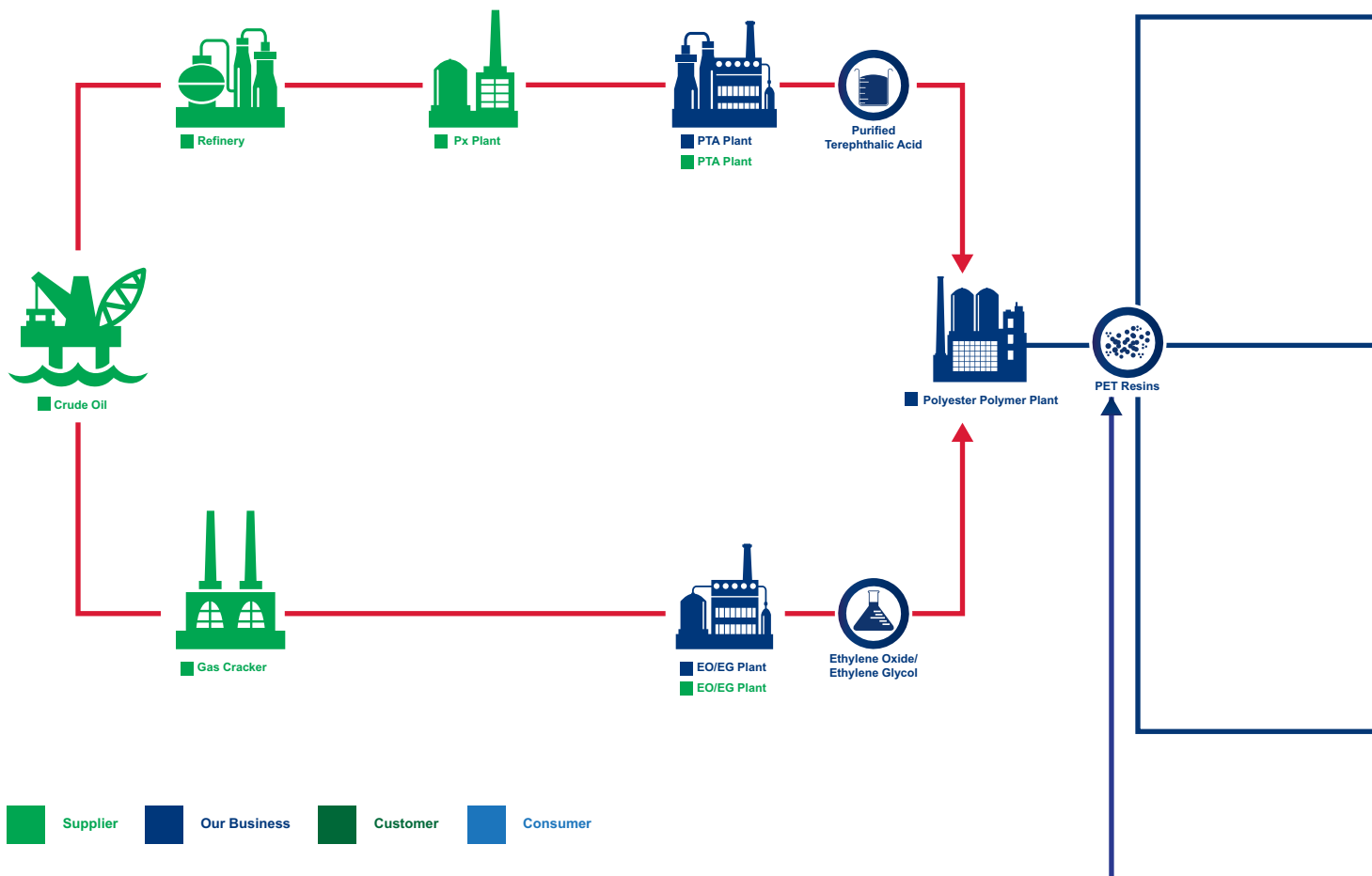
No	Sustainability Materiality Aspects	Material within IVL (All Sites)	Material Outside IVL to External Stakeholders
1.	Innovation Management	x	Customers, Community, Shareholders
2.	Governance and Compliance	x	Shareholders, Customers, Regulators
3.	Supply Chain Management	x	Suppliers, Contractors, Customers
4.	Customer Relationship Management	x	Customers
5.	Health and Safety	x	Suppliers, Contractors
6.	Operational Efficiency	x	Shareholders, Customers
7.	Environmental Management	x	Shareholders, Customers, Government and Industry Groups, Local Communities
8.	Human Resources	x	

More details about material issues are given under the chapter 'Material Issues'.

Polyester Business Value Chain

UPSTREAM

MIDSTREAM



*** Does not include PA66 and PP/PE Fibers Business of the Company.

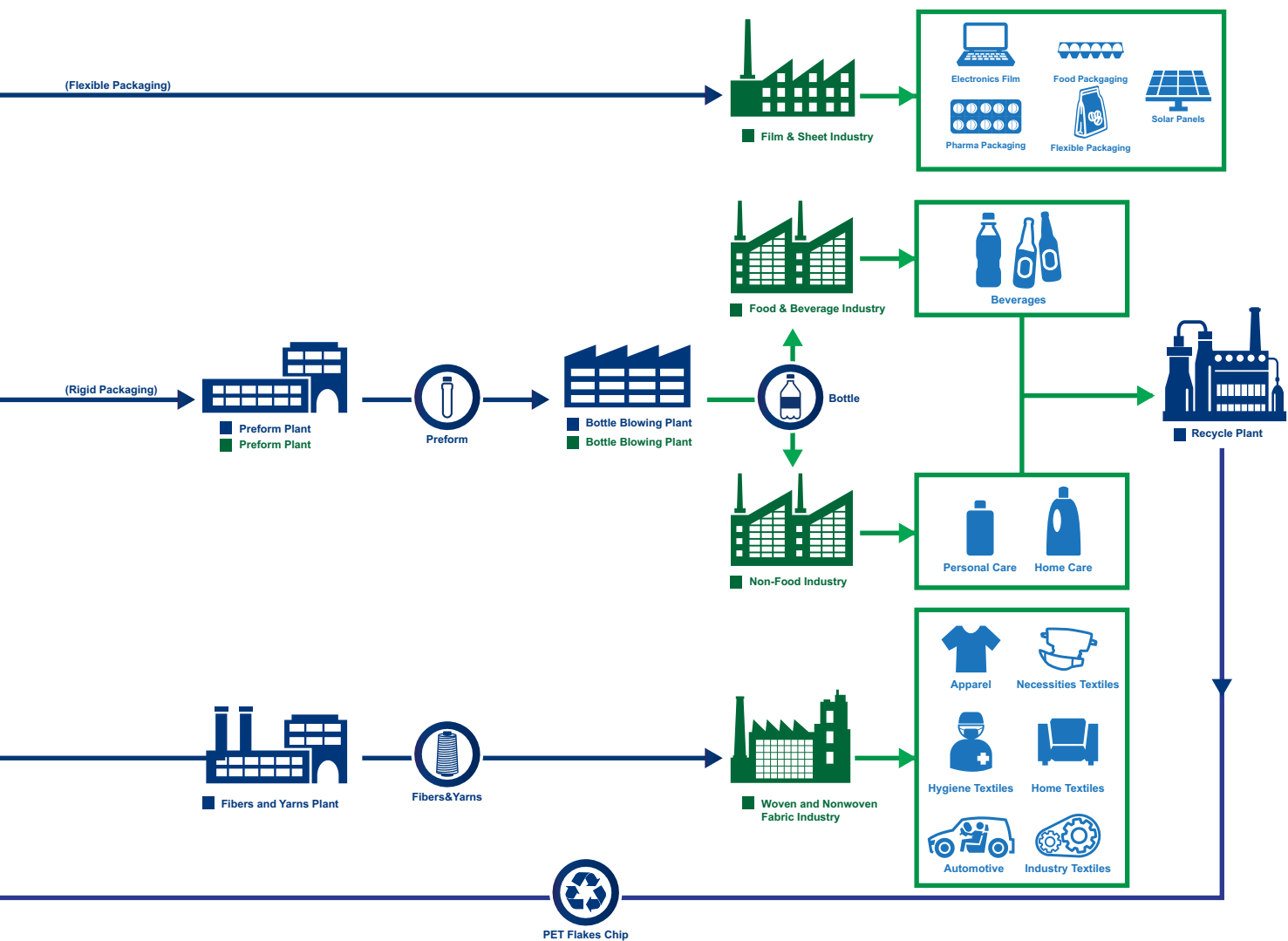
Value Chain

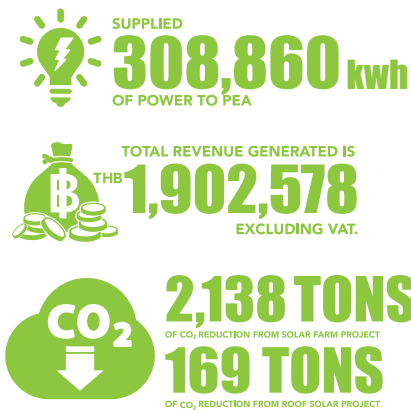
Our value chain is the whole series of activities that create and build value at every step, from the purchase of raw material to the delivery of the end product to customers and beyond. The total value delivered by our Company is the sum total of the value built up at each unit. For us, the value chain is a powerful tool for strategic planning and our products life cycle analysis.

As a part of the polyester industry, the key elements of our value chain include:

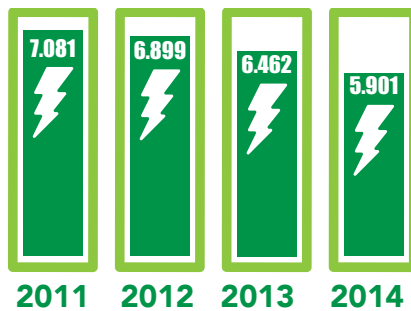
- supply chain management of raw materials procurement;
- plant and machinery;
- eco efficiency in all our operations including waste recycling-reusing-reducing;
- inbound and outbound logistics;
- innovation of new products to meet the requirements of and to give competitive edge to our customers;
- research and development;
- stakeholders engagement;
- life cycle analysis;
- environmental and social impact of our products and operations;
- services to our customers;
- Governance including regulatory compliance.

DOWNSTREAM

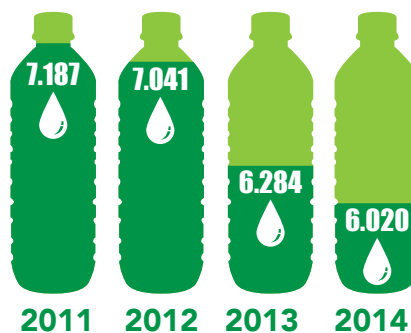




Energy intensity (GJ / Tonne Production)



Water Withdrawal Intensity m³/Tonne of Production



As a means of sustainability we evaluate the key elements of the value chain. To achieve and sustain a competitive advantage and to support that advantage, we understand and evaluate every component of our value chain system at regular intervals.

We have taken various initiatives at our plants for energy and water conservation, reduction of emission levels, developing lighter bottles for our customers and installation of energy-saving machines in order to reduce environmental impact throughout the entire value chain. The initiatives also include reduction of the environmental impact caused by our operations, from procurement of raw materials to delivery of our end products to customers. We are focusing on reduction of logistics cost and in turn reduction of GHG emissions.

Promoting the Use of Renewable Energy

We have been increasing the use of various kinds of clean, renewable energy, including the use of solar and wind power at some of our plants.



▲ Wind generator installed at Orion Global Pet, Lithuania.

In October 2014, we commissioned a 1 MW solar roof project at Indorama Holdings (IRH) plant in Lopburi, Thailand, for supplying power to the Provincial Electricity Authority (PEA) of Thailand under the renewable energy scheme. We are presently commissioning an additional 1.1 MW capacity solar roof project at IRH which is expected to be operational in May 2015. This will be the largest solar roof project for captive consumption in Thailand.

In August 2014 we completed replacing 1,300 LED lights in the IRH plant. The yearly energy savings from this project will be 195,000 KWH / year and CO₂ reduction will be 107 tons for full year of operations. 35.6 tons of CO₂ has been reduced from LED lighting from four months of operations.



▲ Photovoltaic panels installed at Trevira, Germany.

At Trevira in Germany, as part of our energy management and optimization of efficient use of resources, we rent our plant roof areas at the Bobingen and Guben sites to a solar energy company to install and commission photovoltaic panels. The power generated from solar top is physically used at the site. This has reduced the use of grid electricity. In addition, this concept results in energy tax savings of around EUR 77,868 and additional revenue from roof top rent of EUR 78,900.

In 2014 from its solar and wind power plants at Orion Global Pet (OGP) in Lithuania, the Company has generated 38,804 kwh of power, EUR 14,565 of revenue and 27,434 tons of CO₂ reduction. The power generated from the solar power plant has been sold to the grid and the power generated from the wind power plant has been consumed within the plant.

Stakeholder engagement:

Engagement means bringing the stakeholders into decisions that affect or interests them. Through stakeholders' engagement the organization can learn from customers, employees and the surrounding community. At group level, the Sustainability Steering Committee oversees engagement and brings potential gaps to the Sustainability Committee's attention. To develop an understanding of our stakeholders, we communicated with stakeholders about their expectations, interests, benefits and concerns then prioritize and determine how to engage them.

IVL engages with both internal and external stakeholders as a part of business operations to maintain good relationships and understand their expectations.

Stakeholder engagement is one of Indorama Ventures' Seven Pillars for Sustainability. We have processes for each factory to identify and conduct stakeholder engagement with our stakeholder groups including shareholders, customers, employees, suppliers, investors, government and industry group and local communities. Each factory is responsible for stakeholder identification based on location and activities. The Company defines stakeholders as any individual or group that stands to gain or lose economically, socially or environmentally through the actions of the Company. We have tailored our engagement processes using different communications methods to suit each different stakeholder group. Stakeholders' views and expectations are identified through dialogue at each factory. We also encourage factories to apply ISO 26000 to their CSR activities. IVL expects to improve our stakeholder engagement process as part of our continuous improvement.

1 MW Solar Power Project at Indorama Holdings, Lopburi, Thailand. ►



In the table shown below we identify key stakeholders, outlining our approach to engage them, highlight issues and our response.

Engagement Method	Key Issues Raised/Concerns by Stakeholders	How IVL has responded in 2014
Shareholders		
<ul style="list-style-type: none"> ■ Annual General Meeting ■ Opportunity Day ■ Annual Report ■ Sustainability Report ■ Shareholder Visits ■ Shareholder Survey ■ Company Magazine ■ Press Release ■ Website ■ Corporate Grievance Mechanism ■ Response to Information Request 	<ul style="list-style-type: none"> ■ Company Performance and Growth Strategies ■ Corporate Governance ■ Integrity and Transparency ■ Sustainability Performance 	<p>Corporate Governance Policy Awareness Campaign (CGPAC)</p> <p>We deployed 16 related policies to all employees in 12 languages. All are on our website.</p> <p>Anti-corruption Program</p> <p>14 training sessions have been conducted in 2014 in Thailand.</p> <p>Corporate Governance Scorecard</p> <p>“Corporate Governance” was included in the Group CEO’s and Executive Directors’ Balanced Score Card.</p> <p>Sustainability Reporting</p> <p>Sustainability Report 2014 has been prepared in accordance to the GRI G4 guidelines at core level.</p>
Customers		
<ul style="list-style-type: none"> ■ Customer Satisfaction Survey ■ Customer Visits ■ Product Website ■ Marketing Collateral ■ One-on-one Contact ■ Tradeshow, Conferences, Seminars 	<ul style="list-style-type: none"> ■ Sustainable and innovative portfolio of products and solutions ■ Sustainable value chain ■ Use of environmentally materials ■ Reliable business partners ■ Business ethics and compliance 	<p>Collaboration on Sustainability Initiatives</p> <p>We work with customers, such as Coca Cola in Europe and Lechare Guadalajara in Mexico, to produce sustainable products.</p> <p>Product Innovation</p> <p>We launched Polyclear® EBM 5506 “second generation” EBM resin to the delight of customers.</p> <p>Sustainable Procurement Programs</p> <p>We participate in online assessments requested by customers.</p> <p>Product Life Cycle Assessment (LCA)</p> <p>All businesses will have ongoing life cycle assessment (LCA) in the future.</p> <p>Increasing use of post-consumer recycled content</p> <p>New recycling facilities opened in Mexico and Thailand in 2014.</p> <p>Entering into Turkey</p> <p>We support our major customers by entering emerging markets like Turkey.</p>

Engagement Method	Key Issues Raised/Concerns by Stakeholders	How IVL has responded in 2014
Employees		
<ul style="list-style-type: none"> ■ Employee Satisfaction Survey ■ Annual Performance Review ■ Orientation ■ Corporate Grievance Mechanism ■ Town Hall Meetings ■ Training and Workshops ■ Company Magazine ■ Code of Conduct 	<ul style="list-style-type: none"> ■ Retention and Development ■ Staff Benefits ■ Increased sharing of information and best practices 	<p>Internal Sustainability Workshop We conducted internal workshop for IVL's senior executives to raise awareness of sustainability internally.</p> <p>Training Regular training on EHS at plant sites.</p> <p>Employee Induction Manual We have an Employee Induction Manual so employees know our policies.</p>
Suppliers		
<ul style="list-style-type: none"> ■ Business Partners and Competitor Policy ■ Supplier Management System 	<ul style="list-style-type: none"> ■ Responsible sourcing and supply chain management ■ Business Ethics and Compliances 	<p>Supplier Code of Conduct and Compliance Program Our first tier suppliers and all new suppliers will be required to sign to the Code of Conduct as part of any new contract.</p>
Investors and Investor Relations		
<ul style="list-style-type: none"> ■ Quarterly Analyst Meetings ■ Briefings and Presentations ■ One-on-one Meetings ■ Conference Calls ■ Local and Overseas Road shows ■ Press Releases ■ Corporate Grievance Mechanism ■ Investor Fact Sheet ■ Email Subscription ■ Investor Relations Website ■ Annual Report ■ Sustainability Report ■ Social Media 	<ul style="list-style-type: none"> ■ Understanding of IVL's businesses ■ Open and transparent communication ■ Delivery against expectations 	<p>Capital Markets Day Capital Markets Day 2014 allowed executives to engage with investors.</p> <p>Investor Seminar Our seminar "Innovative Investment Opportunity - Hybrid Debentures" at the Stock Exchange was focused on bank representatives, investors and the general public.</p> <p>Improving Understanding of IVL's Businesses IVL held a seminar on "Understanding IVL" to help participants understand Indorama Ventures before investing.</p>
Government and Industry Group		
<ul style="list-style-type: none"> ■ Formal and Informal Meetings ■ Site Visits ■ Focus Group Meetings ■ Joint Events ■ Member of Industry Bodies 	<ul style="list-style-type: none"> ■ Industry zero-waste approach to the economy (effective design and use of finite resources) ■ Environmental Compliance ■ Regulatory Compliance 	<p>Participation in Project MainStream In 2014, we committed to participate in global initiatives to create a circular economy.</p>
Local Communities		
<ul style="list-style-type: none"> ■ Community Visit Program ■ Open House ■ Community Dialogue 	<ul style="list-style-type: none"> ■ Environmental Management ■ Community Development 	<p>Site Visits/ Open House Site visits were carried out to ensure local communities could observe the site and environmental practices.</p> <p>Education Programs We have initiated many education programs in our local communities. Brief details of some programs are mentioned in the chapter What Sustainability Means to Us.</p> <p>Health and Wellbeing Programs We have worked with local organizations to raise awareness of health issues.</p>

Material Issues



Material Issues

Manufacturing facility of Wellman International, Ireland.



The key focus of management is on the material aspects of our business to make us a sustainable enterprise going forward. For this reason, we conducted a detailed materiality analysis across the business and stakeholders, whereby we examined our internal and external stakeholders' expectations and requirements, along with the issues that could represent opportunities or risks. Eight key material aspects have been identified, as explained in detail in the chapter 'What Matters'.



Material Economic Issues	Material Environmental Issues	Material Social Issues
Innovation Management	Operational Efficiency	Health and Safety
Governance and Compliance	Environmental Management	Human Resources
Supply Chain Management		
Customer Relationship Management		

A. Material Economic Issues

In line with our Corporate Values and Environment Policy, which aims to protect and enhance the environment around us, we aim to reduce the impact of our operations on the environment so that we minimize potential impacts on the business. Year-on-year we work towards this objective, for instance by striving for resource efficiency through process innovations, to keep our production as environmentally-friendly

as possible. As energy is a large portion of the conversion cost we bear, the conservation of energy will pay back in economic terms as our electricity bill declines, or at least, does not increase. We have already started increasing the use of renewable energy in the business because we understand that natural resources are finite and we need to lower our dependence on carbon-based energy production so as to promote our sustainability.



▲ An rPET fiber analysis at Wellman International, Mullagh, Ireland.

Reducing greenhouse emissions and efficient waste management will ensure that we retain our permit to operate in all markets, and of course efficiency is the key to lowering costs that go towards improving our bottom line. Being a raw material producer for the world's consumer goods companies, we know that recycling of all products is an inevitable challenge that we must overcome. For this reason, we have greatly expanded our recycling business globally to position ourselves for the creation of a circular economy. Environmental objectives that are integrated into our corporate and business operational strategies and plans are all economically linked to our business continuance.

We know that new legislation could negatively impact our business may arise if we don't take a lead in protecting the environment first. Communities rely on us for employment, but also for our consideration of their lives as members of the community; therefore we want to ensure their lives are not impacted by our presence.

Innovation Management

Innovation Management plays an important role in our organization's success. By being creative and imaginative, we can carve out a new niche ahead of our competitors. Innovation is not just development of new products; it also includes evaluation of existing systems, practices, and incremental improvements to existing products. The focus is continuous and extends to every operation. We encourage creativity and providing opportunities to further advance new ideas.

To keep pace with rapidly evolving market trends and global challenges and demands, we chose to leverage our strength in innovation. Innovation in development focuses on new products that meet social and environmental needs; improvement of existing products, processes and their efficiency; discovering opportunities that are likely to emerge in the future; cutting down on waste and increasing profits; adding new customers by diversifying the product range and its applicability etc. Business is challenging, but we need new ways of doing it. Innovation helps us retain an edge and competitive advantage in the business in which we are operating.

We aim to give better value to our customers by responding to their current needs, anticipating their future needs and developing products that allow them to meet those future needs, rapidly and effectively.



▲ Efficient innovation management for development and advancement of new products.



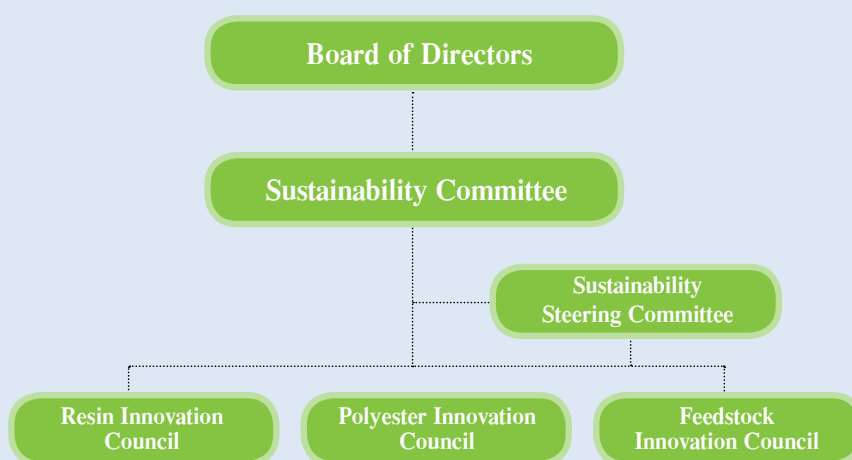
▲ High performance PET resins developed in our R&D laboratory.

a. Innovation Councils

In order to facilitate the setting of product development priorities and ensure collaboration among the Centers of Excellence, Innovation Councils with representatives from both technical and commercial steering committees have been set up. We now have 36 of our top management sitting on innovation councils globally.

The Innovation Councils meet quarterly, or as often as required, to review project proposals, ideas on new technology platforms, unmet customer needs and requirements on a global basis, and for setting priorities for the work direction of our various Centers of Excellence. The Council reviews progress on major programs as well as reviews problems and issues, develops solutions and allocates resources as required to remove or mitigate issues and roadblocks.

The Structure of Innovation Councils



▲ Innovative product testing process at Trevira, Germany.

The Innovation Council takes advantage of the knowledge and capabilities that exist at each of the business units and combines them so that synergies can be developed and used to provide IVL with a sustainable competitive advantage. By facilitating communication and transparency among the individual site R&D capabilities, duplication of effort can be eliminated, which in turn creates an environment that encourages knowledge sharing, develops new product faster, and increases the overall probability of success in new product launches.

Targets and KPIs

The Polyester Business of the Company has achieved a vitality Index of 25.92% in 2014 and has set a target to maintain the index at over 25% in 2015. The vitality index for 2014 excludes the performance of PHP Fibers group which was acquired during the year.

b. Product Innovation

We have set up checks and balances to ensure that product ideas are examined for relevance, commercial and market potential by the pertinent



Case Study: Innovation: New Product, New Application

Auriga Polymers' latest product launch is Polyclear® EBM 5506, a "second generation" EBM resin with improved aged drop performance. The Association of Post consumer Plastic Recyclers ("APR") has recognized Auriga Polymers' Polyclear® EBM PET 5506 resin and the bottle body produced from neat resin, as meeting or exceeding the APR PET Critical Guidance Document protocol. ”



▲ Extrudable PET jar designed for the brand Tropicana in cooperation with PepsiCo.

Innovation Council before final approval for production is given. Through the development of technology platforms, sustainable and differentiated products can emerge.

The success of our product innovation can be determined by the number of new and innovative products we have in our pipeline.

c. Process Innovation

Centers of Excellence (CoE) at individual business sites have been working on improving technical and skill competence, leadership qualities, best practices, research, process innovations etc. The objective of a CoE is cost reduction and operational improvement to gain a sustaining competitiveness. We continue to examine our working process and invest in innovative and energy-efficient technologies to reduce energy consumption and carbon footprint. Lean Six Sigma is also used to drive continuous improvement.

d. Research and Development:

Our R&D facilities in the USA focus on polymer products while our R&D in Germany focuses on filaments and fibers. As of December 31, 2014, we have several product patents that are applicable in three regions where our major operating sites exist.

IVL leverages innovation to drive efficiency and effectiveness through the improvement of our systems and processes.

Some of the key achievements due to innovation or innovative practices in 2014 include:

- Auriga Polymers Inc.'s launch of Polyclear® EBM 5506 a second generation EBM resin used by manufactures of large, clear handle ware containers with enhanced durability. Handles built into PET containers is an innovative concept.

Auriga Polymers' Polyclear® EBM PET 5506 resin and the bottle body made from the neat resin is recognised by

Association of Postconsumer Plastic Recycler (APR) as meeting or exceeding the APR PET Critical Guidance Document protocol

- In several ways we are embarking on a journey to establish a circular economy. We are already part of an open innovation agreement with Ioniqa Technologies: We now collaborate with Ioniqa Technologies, who have been developing and refining technology since 2011 for recycling colored PET waste into "virgin" PET raw materials; Indorama Ventures aims to contribute to the commercialization of this innovative technology.

We are making a contribution to the Circular Economy by recycling colored PET waste into 'virgin' PET raw materials.

- Auriga Polymers' open innovation is targeting the development of technologies that facilitate the use of renewable raw materials in the PET value chain.

e. Product Stewardship

We are committed to research and development of clean and environmental products. The details of new product innovations are given in other chapters of this report and details on product stewardship are given at the end of this chapter.

f. Participation in Project MainStream

Project MainStream is a multi-industry, CEO-led global initiative to accelerate business-driven innovation and help scale the circular economy. It is a collaboration led by the World Economic Forum and the Ellen MacArthur Foundation, with McKinsey & Company as a knowledge partner.

MainStream aims to address multiple environmental issues such as landfills, litter, ocean plastics contamination, carbon emissions, and accumulating



toxicity. The global initiative is gathering commitment from key stakeholders to establish a proof of concept of the economic and environmental benefits of a circular economy that will accelerate the transition of the economy and thereby establish it as the new norm. IVL is a member of its Steering Board and contributes to this initiative by helping to drive forward the businesses and cities save USD 500 million in materials and prevent 100 million tonnes of waste globally.

Participation in Project MainStream, a global initiative to accelerate business driven innovation and help scale the circular economy, a collaboration led by the World Economic Forum and Ellen MacArthur Foundation, with McKinsey & Company as knowledge partner.

Governance and Compliance

With a fast growing business, expansion into new territories by acquisition or greenfield and with new IVL products being added to the portfolio, we are continuously entering into new regulatory environments, new challenges and compliance requirements. To ensure we can adapt quickly, we have established stringent corporate governance policies and have been pursuing a broad range of governance, risk and compliance initiatives across the organization. To drive governance, the process includes elements such as preparation and communication of corporate controls, key policies, enterprise risk management, regulatory and compliance management, including constant monitoring by risk management and audit committees. Effective and transparent corporate governance and enterprise risk management structure help to ensure ethical conduct and regulatory compliance. Due to our stringent management processes, we have not been involved in any regulatory

infringement since our listing in Thailand in 2010.

“Asia Pet (Thailand) and Petform (Thailand), Lopburi, received the “Good Corporate Governance Award 2013” from the Department of Business Development, Ministry of Commerce of Thailand.”

“Indorama Holdings Limited received an Honor Certificate acknowledging compliance with legal requirements for the employed and improved Quality of the Life of the Disabled from the Lopburi Governor.”

IVL has set the target to have zero non-compliance with regard to relevant regulations and is committed to publically reporting any material non-compliances if they occur. Details about our Governance and Compliance are given in the section ‘Approach to Managing Sustainability’ and further information of our awards are given in the Global Awards and Recognitions section.

Supply Chain Management:

Our supply chain carries an intrinsic risk that can have a significant impact on the organization and our stakeholders. The Company recognizes the importance of efficient supply chain risk management relating to economical, environment and social dimensions. To minimize this we have decided to focus on positively influencing and collaborating with supply chain partners to promote best practices in the areas of health and safety, and compliance with environmental, labor and other applicable regulations in the years ahead. More information pertaining to this on supply chain management, code of conduct etc. is given in the section ‘Approach to Managing Sustainability’.

We initiated supplier evaluations in 2014 and aim to complete the evaluation of 40% of tier 1 raw material suppliers during 2015. The process involves a systematic

and harmonized approach, requesting suppliers to respond to a self-assessment questionnaire that will assist in assessing ESG risks and opportunities and improving sustainable supply chain performance.

The Company has developed a systematic supplier risk assessment process in two stages to evaluate risks in supply chain. The first stage includes *supplier spend analysis* where in all the suppliers shall be categorized based on the amount spent and the criticality of the material purchased. The second stage includes *supplier assessment* that covers tier 1 suppliers initially and to expand to tier 2 suppliers in the years to come. The Company's bottom-up and top-down process covering Economic, Environment and Governance (ESG) related criteria. The criteria cover various aspects, for instance, environmental and all other regulatory compliance including child and forced labor.

The Company believes in efficient eco logistics management. During the year 2014, several initiatives have been taken place as part of operational efficiency measures in supply chain management which includes reduction of raw material transportation cost directly and reduction of green house gasses indirectly.

Our target for Supply Chain Management is to have all Critical Tier 1 Suppliers of raw materials comply with our Supplier Code of Conduct, or equivalent code of conduct that meets or exceeds our standards. **Currently we have achieved coverage of 71% of Critical Tier 1 Suppliers of PET and PTA business in Asia and hope to improve our coverage as well as expand it to our other suppliers.**

Systematic logistics management at FiberVisions.



“

Case Study 1 : Efficient Logistics Management

Guangdong IVL PET Polymer (“GIVL”), a wholly owned subsidiary of the Company in China, has undertaken a project of PTA chain conveying system by using trucks for PTA conveying and unloading resulted in annual saving of 320,000 KW of electric power, reduction of 5MT of grounded PTA powder wastage and a saving of cost to the company.

GIVL undertook a logistics cost reduction initiative of using barge shipment instead of road transportation to transport its raw materials and products.

The above initiatives have resulted in net savings of approximately USD 550,000 per annum from efficient logistics management ”

“

Case Study 2 : IPA Logistics Project

IPA Logistics Project resulted in cost savings as well as reduction in carbon footprints.

IVL group companies in Asia, Europe and Mexico buy Purified Isophthalic Acid (“IPA”), one of the raw materials in production of PET resins, from one of the suppliers. As per industry norms, IPA was shipped in industry standard packing of 1MT/bag (20MT/20ft container). However, IVL in collaboration with a supplier has studied the possibility of increasing the packaging capacity from the current capacity of 1 MT/bag (20MT/20ft container) to 1.1 MT/bag (22MT/20ft container). The initiative resulted in:

- Net savings of USD 150,000 per annum to IVL group companies.
- Improvement of space utilization and reduction in material movement.
- Less number of shipments, resulting in reduction in carbon footprints.
- Provision of benefits to the supplier, i.e. transportation cost-saving, space utilization improvement, and reduction of material movements in plants. ”

“
**Supplier of the Year
 Award for Excellence
 in Innovation given to
 Indorama Ventures
 by TWE Group,
 Germany.**”

“
**Auriga Polymers
 honoured with the
 Quality Supplier of
 the Year Award on
 March 19, 2014 by our
 customer, Care Stream,
 at their 8th Annual
 Supplier Event.**”

Customer Relationship Management

We concentrate on building strong relationships with all our customers using two-way communication because customer engagement is important for our success. We provide the highest quality products to our customers and strive to provide them with the solutions to address their sustainability challenges in a cost effective manner.

Customer satisfaction is one of the company's goals as reflected in our mission statement. We want to achieve customer delight and loyalty for a long-lasting relationship. While we strive to provide all customers - irrespective of their size or location - with a complete and high level of service, there are also inherent challenges when supplying regional and global customers. At present, we are looking at customers from a perspective of the breadth of the portfolio they require, which more than ever includes High Value-added (HVA) or specialty materials.

Together with our subsidiaries and affiliates, we are committed to conducting business in accordance with all applicable laws, regulations and the highest ethical standards, with a strategic approach to corporate responsibility. To ensure we minimize risk, we are encouraging our suppliers to adopt similar principles if they have not already done so.

There have been no incidents of non-compliance with regulations or voluntary codes concerning the health and safety impacts of our products. There have been no complaints regarding breaches of customer privacy or losses of customer data.

Combined results for the Customer Satisfaction Index of PTA business

Year	Product Quality	Logistics	Delivery Document	Sales & Marketing Service
2014	87%	86%	94%	88%
2013	85%	86%	91%	84%
2012	78%	82%	90%	81%

Voice of Customers

As part of our customer engagement process, in 2014 our marketing departments conducted a *Customer Feedback Programme* survey to understand customer satisfaction levels. Senior executives visit key customers regularly in order to gauge satisfaction. The results of the satisfaction survey are being reviewed annually for continuous improvement of our products and services. In 2015, we are targeting to expand the survey to more customers and products.

In a business largely driven by market pricing, customer satisfaction may be measured via repetitive orders over the long term. As utilization rates continued to remain high in 2014 and are expected to rise even more in 2015, repeat or larger orders are seen as reflecting the satisfaction of the client with our goods and services.

In 2014, the marketing departments of our PTA and PET Business Segments conducted a Customer Feedback Programme of tier 1 customers covering 80% of total sales to understand customer satisfaction levels, their concerns, comments, suggestions.

In case of PTA business, the survey required the customers to provide their feedback on four broad parameters namely, Product Quality, Logistics, Delivery Document and Sales & Marketing.

The rating from customers will be reviewed each year for continuous improvement of our products and services. There will be a constant endeavor on the part of all the concerned to continuously strive for excellence and for the maximum customer satisfaction.

The PTA business segment has the following targets for the year 2015.

- Continuously strive for an increased customer satisfaction year after year
- Reduction by 25% In Quality related Complaints and by 50% In Logistics related Complaints

In case of our PET business in Asia, the survey required the customers to provide feedback on four broad parameters namely, Product, Sales and Marketing Services including Documentation, Logistics, and give Overall Satisfaction.

Combined results for the Customer Satisfaction Index of PET business

Year	Product	Sales & Marketing Services	Logistic Services	Overall Satisfaction	Total Average Satisfaction
2014	85%	81%	78%	91%	84%

The rating from customers are reviewed each year for continuous improvement of our products and services. There will be a constant endeavor on the part of all the concerned to continuously strive for excellence and for the maximum Customer Satisfaction.

As part of our customer engagement process, we maintain Customer Complaints Register for all complaints received from our customers to further improve our customer service.

The Asia PET business segment has the following targets for the year 2015.

- Retaining of 100% tier 1 customers
- Customer satisfaction at 85%
- Reduce complaints by 10%

Growth of Customer Base

From 2012 to 2014 through our good customer relationship management we grew our customer base and volume growth by 7% and 65% respectively, leading to increased revenues.

Product Stewardship

The Company recognizes the need of better understanding both the impacts and benefits of its products across their life cycles and has thus adopted the principle of a life cycle management of its products from their discovery, development and manufacture to

their use and final disposal or phase-out. Through Product Stewardship the Company is successful in deriving maximum value, conserving resources, minimizing wastage, health and environmental impacts of products through their life cycle along the value chain. As part of product stewardship drive, the Company has increased its focus on expansion of recycling business, reuse of our products and sourcing from natural resources.

The Company aims to reduce the impact of its products, recycling used products. IVL has committed itself to research projects in order to find alternative raw materials to reduce reliance on fossil based materials.

Product Stewardship Management Structure

The Company's product stewardship management is guided by its Resins, Fiber and Feedstock Councils. The Company has Innovation Councils representing three business segments with 36 senior management members from business and technical leadership of the various operating companies in order to facilitate the setting of product development priorities and ensure collaboration among the Centers of Excellence.



▲ Employees sorting out waste bottles for recycling process.



CASE STUDY: “Exploratory study on an Iso Butanol Biorefinery”

At the beginning of 2013, a number of industrial companies in the Rotterdam region including Indorama Ventures joined forces with various knowledge institutes in the Iso Butanol Platform Rotterdam (IBPR) consortium. IBPR is the consortium founded to develop a value chain for isobutanol in the Rotterdam region. As part of this IBPR consortium, the Company provided data and knowledge support to the study.

Using Iso Butanol from biorefineries is not economically feasible, however the positive effect in the value chain from using Iso Butanol is reduced energy use (40-60%) and reduction of GHG emissions (65-75%) through reduction of combustion of fossil fuels. In future IVL hopes that this approach may be used when it is financially feasible. ”

The Bio-PET resin produced by Indorama Ventures addresses social and environmental concerns and has become a business opportunity for the company. Bio-PET Resin is PET Resin with up to 30% bio content, made from 70% PTA and 30% plant-based bio-MEG. The development of a polymer resin that utilizes a derivative of plant material as a component is a much sought-after packaging resin. The normal feedstock components of PET resin are Purified Terephthalic Acid (PTA) and Mono Ethylene Glycol (MEG). Both are derivatives of the oil and gas chain. However, Indorama Ventures was able to substitute MEG typically made for a naphtha or gas origin, and with one made from ethanol derived from sugar cane.

Life Cycle Analysis at Indorama Ventures

As part of our sustainability efforts, we need to know the effect of our products on the environment. Conducting a Life Cycle Analysis (LCA) can help us identify and monitor any potential risks of our products. Our main product is

Polyethylene Terephthalate (PET), which is resistant to microorganisms and does not react with food; it is widely used in food and drink packaging. In order to understand the carbon footprint of PET we worked with the University of Utrecht in the Netherlands. To assess the environmental aspects and potential impacts associated with a product and process. The analysis looked at our plants in the Netherlands, Lithuania and Poland; the analysis highlighted the Non-renewable energy use (NREU) and the greenhouse gases (GHG) emitted during the production of PET. The main contribution to NREU for PTA and PET production for the Netherlands' site is accredited to the raw materials (i.e. around 94% to 95% of total NREU) and not to the energy carriers used for the production processes.

The study concluded that the plant in the Netherlands is the one with the lowest impacts of all three plants studied, and moreover it performs much better than the European average especially concerning the CO₂ emissions. The Lithuania and Poland plants' performance is also better than the average European PET producers.

Recycled PET and Recycled Polyester

Some Facts about Recycled PET:

88% of the oil extracted globally are used as fuel for transport systems, heating appliances or for the generation of electricity. The amount used for chemicals and plastics is small in comparison (4%)⁽¹⁾. PET uses less than 0.15% of the world's oil⁽²⁾.

Source: (1) "Oil Consumption". British Plastics Federation; Source: (2) CPME Pet Manufacturers in Europe. <http://www.cpme-pet.org>

PET is one of the most valuable recycled materials. PET bottles, more sustainable material compared to other beverage packaging alternatives, are 100% recyclable and with a high degree of post-consumer collection (50% has been collected), making it an ideal choice for sustainable business.



▲ PET flakes and resins made from recycled PET bottles.

Reducing the weight of 0.5 PET Bottles



Source: "PET-the sustainable beverage packaging solution". www.sidel.com

In addition, due to advances in technology, the weight of PET bottles has significantly reduced in the past decades. In 1985, a 0.5 liter PET bottle weight was approximately 28 grams, today it weighs between 7.5 and 10 grams (2) equivalent to 71.6% reduction. The lighter weight of PET reduces the amount of raw material needed for production and packaging and uses less energy for transportation.



Case Study : Light Weighting of Packaging Material for our Customers

Competitive costs, attractive look and flexibility in handling have established PET as a widely used packaging material among soft drink brand owners.

However, the popularity of PET bottles has inevitably been accompanied by an increase in the amount of PET packaging waste. Our customers face mounting pressure to take responsibility for reducing the amount of material being used.

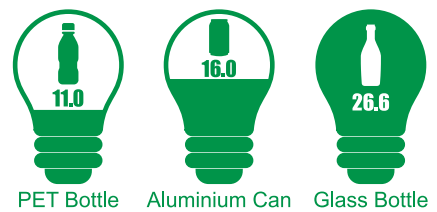
Lightweight bottles offer the soft drinks industry massive untapped potential for reducing raw materials, processing, distribution and energy costs. And therefore, with the advancements in PET resin, blow molding and preform design technology, our subsidiaries have helped customers to reduce the weight of the existing PET bottle, and produce lightweight PET Bottle without any compromise to its quality.

On an average, the PET Bottle weight has been reduced by about 15%, which has resulted in:

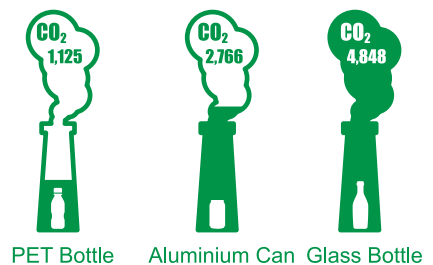
- Over 5,000 Mt saving in PET resin, thus reducing the waste of PET plastic bottle
- 15% saving in the raw material cost
- Over USD 405,000 saving in the energy cost
- About 30,000 Mt saving in carbon emissions (covering the whole chain from upstream to downstream)

The lightweight bottles offer the soft drinks, edible oil and all other similar packaging user industry, a massive untapped potential for reducing raw material, processing, distribution, reduction of GHG and energy costs. Moving forward our subsidiaries are working with their customers to further lightweight PET bottles, to bring the best possible experience to end users. ”

Energy Required to Produce Packaging for 100 Koz of Soft Drink (MM Btu).



Greenhouse Gases Generated to Produce Packaging for 100 Koz of Soft Drink (K Lbs CO₂ equivalent)



Source: Franklin Associates, a Division of ERG

Every collected PET bottle is a resource that can be recycled into new bottles or variety of everyday items. A single pound of recycled PET used in place of virgin material reduces energy use in plastic production by 84% and greenhouse gas emissions by 71%*.

Source : (*) "Recycling Facts & Stats". www.kab.org

In 2014, IVL recycled approximately 11 billion PCR bottles to produce flakes, recycled PET and recycled polyester.



▲ An rPET fiber processing at Wellman International, Mullagh, Ireland.

Some Facts about Recycled Polyester

The 'Life Cycle Assessment' shows that the production of natural cotton fiber emits nearly double the amount of CO₂ and consumes 8000x more water than those of polyester⁽¹⁾⁽²⁾.

📄 Source: (1) SEI Stockholm Environment Institute; Source: (2) Eija M. Kalliala & Pertti Nousiainen. Tampere University of Technology, Finland.

Contrary to the popular belief that synthetic fibers such as polyester are consuming a lot of crude oil, which is a non-renewable source, in reality, less than 1% of globally produced crude oil is consumed in the production of synthetic manmade fibers (#).

📄 Source: (#) IVC-EV Industrievereinigung Chemiefaser e.V., www.ivc-ev.de

Natural cotton fiber may provide lower quality recycled material compared to the original while the recycled polyester fiber from either PCR PET bottle or from Polyester can meet or exceed the quality of virgin polyester(*).

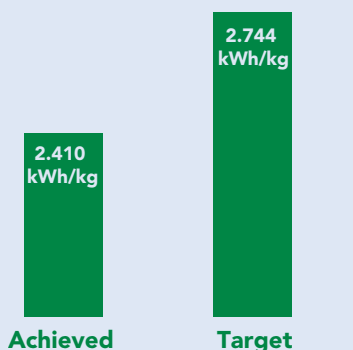
📄 Source: (*) "Polyester vs. Cotton - Which is Better for the Environment?". Gail Baugh. University of Delaware.



Reduction in carbon footprint, emissions:

Beverage Plastics Limited, a subsidiary of the Company in the UK, has achieved climate change levy targets ahead of the planned date. It delivered 2.410 kWh/kg as against the target of 2.744 kWh/kg. ”

Achievement versus Target



IVL products comply with the intended application according to relevant local regulations. Our European sites comply with Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) by limiting the use of restricted chemicals. In the past year IVL had no non-compliance with regard to the Health and Safety of its customers and breaching of customer data.

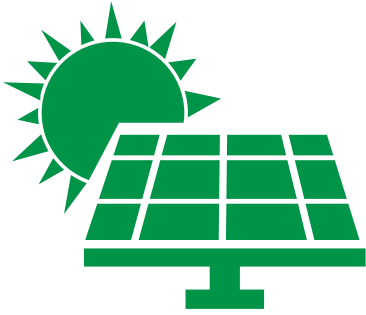
The Company has 'Business Partners and Competitors Policy' which is available on Company website www.indoramaventures.com under section Corporate Governance - Stakeholders Policies. According to this Policy, the Company, all its subsidiaries and affiliates are committed to meet ethical business practices, to produce the products to the highest standards of product safety, quality, and business integrity in order to meet the customers' expectations and satisfactions.

The Company confirms that there is no non-compliance regarding the health & safety of customers.

The Company has a 'Policy on the Treatment of Customers' that is available on the Company website www.indoramaventures.com under the section Corporate Governance - Stakeholders Policies.

According to this Policy, the Company respects the individual rights of customers, keeps confident customer information and does not disclose to a third party. The Company confirms that there are no breaches of customer data.

IVL has a zero non-compliance regard to product information and labeling, regulations concerning the provision and use of products and the sale of banned products.



Indorama Holdings in Thailand (“IRH”) installed a solar roof with capacity of 1 MW; replaced TL5 lights with LED lights with expected savings of

195,000 kWh/year.

IRH is also installing another solar roof with a capacity of 1.1 MW and this is expected to be completed in 2015.



▲ The robot used at Trevira to improve Operational Efficiency.

B. Material Environment

Issues

As a company, we do recognize the need to continue improving our own environmental performance through cultivating operational efficiency, conforming to environmental laws, regulations, and standards to achieve zero material non-compliance issues.

Operational Efficiency

Operational Efficiency (OE) is a competitive advantage for us: it translates into increased production, improved customer responsiveness, enhances organizational capabilities, improves performance management skills and ultimately cost minimization. We are dedicated to using resources efficiently, providing good value to our customers and stakeholders and safe working conditions to employees. We keep improving our efficiency to achieve a vision of no accidents, no injuries and no harm to the environment.

In 2014, our plants undertook several operational efficiency projects to achieve better returns which have been mentioned under various sections in this report.

Environmental Management

We believe in the philosophy that the environment and economy are both sides of a coin and to sustain ourselves we should ensure the sustainability of the environment.

The Company is committed to protecting the environment

- by embedding environmental performance and sustainability principles within all our operations, management systems and practices;
- by efficient utilization of the resources, recycling, reducing, reusing; and
- by promoting the health and safety within the workplace of all its operations.

- to achieve zero non-compliance with regard to environmental regulations, which it aims to achieve through good environmental management.

We have made strong progress in reducing our overall environmental impact with several environment management initiatives undertaken during the year and previous years. Our environmental performance also drives our commercial benefit and ensures our continued success. Our initiatives have been illustrated in this chapter and other chapters in this report.

Targets and KPIs

For the year 2015, IVL has the target of reducing the energy consumption, emissions and waste by 2%.



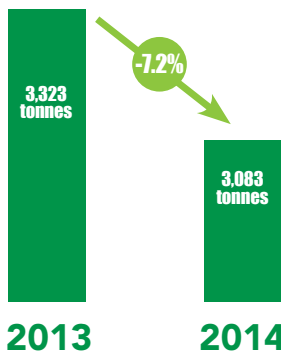
Energy Reduction

PT Indorama Ventures Indonesia (PTIVI) has reduced power consumption by 1.7MW in 2014, from 18MW in January 2013 to 16.3MW in December 2014.

Case Study: Reduction of consumption of a raw material

During the year, TPT Petrochemicals, Thailand (TPT) has undertaken a study investigating into possibilities to reduce consumption of Para-Xylene (PX) usage. During the study the team has discovered that using three CTA reactors in place of two CTA reactors resulted in reduction of consumption of PX. Accordingly, the trial runs and the tests conducted discovered that three reactors running together reduced PX reaction burning due to increasing the retention time and mass transfer coefficient, which helped reduce catalyst dosing (consumption) and reactor temperature. With this process TPT has successfully reduced the consumption of PX usage from 662.79 Kg/Te to 660.79 Kg/Te and net saving of USD 1.518 million.

Waster Sludge Discharge Reduction by TPT



TPT reduced waste water sludge by 7.2% in 2014 as compared to 2013.



TPT has a target of saving of USD 0.489 million in 2015 as compared to the saving of USD 0.142 million in 2014 from operational excellence measures such as SX steam reduction via PTA flushing and shell side flushing of pre heaters.

Indorama Ventures (Oxide & Glycols) (IVOG)

While the cost of shipping goods, especially toxic inhalation (TIH) and hazardous materials continues to escalate, IVOG has been working to mitigate such increases (and risk) by strategic logistics arrangements with co-producers. IVOG was able to achieve the savings of USD 1.8 million through Ethylene Oxide/Ethylene Glycols exchanges in 2014.

PT Indorama Ventures Indonesia (PTIVI)

Throughout 2014, PTIVI undertook operational efficiency measures to reduce its "off spec" material generation by 50% resulting from frequent grade changeovers in PET. A sizable quantity of material used to be segregated as off spec because of transitions resulting from frequent grade changeovers. In July 2014, this issue was taken up as a challenge by production and marketing teams to reduce the off spec material by at least 20%. **As a result of this joint project, a reduction of off spec material by 50% resulting in average saving of USD 114,600 within 5 months period from August to December 2014 was achieved.**

“

PROCESS INNOVATION leading to energy saving

Indorama Ventures Poland (IVP) in association with UIF, Buhler and BKG, used collaborative open innovation employing crystal cut technology and has achieved remarkable energy savings as opposed to a more conventional PET resin process. The crystal cut method involves direct crystallization that combines pelletizing, drying and crystallization in a single step and thus simplifies the PET production chain, saves energy and increases process stability. With crystal cut, energy saving is around 30% with a further saving of around 5% during the subsequent processing of the pellets in the injection molding machine. This resulted in an overall energy savings, when compared to conventional processes, of around 30-35%. ”

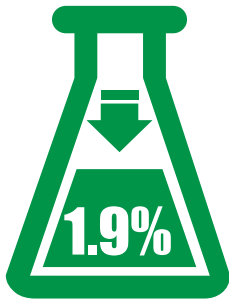
Eco-efficiency Measures

As part of our objective of improving environment protection, PTIVI has started using recyclable plastic pallets in place of single-use wooden pallets for its shipment of its products to customers. PTIVI also started using reusable bags for transferring chips to PT Indorama Polyester Industries Indonesia and for internal transfer. These changes have achieved a net savings of USD 100,000 and reduced our waste production.

“

Indorama Polymers, Lopburi, Thailand ("IRP") has contributed to the environment by undertaking certain Operational Excellence measures during the year. IRP has replaced existing air compressors with 1,500 CFM new air compressors and installed 18Watt LED lamps instead of 36Watt lamps. ”

▶ Manufacturing facilities at Indorama Polymers, Lopburi, Thailand.



Orion Global Pet, Lithuania (OGP) made yield savings due to reduction in IPA ratio from 2.2% to 1.9%.



of our sites have ISO 14001 certificates.



Indorama Polyester Industries, Rayong, Thailand (IPIR)

has improved Operational Efficiency by replacing steam ejectors with glycol ejectors to reduce steam consumption and by recovering column waste heat and installation of hot water absorption chillers. Furthermore, IPIR has revamped one of its HTM Heaters and as a result only one heater is needed to run instead of two, thus resulting in power saving. These OE measures yielded some savings of over USD 1 million to the Company. Indorama Polyester Industries has also undertaken the following OE measures during the year:

- Direct unloading of PTA hoppers to day silo instead of storage silo.
- Installation of an oxygen probe in an HTM heater resulted in lower gas consumption.
- Installed an inverter to reduce power consumption in the Solid State Polymerization (SSP) process.
- Reduced power consumption by stopping a catalyst storage vessel agitator in the CP process.

PT Indorama Polypet Indonesia (PTIPPI)

has been successfully turned around in less than one and a half years of operation and process consolidation. During the year, the plant has contributed to the environment by saving energy by proactive energy conservation initiatives and commissioning of a coal fired heater. There has been significant cost reduction in power and utilities after turn around due to various cost saving projects and operational excellence initiatives. After installation of the coal fired heater, there has been substantial decrease in the conversion cost.



During the year 2014, there were no non-compliances of environmental regulatory compliances across all entities of IVL.



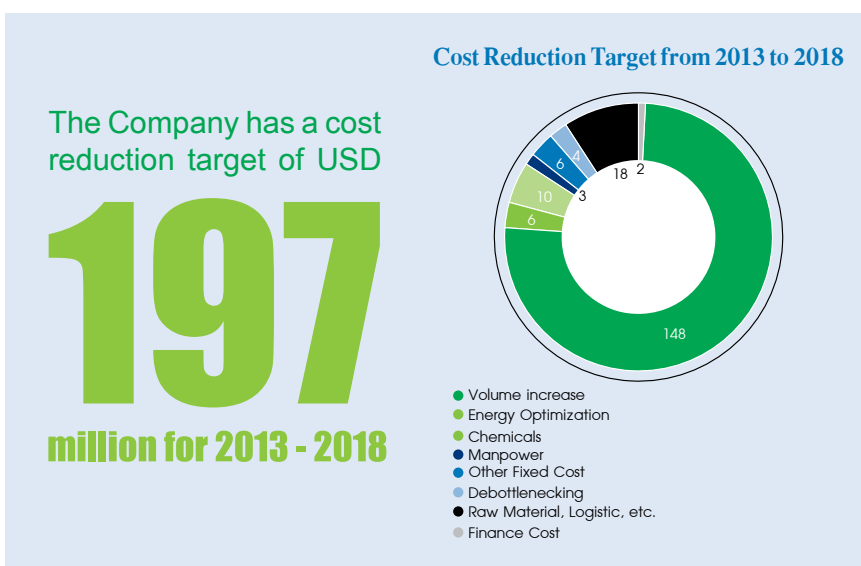
Trevira, Germany, has achieved a reduction hazardous waste by 20% through continuous information and process optimization.

Guangdong IVL PET Polymer China (GIVL)

has achieved energy savings, chemicals savings, raw material cost savings and also logistics savings, which was achieved due to improved barge operations. GIVL achieved "ZERO" off-spec as against the targeted quantity of 1%; ZERO waste as against budgeted quantity of 0.20% and a ZERO accident rate for the year 2014 without any minor or major incident/ accident.

Indorama Ventures Polymers Mexico (IVPM)

has achieved packing savings due to change in jumbo bag supplier and operational excellence initiatives; logistics savings due to new shipping lines and multimodal shipment; factoring charges reduction.



“ Targets of some entities for the year 2015: ”

- AlphaPet, USA is targeting a reduction in energy/utilities consumption which would lead to a saving of approximately USD 180,000.
- Auriga Polymers, USA is targeting to achieve a saving of USD 880,000 by reduction in consumption of utilities/energy.
- Indorama Ventures Polymers Mexico is targeting to achieve a saving over USD 1.6 million by undertaking utilities/energy consumption excellence initiatives. ”



▲ Manufacturing facilities at Indorama Ventures Poland.

The Company is committed to achieving the following:

- Build the "Indorama Ventures Brand"
- Focus on Safety & Environment
- Strengthen competitive advantage
- Inculcate culture of continuous improvements at all levels across businesses and regions
- Create an environment for faster growth to achieve the IVL vision



▲ Safety inspection at Indorama Polymers (Nigeria) plant.



In 2014, 16 sites have ZERO accidents representing 33% of total entities of the Company.

C. Material Social Issues

As a company, we put health and safety at the forefront of our activities. This concern is related to:

- The health and safety of everyone who comes to work in or lives near our premises.
- The personal and professional development of employees in terms of people management, people leadership and development, training, team events, job opportunities, etc.
- Strengthen ties with local communities.

Health and Safety

The most material issue is the risk of serious injury or fatality whenever anyone is involved in our work. We commit to providing safe and healthy workplaces for employees and subcontractors.

Providing safe and health work places not only boosts employee morale but also prevents lost hours and saves IVL costs.

Despite increasing its total workforce by 9.7%, the Company has maintained the number of injuries from 152 in 2013 to 153 in 2014. IVL reduced its injury rate from 9.05 per million hours in 2013 to 8.33 per million hours in 2014. This is linked to an estimated savings of USD 613,735 related to indirect costs resulting from reducing the injury rate across all plants in 2014 compared with 2013. Indirect costs include costs of fines, third-party liability and legal costs, worker pain and suffering and loss of goodwill from bad publicity.

We have an Employee Hygiene and Safety Policy (EHS Policy) approved by the Board of Directors to govern all health- and safety-related activities. To implement EHS management, a Site Hygiene and Safety Officer (SHSO) is assigned to all subsidiaries. The SHSO is responsible for evaluating all EHS performance at its facilities. They will examine the implementation of our EHS management program, conduct audits of Safety Directives on a regular basis, and oversee control of contractors in

respect to hygiene and safety. Our EHS Policy extends also to our products. We have quality control laboratories at all sites for product quality checks to identify any imperfection or contamination. Every employee is provided with a copy of the general policy during the commencement of their employment.

Targets and KPIs

Our target for Health and Safety Management is

- To reduce Lost Time Injuries Frequency Rate (LTIFR) and Total Recordable Injury Rate (TRIR) by 2%.
- To implement H&S policy of the Company for all the sites.
- To improve further continuously every year.

Health and Safety Management System and Risk Assessments

10 of our operations have occupational health and safety management system OHSAS 18001 certifications in place. We adhere to the ISO 14001 environmental standard and evaluate environmental performance regularly.

All our sites are required to conduct health and safety risk assessments on an annual basis to identify areas where operational procedures or other controls are required or should be reviewed. Reviews are scheduled whenever changes occur that could affect the risk profile, such as the installation of new equipment, new work systems or when the business changes premises. The result of the risk assessment assists the Company to improve safety procedures and ensures adequate levels of hygiene, safety, and welfare. The result of the risk assessments is reported to the Risk Management Committee.



of our sites have OHSAS 18001 certificates.

Implementation of occupational health and safety management system in Thailand

Five of 11 operations in Thailand have an occupational health and safety management system in accordance with OHSAS 18001 certified by an external party, accounting for 45% of our operations in Thailand. The other non-certified sites are operations with minimal health and safety risks, such as office buildings or are in the process of implementing the system. ”



TPT Petrochemicals in Thailand achieved one million man hours without lost time through injury (LTI) for the first time in seven years.



The total recordable injury rate (injuries per million man hours) has been reduced from 13.19 in 2011 to 8.37 in 2014.

In addition to the H&S Management System, each facility is encouraged to implement a safety program to provide and maintain a safe and hygienic working environment and to provide adequate control of the hygiene and safety risks at the workplace.

Behavior-based Safety Program

Behavior-based Safety (BBS) Program is a behavioral change program to improve safety performance. The BBS program has been implemented at TPT site since 2011. This BBS program has three focus areas: eyewear protection, compliance with a continuous permit to work procedure and wearing safety helmets using the chin strap correctly.

Employee Health Promotion

The health of our employees is our main concern, whether occupational or general health issues. In all of our workplaces we have health communication programs focusing on the prevention of diseases and promoting good health practices. To ensure health issues do not create discrimination, we have, for example, an HIV-AIDS Policy in place covering confidentiality and disclosure, non-discrimination, testing and education as well as awareness training. All managers and supervisors are trained to communicate and ensure compliance with the policy.

Employee Welfare

To boost morale of the workforce and for the welfare of employees, TPT Petrochemicals Pcl, a subsidiary of IVL in Thailand formed employee football club known as 'TPT Football Club'. TPT employees play football matches with employees of other stakeholder companies, i.e. the Industrial Estates Authority of Thailand (IEAT) and communities. This helps strengthen the relationship amongst employees and develops rapport with stakeholders.



▲ TPT Football Club arranged by TPT Petrochemicals to support recreational activities of its employees.



▲ TPT cycling Club arranged by TPT Petrochemicals to promote good health of its employees.

In 2014, TPT Petrochemical started its own TPT Cycling Club, inviting employees to ride bicycles to work for exercise and health promotion.

Indorama Petrochem, Rayong, Thailand (IRPL)

We have arranged for our staff to use local sports centers in Rayong and Banchang in Thailand so that employees and their families can enjoy exercise and sports.

In 2014, we organized an 'Employee Sport Day' inside IRPL as part of our New Year celebration activities. The activities included badminton, table tennis, and darts competitions.

PT Indorama Ventures Indonesia (PTIVI)

PT Indorama Ventures Indonesia (PTIVI) with systematic safety measures including regular training and inspection practices was able to achieve 2,000,000 man hours of ZERO accidents in 2014. The Company is targeting for 3,000,000 man hours of ZERO accidents.

Indorama Ventures (Oxide & Glycols)

Factory management commenced a 'Behavioral Based Observation Program' in 2014 at the Clear Lake Site to reduce behavior based injuries following an

increase of such injuries. A program, based on the DuPont STOP program was adopted, modified and implemented. Though the program is voluntary, each employee of the site is asked to perform two behavioral based observations per month. Data is published once per month on the top actions that were observed to be at risk. The program encourages one-on-one contact between observers and task performers. 2015 will focus on program improvements and effectiveness, including improved dialogue, partnered observations, more thorough analysis of data and action plans for improvement, and overall, making it a part of who we are, not just a program.

Human Resources

In our Company, Human Resources plays a critical role in driving the business to success and securing a sustainable future for the company and employees. The challenge for any corporation would be to get leadership and the Human Resources function at our Company helps developing leaders to be prepared and to take up the challenges today to run the company. It also builds a good team of working professionals. Further, being a global organization, our growth trajectory is contingent of people who thrive on a multicultural world in the workplace and in the market. We ensure that a judicious mix of talent is infused in our workforce. Our employee base includes a broad range of functions and roles globally, from manufacturing and maintenance experts to new product designers and plant workers, from specialists in marketing, sales, logistics, customs, tax and trade, to finance & accounts, managers and many, many more.

The Company is committed to implement Performance Management Process for management level staff as well as a training module from corporate level to be implemented across IVL, which is in line with its Human Resources strategy.

More information on Human Resources is given under section 'What Sustainability Means to Us'.



▲ PT Indorama Ventures Indonesia (PTIVI)
 ■ Achieved - 2,000,000 man hours of ZERO accidents
 ■ New Target - 3,000,000 man hours of ZERO accidents

Global Material Sustainability Data Summary

This summary covers all sites across all business units (PET, Fibers and Yarns, and Feedstock) including:

Americas (North America and Mexico)

- AlphaPet
- Auriga Polymers
- FiberVisions
- Indorama Ventures (Oxide & Glycols)
- Indorama Ventures Polymers Mexico
- Polyamide High Performance
- StarPet

Asia Pacific (APAC)

- AsiaPet (Thailand)
- Guangdong IVL PET Polymer
- Indorama Holdings (Thailand)
- Indorama Petrochem
- Indorama Polyester Industries, Nakorn Pathom
- Indorama Polyester Industries, Rayong
- Indorama Polymers
- Indorama Ventures Packaging (Philippines) Corporation
- Petform, Korat
- Petform, Lopburi
- Petform, Pathumthani
- Petform, Rayong

- PT Indorama Polychem Indonesia
- PT Indorama Polyester Industries Indonesia
- PT Indorama Ventures Indonesia
- PT Indorama Petrochemicals
- PT Indorama Polypet Indonesia
- TPT Petrochemicals

Europe, Middle East and Africa (EMEA)

- Beverage Plastics
- Indorama PET (Nigeria)
- Indorama Polymers Rotterdam
- Indorama Ventures Adana PET
- Indorama Ventures Packaging (Ghana)
- Indorama Ventures Packaging (Nigeria)
- Indorama Ventures Poland
- PHP Fibers
- Trevira
- Orion Global Pet
- Wellman France Recyclage
- Wellman International (Ireland)
- Wellman International (The Netherlands)

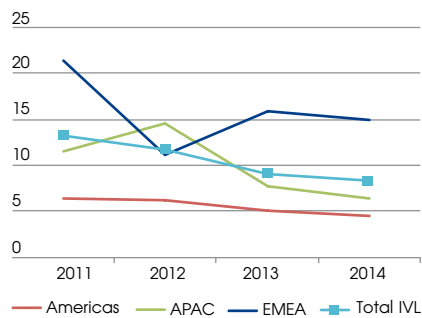
For the majority of sustainability data indicators IVL is showing an improving trend on a global level, especially when comparing environmental intensity year on year. When comparing absolute figures there is a year on year increase in resource consumption and absentee days, however these can be attributed to the growth of IVL in terms of both production output as well as number of employees.

Health and Safety

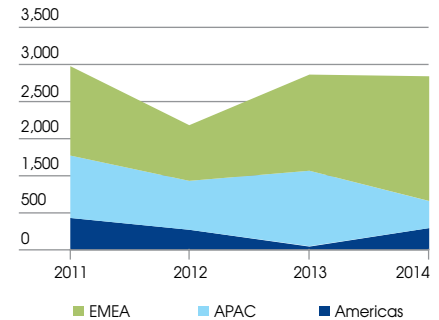
Region	Total Recordable Injury Rate (TRIR) (injuries per million hours)				Employee Lost Days				Absentee Days			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Americas	6.33	6.18	5.15	4.49	422	266	49	282	5,549	5,644	5,694	5,188
APAC	11.45	14.46	7.77	6.37	838	653	1,024	375	4,790	8,457	11,615	20,651
EMEA	21.31	11.08	15.78	14.93	1,211	767	1,290	1,669	31,025	32,072	32,641	32,212
Total IVL	13.19	11.62	9.05	8.33	2,471	1,686	2,363	2,326	41,364	46,173	49,950	58,051

*Increase in absentee days due to acquisitions

TRIR (Injuries per million hours)



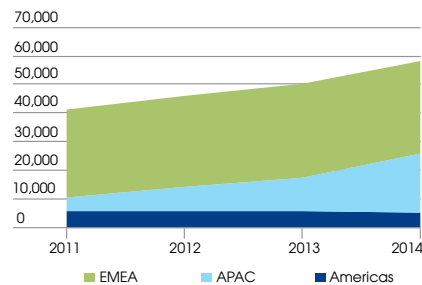
Employee Lost Days



“

Coverage of reporting represented by % revenue of total revenue of all sites in 2014 was as follows: TRIR 100%, Lost Days 100% and Absentee Days 91%. ”

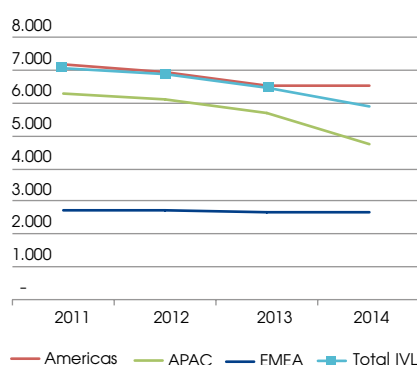
Absentee Days



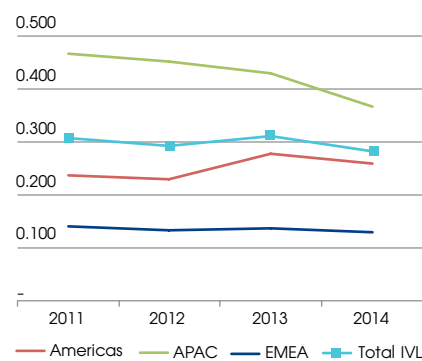
Environmental Intensity (by Region)

Region	Energy Intensity GJ/Tonne of Production				Scope 1 Intensity tCO ₂ e/Tonne of Production				Water Withdrawal Intensity m ³ /Tonne of Production			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Americas	7.180	6.932	6.545	6.535	0.239	0.230	0.278	0.260	3.857	3.819	4.020	3.873
APAC	6.268	6.144	5.689	4.732	0.466	0.453	0.429	0.367	6.930	7.158	6.086	5.482
EMEA	2.720	2.705	2.685	2.646	0.139	0.135	0.139	0.128	12.287	11.329	9.603	9.921
Total IVL	7.081	6.899	6.462	5.901	0.307	0.295	0.313	0.283	7.187	7.041	6.284	6.020

Energy Intensity GJ/Tonne of Production

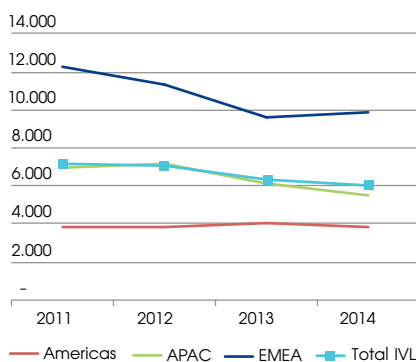


Scope 1 Intensity tCO₂e/Tonne of Production



“ Coverage of reporting represented by % revenue of total revenue of all sites in 2014 was as follows: Energy 99%, Scope 1 emissions 97% and Water Withdrawal 100%. ”

Water Withdrawal Intensity m³/Tonne of Production



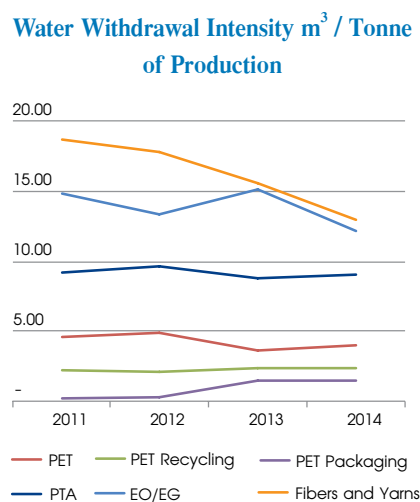
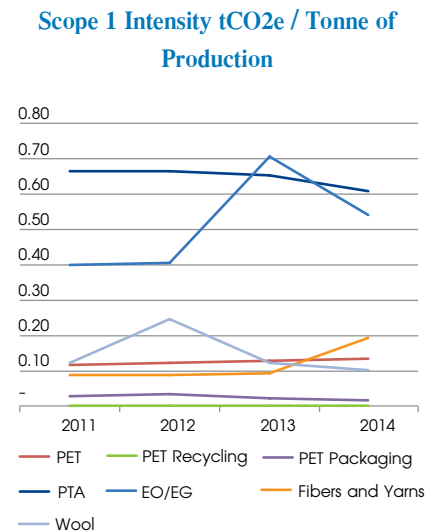
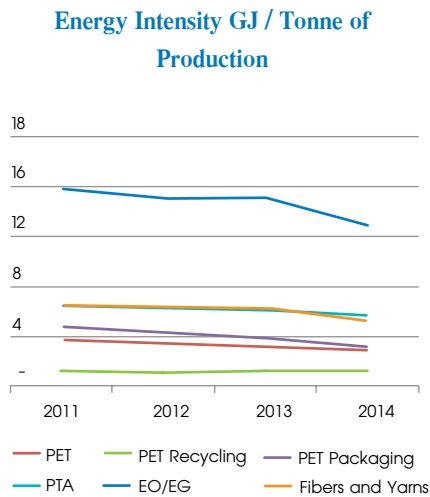
Regional differences in intensity are attributable to the differences in business makeup of each region. The Americas has high energy intensity due to multiple fibers and yarns sites and one ethylene oxide and glycols plant. Asia Pacific region has high scope 1 GHG intensity due to the presence of PTA producing sites. Additionally, the Asia Pacific region also has a wool production site which is very resource intensive, however due to low production output compared to other businesses the effect on the overall environmental intensity of the region is minimal. Europe, Middle East and Africa region has high water consumption due to the presence of fibers and yarns sites. Low energy intensity in EMEA is attributable to the presence of packaging and recycling sites.

Environmental Intensity (by Business)

Business Unit	Energy Intensity GJ / Tonne of Production				Scope 1 Intensity tCO ₂ e / Tonne of Production				Water Withdrawal Intensity m ³ / Tonne of Production			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
PET	1.96	2.07	2.60	3.05	0.11	0.12	0.13	0.14	4.63	4.83	3.63	3.94
PET Recycling	1.27	1.21	1.27	1.34	0.00	0.00	0.00	0.00	2.28	2.10	2.30	2.33
PET Packaging	4.79	4.31	3.82	3.30	0.03	0.03	0.02	0.02	0.20	0.22	1.53	1.49
PTA	6.41	6.46	6.10	5.74	0.67	0.66	0.65	0.61	9.23	9.63	8.79	8.99
EO/EG	15.75	15.04	15.00	12.84	0.40	0.40	0.71	0.54	14.86	13.43	15.15	12.10
Fibers and Yarns	6.33	6.28	6.21	5.23	0.09	0.09	0.09	0.19	18.71	17.80	15.58	12.97
Wool	37.44	48.67	34.41	31.69	0.12	0.24	0.12	0.10	92.51*	256.09*	105.83*	73.21*

* Includes consumption for commonalities for dormitories, gardening, solar plant etc.

“ Coverage of reporting represented by % revenue of total revenue of all sites in 2014 was as follows: Energy 99%, Scope 1 emissions 97% and Water Withdrawal 100%. ”



* Wool business excluded from above energy and water intensity graphs due the higher intensity of the business and unique business nature when compared with other IVL businesses.

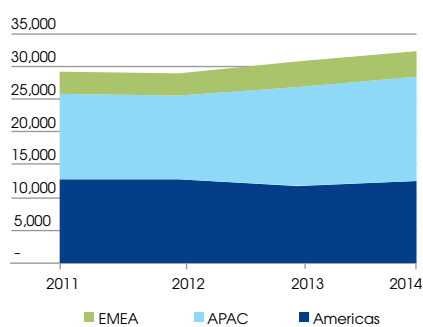
Resource Use

Region	Total Energy Consumption TJ				Water Withdrawal Million m ³			
	2011	2012	2013	2014	2011	2012	2013	2014
Americas	12,733	12,656	11,799	12,635	6.8	7.0	7.2	7.5
APAC	13,028	12,787	15,105	15,714	14.4	14.9	16.2	18.2
EMEA	3,435	3,557	3,727	4,029	15.5	14.9	13.3	15.1
Total IVL	29,197	29,000	30,631	32,378	36.8	36.8	36.7	40.8

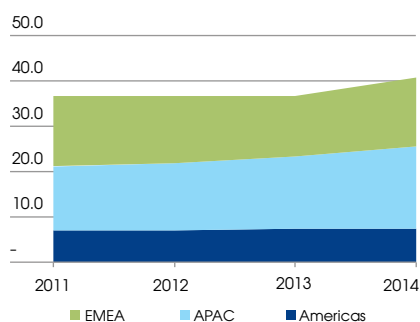


Coverage of reporting represented by % revenue of total revenue of all sites in 2014 was as follows: Energy 99% and Water Withdrawal 100%. ”

Total Energy Consumption TJ



Water Withdrawal Million m³



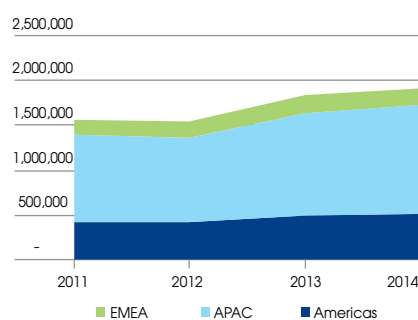
Air Emissions

Region	Scope 1 GHG tCO2e				Scope 2 GHG tCO2e				NOx Tonnes			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Americas	423,149	419,433	500,854	502,120	396,951	396,434	337,391	323,007	329	313	356	323
APAC	969,142	942,352	1,138,122	1,219,674	386,001	394,357	517,086	626,759	5,932	3,259	2,583	3,992
EMEA	176,030	177,648	192,564	195,022	378,715	358,462	383,114	357,996	142	138	128	99
Total IVL	1,568,321	1,539,433	1,831,539	1,916,816	1,161,667	1,149,253	1,237,591	1,307,762	6,403	3,710	3,068	4,415

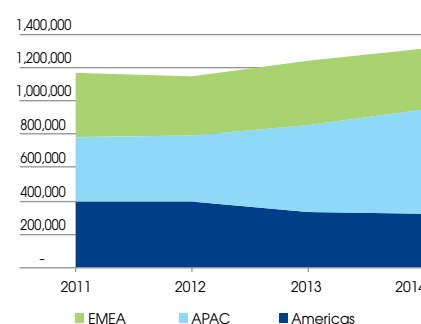


Coverage of reporting represented by % revenue of total revenue of all sites in 2014 was as follows: Scope 1 emissions 97%, Scope 2 emissions 97% and NOx emissions 86%. ”

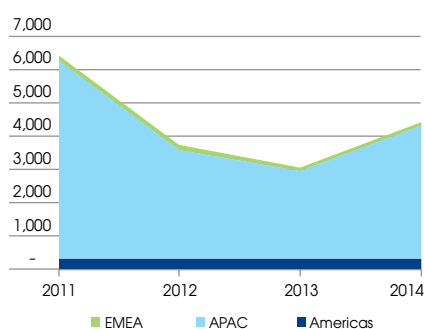
Scope 1 GHG tCO2e



Scope 2 GHG tCO2e



NOx Tonnes



Waste and Water Discharge

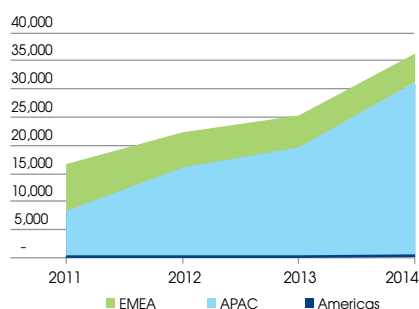
Region	Hazardous Waste Tonnes				Non-Hazardous Waste Tonnes				Water Discharge Million m ³			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Americas	142	149	145	333	13,207	10,583	9,727	10,596	1.55	1.54	1.54	1.47
APAC*	8,219	15,834	19,452	30,795	33,476	31,679	37,007	36,324	4.64	4.81	5.10	5.63
EMEA	8,354	6,225	5,811	5,318	18,758	19,114	19,278	18,652	5.55	5.81	5.22	5.01
Total IVL	16,715	22,208	25,408	36,446	65,440	61,375	66,012	65,572	11.74	12.15	11.86	12.11

*Large increase due to acquisition in 2012 and acquisition in 2013 of PT. Indorama Polypet Indonesia (PTIP).

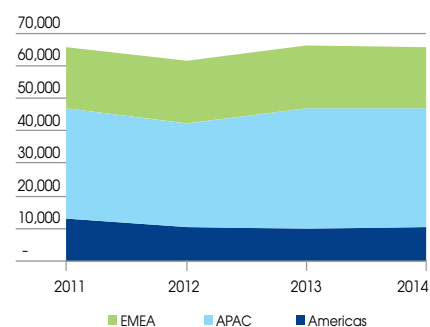


Coverage of reporting represented by % revenue of total revenue of all sites in 2014 was as follows: Hazardous Waste 100%, Non-hazardous Waste 98% and Water Discharge 97%. ”

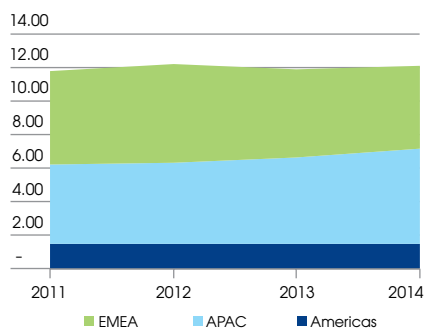
Hazardous Waste Tonnes



Non-Hazardous Waste Tonnes



Water Discharge Million m³



Global and Thailand EHS Data

G4		Unit	Global				Thailand			
			2011	2012	2013	2014	2011	2012	2013*	2014*
Production										
General	Total production	Tonnes	5,114,658	5,221,598	5,845,675	6,777,600				
Materials										
EN1	Total material use	Tonnes	5,417,030	5,697,178	6,244,632	6,973,953				
	• PTA	Tonnes	2,172,923	2,389,233	2,758,205	3,073,569				
	• MEG	Tonnes	872,171	939,328	1,149,538	1,439,981				
	• others	Tonnes	2,371,936	2,368,618	2,336,889	2,460,403				
EN2	Total recycled materials	Tonnes	70,615	74,429	84,331	111,143				
Energy										
	Total energy consumption ⁽¹⁾	GJ	29,196,667	29,000,351	30,631,011	32,378,240	10,681,534	10,334,693	10,780,728	9,897,330
	• Fuel oil	GJ	786,748	592,357	106,495	125,305	277,457	230,538	56,501	74,746
	• Natural gas	GJ	14,706,664	15,121,300	14,690,903	15,350,627	2,326,273	2,422,651	2,317,078	2,124,275
	• LPG ⁽²⁾	GJ	129,535	152,523	35,779	63,367	2,837	2,434	6,659	20,957
	• Diesel	GJ	14,911	11,069	11,229	14,969	10,881	3,817	3,921	5,929
	• Gasoline	GJ	636	4,737	15,747	27,587	185	1,460	1,475	1,383
EN3	• Fuel gas	GJ	-	-	-	-	-	-	-	-
	• Coke	GJ	-	-	-	-	-	-	-	-
	• Coal	GJ	8,046,958	7,637,361	10,570,044	11,137,354	8,046,958	7,551,148	8,568,773	7,727,617
	Total Indirect energy consumption	GJ	7,018,351	7,021,327	7,145,085	7,615,814	1,437,852	1,477,703	1,488,161	1,595,570
	Electricity sold	GJ	739,929	772,892	951,655	930,595	513,755	534,454	653,031	663,130
	Total steam sold	GJ	920,081	840,087	1,062,039	1,057,382	907,154	820,604	1,008,809	990,016
EN5	Energy Intensity	GJ/Tonnes of production	7.08	6.90	6.46	5.90	6.343	6.182	6.421	6.015
Water Withdrawal and Consumption										
	Total water withdrawn by sources	m ³	36,759,614	36,764,794	36,734,582	40,801,813	12,699,490	12,655,126	12,551,204	12,447,144
	• Surface water	m ³	14,675,409	14,635,142	14,093,121	14,934,348	11,572,185	11,543,471	11,230,357	10,773,329
	• Sea water (excluding once through cooling water)	m ³	3,265,247	2,651,424	2,065,119	2,065,298	-	-	-	-
EN8	• Once through cooling water	m ³	4,983,236	4,917,371	4,358,201	5,324,476	-	-	-	-
	• Municipal water	m ³	8,280,422	9,210,325	10,882,035	12,293,666	896,844	943,635	1,010,226	1,159,350
	• Ground water	m ³	5,494,541	5,297,033	5,281,059	6,146,267	210,461	148,020	288,421	514,465
	• Rain water	m ³	60,759	53,499	55,047	37,758	20,000	20,000	22,200	-
	Water Intensity	m ³ /Tonnes of Production	7.19	7.04	6.28	6.02	6.647	6.624	6.569	6.515
Reused / Recycled Water										
EN10	Total volume of recycled/reused water	m ³	1,430,329	1,460,417	1,635,765	1,931,671	1,298,015	1,298,015	1,298,015	1,298,015
	% of recycled/reused water	%	3.89%	3.97%	4.45%	4.73%	10.22%	10.26%	10.34%	10.43%
Emission										
EN15	Scope 1 GHG emissions	Tonnes of CO ₂ e	1,568,321	1,539,433	1,831,539	1,916,816	917,147	872,557	959,408	913,388
EN16	Scope 2 GHG emissions	Tonnes of CO ₂ e	1,161,667	1,149,253	1,237,591	1,307,762	339,517	337,824	373,357	378,290
EN17	Other indirect GHG (Scope 3) emission ⁽³⁾	Tonnes of CO ₂ e	15,659	15,616	11,648	12,472	N/A	N/A	N/A	N/A
EN18	Scope 1 GHG Intensity	tCO ₂ e/t of production	0.307	0.295	0.313	0.283	0.480	0.457	0.502	0.478

⁽¹⁾ Total energy consumption is calculated using the following formula as per GRI-EN3 requirements: Total energy consumption = Non-renewable Fuel consumed + Indirect Energy Consumed - Electricity and Steam Sold

⁽²⁾ LPG includes methanol

⁽³⁾ Scope 3 emissions from one plant only (Orion Global Pet)

		Global				Thailand				
G4	Unit	2011	2012	2013	2014	2011	2012	2013*	2014*	
Production										
EN21	Total NOx emission	Tonnes	6,403	3,710	3,068	4,415	348	409	382	360
	Total SOx emission	Tonnes	855	1,323	362	971	428	204	130	448
	Total VOC emission	Tonnes	440	471	612	534	0.00	0.00	135	169
Wastewater Discharge										
EN22	Total water discharge volume	m ³	11,742,763	12,151,270	11,859,572	12,111,937	4,410,348	4,334,832	4,109,795	3,970,211
	COD in treated wastewater discharged	Tonnes	1,347.27	1,314.18	1,415.49	1,508.99	334.02	322.86	286.11	285.08
	BOD in treated wastewater discharged	Tonnes	304.46	267.96	300.07	303.59	27.52	28.95	28.52	26.91
	TSS in treated wastewater discharged	Tonnes	1,264.89	1,449.45	1,123.54	1,317.74	144.92	117.98	133.78	380.32
	Oil and grease in treated wastewater discharged	Tonnes	12.36	13.09	20.90	15.51	5.26	5.40	4.68	4.99
	Recycled & Reused water	m ³	1,199,067	1,352,543	1,536,994	1,753,346	928,152.23	980,917.55	1,175,449.88	1,343,882.40
Solid Waste										
EN23	Total hazardous waste	Tonnes	16,715	22,208	25,405	36,427	7,013	6,518	5,841	5,251
	• Reuse	Tonnes	7,140	5,308	4,468	10,818	5	2	1	3
	• Recycling	Tonnes	216	344	352	396	40	261	119	232
	• Composting	Tonnes	-	-	-	-	0	0	0	0
	• Recovery (including energy recovery)	Tonnes	451	451	460	474	53	26	3	33
	• Incineration	Tonnes	7,042	6,107	5,841	4,618	6,581	5,709	5,385	4,329
	• Landfill	Tonnes	1,377	9,783	13,750	17,791	334	520	333	451
	• Onsite storage	Tonnes	-	0	74	55	0	0	0	0
	• Others	Tonnes	487	215	459	2,277	0	0	1	203
	Total non-hazardous waste	Tonnes	65,440	61,375	66,012	65,573	33,468	31,389	36,504	31,736
	• Reuse	Tonnes	1,096	562	607	595	56	0	171	52
	• Recycling (wool dust)	Tonnes	32,264	33,192	36,144	34,987	21,846	21,985	26,182	20,832
	• Composting	Tonnes	246	279	174	252	0	0	0	0
	• Recovery (including energy recovery)	Tonnes	6,034	6,515	6,680	6,262	9	20	14	33
	• Incineration	Tonnes	1,095	958	1,180	1,480	0	0	0	0
	• Landfill (general waste)	Tonnes	20,089	17,522	17,930	17,816	10,458	8,209	8,244	9,124
	• Onsite storage	Tonnes	34	24	28	33	0	0	0	0
• Others	Tonnes	4,583	2,323	3,270	4,148	1,099	1,175	1,892	1,696	
EN25	Total weight of hazardous waste transported	Tonnes	14,522	11,515	10,423	18,220				
	Total weight of hazardous waste treated	Tonnes	6,747	5,715	5,525	6,348				
	The total weight of hazardous waste shipped internationally	Tonnes	51	6	-	39				
Spills										
EN24	Total significant spill	Case	20	19	23	26				
	Total significant spill	Tonnes	1	111	59	126				
	• Hydrocarbon spills	Case	0	3	0	0				
	• Hydrocarbon spills	Tonnes	0	1	0	0				
	• Chemical spill	Case	16	13	20	22				
	• Chemical spill	Tonnes	0	111	58	20				
	• Other spills (specify)	Case	4	3	3	5				
	• Non-hydrocarbon spills	Tonnes	1	0	0	107*				

* Other Spills in 2014 were of PTA powder product spilled from a silo at Indorama Petrochem (IRPL) plant in Rayong, Thailand. This spill did not have any detrimental effects as it did not have any environmental effect (wildlife, air, soil or water) and also did not affect the health of any staff within IRPL or any persons outside of IRPL.

		Global				Thailand				
G4	Unit	2011	2012	2013	2014	2011	2012	2013*	2014*	
Production										
Employees										
	Total employee	Person	8,228	8,386	8,657	9,498	1,804	1,922	2,142	2,427
G4-10	• Male	Person	6,503	6,631	6,868	7,611	1,015	1,105	1,296	1,728
	• Female	Person	1,725	1,755	1,789	1,887	789	817	847	699
Occupational Health and Safety										
	Total workforce represented in formal joint management-worker health and safety committees	Person	2,650	2,495	2,497	2,605				
LA5	Percentage of workforce represented in formal joint management-worker health and safety committees	%	32%	30%	29%	27%				
	Total Recordable Injury rate (TRIR)	No/MillionMan-Hours								
	Employee	No/MillionMan-Hours	13.19	11.62	9.05	8.33	18.11	24.89	11.69	10.63
	• Male	No/MillionMan-Hours	14.65	11.04	9.68	8.98	26.42	31.23	14.60	10.85
	• Female	No/MillionMan-Hours	7.39	13.93	6.41	5.65	8.02	16.76	7.47	6.61
	Contractor	No/MillionMan-Hours	7.27	13.89	8.06	9.86	6.56	14.91	7.80	6.88
	• Male	No/MillionMan-Hours	7.48	16.92	9.03	11.64	8.41	23.10	10.45	7.18
	• Female	No/MillionMan-Hours	6.48	3.44	5.23	5.15	3.71	1.84	3.44	7.08
	Total number of injury (not including first aid incidents)	Person	221	206	167	174	79.00	116.00	62.00	85.00
	Employee	Person	208	179	152	153	70.00	95.00	50.00	67.00
	• Male	Person	184.5	136.0	131.5	133.0	56	67	37	52
	• Female	Person	23.5	43.0	20.5	20.0	14	28	13	15
LA6	Contractor	Person	13	27	15	21	9	21	12	18
	• Male	Person	10.5	25.5	12.5	18.0	7	20	10	15
	• Female	Person	2.5	1.5	2.5	3.0	2	1	2	3
	Occupational Diseases Rate (ODR) (all employees, all contractors)	No/MillionMan-Hours	0	0	0	0	0	0	0	0
	Fatalities (all employees and contractors)	Person	0	0	0	0	0	0	0	0
	Lost Day Rate (LDR)	Days/MillionMan-Hours								
	Employee	Days/MillionMan-Hours	157	109	141	127	69.9	55.6	35.5	36.8
	• Male	Days/MillionMan-Hours	157	102	140	128	122.2	83.4	46.2	38.6
	• Female	Days/MillionMan-Hours	154	140	143	122	6.3	19.7	20.1	20.7
	Contractor	Days/MillionMan-Hours	16	27	2	19	20.4	25.6	1.9	14.5
	• Male	Days/MillionMan-Hours	20	35	3	18	33.7	41.6	3.1	12.0
	• Female	Days/MillionMan-Hours	0	0	0	22	-	-	-	30.7

G4	Unit	Global				Thailand			
		2011	2012	2013	2014	2011	2012	2013*	2014*
Production									
Total number of lost day (not including calendar days, only including lost scheduled work days)	Days	2,499.0	1,738.0	2,366.8	2,367.2	298.0	248.0	155.0	270.0
Employee	Days	2,471.0	1,686.0	2,362.8	2,326.2	270.0	212.0	152.0	232.0
• Male	Days	1,981.0	1,254.0	1,904.8	1,893.2	259.0	179.0	117.0	185.0
• Female	Days	490.0	432.0	458.0	433.0	11.0	33.0	35.0	47.0
Contractor	Days	28.0	52.0	4.0	41.0	28.0	36.0	3.0	38.0
• Male	Days	28.0	52.0	4.0	28.0	28.0	36.0	3.0	25.0
• Female	Days	-	-	-	13.0	-	-	-	13.0
Absentee Rate (AR)	%								
Employee	%	2.0%	2.2%	2.3%	2.6%				
• Male	%	1.9%	2.0%	2.2%	2.7%	0.7%	0.9%	1.2%	1.4%
• Female	%	2.3%	2.8%	2.6%	2.2%	1.2%	2.1%	1.3%	2.1%
Absentee days	Days								
Employee	Days	41,364.0	45,328.5	49,078.5	62,675.1	4,023.0	6,939.5	6,835.0	9,791.0
• Male	Days	31,449.6	33,120.7	37,651.1	52,180.3	1,737.6	2,584.1	4,018.0	6,089.0
• Female	Days	9,914.4	12,207.8	11,427.4	10,494.9	2,285.4	4,355.4	2,817.0	3,702.0
Contractor	Days	440.0	443.0	230.0	1,582.0	-	-	-	1,077.0
• Male	Days	432.0	436.0	230.0	1,240.5	-	-	-	737.5
• Female	Days	8.0	7.0	-	341.5	-	-	-	339.5

*Verified by LRQA

The data in the above tables were verified by LRQA for the following sites in Thailand:

- Indorama Petrochem
- Indorama Holdings (Thailand)
- AsiaPet (Thailand)
- Indorama Polyester Industries, Nakorn Pathom
- Indorama Polyester Industries, Rayong
- Indorama Polymers
- TPT Petrochemicals
- Petform, Lopburi

Global Human Resources Data

G4		Unit	Global 2014*	Only Thailand 2014
Entry level wage ratio				
EC5	Entry level wage	THB		
	•Male	THB	17878.53	
	•Female	THB	18007.55	
	Local minimum wage	THB		
	•Male	THB	16741.84	
	•Female	THB	16741.84	
	Ratios of standard entry level wage compared to local minimum wage	THB		
	•Male	%	107%	
	•Female	%	108%	
Local employee proportion				
EC6	Senior management hired from local community at significant location	Persons	29	
Labor Practice Grievance				
EN34, LA16	Number of grievance about for labor practice through formal grievance process	Case	2	
Employees				
G4-10	Total employee	Person	9,683	
	•Male	Person	7,702	
	•Female	Person	1,981	
	Total full-time employee	Person	7,186	
	•Male	Person	5,560	
	•Female	Person	1,626	
	Total part-time employee	Person	102	
	•Male	Person	52	
	•Female	Person	50	
	Total permanent contract employee	Person	3,335	
	•Male	Person	2,717	
	•Female	Person	618	
	Total temporary contract employee	Person	624	
	•Male	Person	563	
	•Female	Person	61	
G4-10, LA12	Total employees	Person	7,138	1,447
	•Male	Person	5,505	728
	•Female	Person	1,633	719
	Total employee by Level	Person	7,178	1,447
	Executive	Person	91	2
	•Male	Person	76	2
	•Female	Person	15	0
	Middle Management	Person	320	52
	•Male	Person	271	41
	•Female	Person	49	11
	Senior	Person	742	235
	•Male	Person	574	168
	•Female	Person	168	67
	Employee	Person	6,025	1,158
	•Male	Person	4,692	517
	•Female	Person	1,333	641

G4		Unit	Global 2014*	Only Thailand 2014
LA12	Total employee by Age	Person	7,159	
	Over 50 years old	Person	1,519	
	• Male	Person	1,192	
	• Female	Person	326	
	30-50 years old	Person	4,097	
	• Male	Person	3,175	
	• Female	Person	923	
	Below 30 years old	Person	1,543	
	• Male	Person	1,209	
	• Female	Person	334	
	Total governance body (board of directors/ supervisory board) by Age	Person	35	
	Over 50 years old	Person	22	
	• Male	Person	22	
	• Female	Person	0	
	30-50 years old	Person	13	
	• Male	Person	11	
	• Female	Person	2	
	Below 30 years old	Person	0	
	• Male	Person	0	
• Female	Person	0		

Employee hires and turnover

LA1	Total new employee	Person	876	
	• Male	Person	535	
	• Female	Person	341	
	Total new hire rate	New hire rate (%)	9%	
	• Male	New hire rate (%)	7%	
	• Female	New hire rate (%)	17%	
	New employee by Age	Person	876	
	Over 50 years old	Person	9	
	• Male	Person	2	
	• Female	Person	7	
	30-50 years old	Person	209	
	• Male	Person	107	
	• Female	Person	102	
	Below 30 years old	Person	658	
	• Male	Person	425	
	• Female	Person	233	
	New hire rate by Age	Turnover rate (%)	9%	
	Over 50 years old	Turnover rate (%)	1%	
	• Male	Turnover rate (%)	0%	
	• Female	Turnover rate (%)	2%	
	30-50 years old	Turnover rate (%)	5%	
	• Male	Turnover rate (%)	3%	
	• Female	Turnover rate (%)	11%	
	Below 30 years old	Turnover rate (%)	43%	
	• Male	Turnover rate (%)	35%	
	• Female	Turnover rate (%)	70%	

G4		Unit	Global 2014*	Only Thailand 2014
LA1	Total employee turnover	Person	842	
	•Male	Person	520	
	•Female	Person	322	
	Total employee turnover rate	Turnover rate (%)	9%	
	•Male	Turnover rate (%)	7%	
	•Female	Turnover rate (%)	16%	
	Turnover by Age	Person	664	
	Over 50 years old	Person	67	
	•Male	Person	45	
	•Female	Person	22	
	30-50 years old	Person	241	
	•Male	Person	146	
	•Female	Person	95	
	Below 30 years old	Person	356	
	•Male	Person	356	
	•Female	Person	0	
	Turnover Rate by Age	Turnover rate (%)	7%	
	Over 50 years old	Turnover rate (%)	4%	
	•Male	Turnover rate (%)	4%	
	•Female	Turnover rate (%)	7%	
	30-50 years old	Turnover rate (%)	6%	
	•Male	Turnover rate (%)	5%	
	•Female	Turnover rate (%)	10%	
	Below 30 years old	Turnover rate (%)	23%	
	•Male	Turnover rate (%)	29%	
	•Female	Turnover rate (%)	0%	
	Voluntary employee turnover	Person	185	
Voluntary employee turnover	Turnover rate (%)	2%		
Number of employees laid off	Person	68		
Number of consultations/negotiations with employees over organizational changes	Person	139		
Parental leave				
LA3	Number of employee entitled for parental leave	Person	1,946	
	•Male	Person	1,336	
	•Female	Person	610	
	Number of employee taken parental leave	Person	86	
	•Male	Person	34	
	•Female	Person	52	
	Number of employee return to work after parental leave	Person	75	
	•Male	Person	33	
	•Female	Person	42	
	Return to work (after parental leave) rate	%	87%	
	•Male	%	97%	
	•Female	%	81%	
	Number of employee returning from parental leave and still employed for the next 12 months	Person	50	
	•Male	Person	22	
	•Female	Person	28	
	Retention (after parental leave and still employed for the next 12 months) rate	%	1	
	•Male	%	67%	
	•Female	%	67%	

G4		Unit	Global 2014*	Only Thailand 2014
Employee training				
	Total training hours provided to employee	Hours	126,351	63,931
	• Male	Hours	93,313	33,732
	• Female	Hours	33,038	27,177
	Executive	Hours	1,715	266
	• Male	Hours	1,392	266
	• Female	Hours	323	0
	Middle Management	Hours	10,007	3,959
	• Male	Hours	8,052	3,080
	• Female	Hours	1,955	919
	Senior	Hours	20,567	10,381
	• Male	Hours	16,513	7,448
	• Female	Hours	4,053	2,933
	Employee	Hours	94,062	54,980
	• Male	Hours	67,355	29,005
	• Female	Hours	26,707	25,975
LA9	Average training hours	Hours/Employee	13	25
	• Male	Hours/Employee	12	20
	• Female	Hours/Employee	17	39
	Executive	Hours/Employee	19	12
	• Male	Hours/Employee	18	67
	• Female	Hours/Employee	22	0
	Middle Management	Hours/Employee	31	36
	• Male	Hours/Employee	30	41
	• Female	Hours/Employee	40	44
	Senior	Hours/Employee	28	28
	• Male	Hours/Employee	29	36
	• Female	Hours/Employee	24	42
	Employee	Hours/Employee	16	35
	• Male	Hours/Employee	14	43
	• Female	Hours/Employee	20	83
Performance Review				
	Number of employee receiving regular performance reviews	Person	3,565	
	Executive	Person	65	
	Middle Management	Person	277	
	Senior	Person	622	
	Employee	Person	2,601	
	% of employee receiving regular performance reviews	%	37%	
	Executive	%	72%	
	Middle Management	%	87%	
	Senior	%	84%	
	Employee	%	43%	
LA11	Number of employee receiving career development reviews	Person	1,268	
	Executive	Person	50	
	Middle Management	Person	108	
	Senior	Person	162	
	Employee	Person	948	
	% of employee receiving career development reviews	%	47%	
	Executive	%	1%	
	Middle Management	%	7%	
	Senior	%	4%	
	Employee	%	61%	

G4		Unit	Global 2014*	Only Thailand 2014
Remuneration Ratio of women to men				
	Ratio of basic salary + remuneration of women to men			
LA13	Strategic	Ratio	0.42	
	Managerial	Ratio	0.6	
	Supervisory and operational	Ratio	1.17	
Collective Bargaining				
	Total employees covered by collective bargaining agreements		Person	3,266
G4-11,	Percentage of total employees covered by collective bargaining agreements		%	34%
	Number of consultations/negotiations with trade unions over organizational changes		Number	21

*Global Data includes Thailand entities data also.

Global CSR Data

G4		Unit	All Sites 2014
Local community engagement			
SO1	Total number of operations with local community engagement, impact assessments and developed programs		Number 26
Supplier Assessment for impacts on society			
SO9	Total number of new suppliers that were screened using criteria for impact on society		Number 15
Societal Grievance			
SO11	Number of grievance regarding society through formal grievance process		Case 2
	Total number of societal grievance in this reporting period addressed		Case 1
	Total number of societal grievance in this reporting period resolved		Case 2
	Total number of societal grievance in previous reporting period resolved		Case 0
Philanthropic			
	Total investment of Philanthropic Activities		THB 9,470,983.57
	Charitable Donations		% 40%
	Community Investments		% 12%
	Commercial Initiatives		% 49%
Contribution			
	Total cash contributions		THB 6,282,966.15
	Total time: employee volunteering during paid working hours		Hours 4051
	Total in-kind giving: product or services donations, projects/ partnerships or similar		THB 480,444.88
	Total management overheads		THB 1,276,454.28

Global Data includes Thailand entities data also.

Reporting Coverage of the Performance Indicators

Site / Company name	Environmental performance							Social performance		Community
	Electricity	Energy	Water withdrawal	Water Discharge	Waste	GHG	Air Emissions	Safety	Human Resource	CSR
1 Indorama Polymers	x	x	x	x	x	x	x	x		X
2 AsiaPet (Thailand)	x	x	x	x	x	x	x	x	P	X
3 Petform, Korat	x	x	x		x	x		x	P	
4 Petform, Lopburi	x	x	x	x	x	x	x	x	P	
5 Petform, Pathumthani	x	x	x		x	x		x	P	
6 Petform, Rayong	x	x	x			x		x	x	
7 Indorama Polyester Industries, Rayong	x	x	x	x	x	x	x	x	x	X
8 Indorama Polyester Industries, Nakorn Pathom	x	x	x	x	x	x	x		P	
9 PT Indorama Ventures Indonesia	x	x	x		x			P	x	
10 PT Indorama Polypet Indonesia	x	x	x	x	x	x		P	x	
11 Guangdong IVL PET Polymer	x	x	x	x	x	x	x	x	P	X
12 Indorama Ventures Packaging (Philippines) Corporation	x	x	x			x		x	x	
13 StarPet	x	x	x	x	x	x	x	x	x	X
14 AlphaPet	x	x	x	x	x	x	x	x	x	X
15 Auriga Polymers	x	x	x	x	x	x	x	x		X
16 Indorama Ventures Polymers Mexico	x	x	x	x	x	x	x	x	x	X
17 Beverage Plastics	x	x	x	x	x	x		P	x	X
18 Wellman France Recyclage	x	x	x	x	x	x		x	x	X
19 Wellman International, the Netherlands	x	x	x	x	x	x		P	x	X
20 Indorama Polymers Rotterdam	x	x	x	x	x	x		P		
21 Indorama Ventures Poland	x	x	x	x	x	x		P	x	X
22 Orion Global Pet	x	x	x	x	x	P		x	x	X
23 Indorama Ventures Adana PET	x	x	x	x	x	x		P	P	
24 Indorama PET (Nigeria)		x	x		x			P	x	
25 Indorama Ventures Packaging (Nigeria)			x	x				P	P	
26 Indorama Ventures Packaging (Ghana)	x	x	x	x	x	x		x		
27 Indorama Ventures (Oxide & Glycols)	x	x	x	x	x	x		P		X
28 TPT Petrochemicals	x	x	x	x	x	x		x		X
29 Indorama Petrochem	x	x	x	x	x	x		x	x	X
30 PT Indorama Petrochemicals		x	x	x	x	x		P	x	
31 PT Indorama Polyester Industries Indonesia	x	x	x	x	x	x		x	x	X

Site / Company name	Environmental performance							Social performance		Community
	Electricity	Energy	Water withdrawal	Water Discharge	Waste	GHG	Air Emissions	Safety	Human Resource	CSR
32 PT Indorama Polychem Indonesia	x	x	x	x	x	x	P	x		
33 FiberVisions	x	x	x	x	x	x		x	x	X
34 PHP Fibers, USA	x	x	x	x	x	x	x	P		
35 Wellman International, Ireland	x	x	x	x	x	x	x	x		X
36 Trevira	x	x	x	x	x	x	P	x	x	X
37 PHP Fibers, Germany	x	x	x	x	x	x	P	P	x	X
38 Indorama Holdings (Thailand)	x	x	x	x	x	x	x	x	x	X
39 Head Office										X
Coverage by Revenue Generated	96%	99%	100%	97%	98%	97%	59-86%	93-100%	56-98%	78%

Remarks:

1. Air emissions reporting represents 59-86% by revenue generated.
2. Health and Safety performance reporting represents 93%-100% by revenue generated.
3. Human Resource performance reporting represents 56-98% of companies by revenue generated.
4. Sites marked as "P" have partial data. The data was partial because the site could not provide all of information for that data category as described in point no. 5, 6 and 7.
5. Air emissions data includes NOx, SOx, VOC data.
6. Safety data includes TRIR, Fatalities, Lost Day Rate and Occupational diseases.
7. Human Resource data includes entry level wage ratio, local employee proportion, labor practice grievance, number of employees (by employee type, employee level, age and gender), employee hires and turnover, parental leave, employee training, performance review, remuneration ratio of women to men and collective bargaining.

Global Reporting Initiative (GRI) Index G4

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GOVERNANCE	
G4-34	p.35-36, http://www.indoramaventures.com/EN/ourCompany/ourCompany_ManagementStructure.php
ETHICS AND INTEGRITY	
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SPECIFIC STANDARD DISCLOSURES

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CATEGORY: ECONOMIC				
CATEGORY: ENVIRONMENTAL				
MATERIALS	G4-DMA	p.62-65	Internal	
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	G4-EN18	p.76	Internal / External	
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EFFLUENTS AND WASTE	G4-DMA	p.62-65	Internal / External	
	G4-EN22	p.77	Internal / External	
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COMPLIANCE	G4-DMA	p.38-41	Internal / External	
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CATEGORY: SOCIAL				
SUB-CATEGORY: LABOR PRACTICES AND DECENT WORK				
EMPLOYMENT	G4-DMA	p.66-68	Internal	
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OCCUPATIONAL HEALTH AND SAFETY	G4-DMA	p.66-68	Internal	
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TRAINING AND EDUCATION	G4-DMA	p.66-68	Internal	
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Material Aspects	DMA and Indicators	Page Number	Material Boundary (External / Internal)	External Assurance (Thailand Only)
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	G4-LA12	p.80-81	Internal	
LABOR PRACTICES GRIEVANCE MECHANISMS	G4-DMA	p.66-68	Internal	
	G4-LA16	p.80	Internal	
SUB-CATEGORY: HUMAN RIGHTS				
SUB-CATEGORY: SOCIETY				
ANTI-CORRUPTION	G4-DMA	p.36	Internal / External	
	G4-SO3	p.36	Internal / External	
	G4-SO4	p.36	Internal / External	
	G4-SO5	p.55, p.61	Internal / External	
COMPLIANCE	G4-DMA	p.38-39	Internal / External	
	G4-SO8	p.55, p.61	Internal / External	
GRIEVANCE MECHANISMS FOR IMPACTS ON SOCIETY	G4-DMA	p.38-39	Internal / External	
	G4-SO11	p.88	Internal / External	
SUB-CATEGORY: PRODUCT RESPONSIBILITY				
CUSTOMER HEALTH AND SAFETY	G4-DMA	p.57-60	Internal / External	
	G4-PR2	p.61	Internal / External	
PRODUCT AND SERVICE LABELING	G4-DMA	p.57-60	Internal / External	
	G4-PR4	p.61	Internal / External	
MARKETING COMMUNICATIONS	G4-DMA	p.57-60	Internal / External	
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COMPLIANCE	G4-DMA	p.57-60	Internal / External	
	G4-PR9	p.61	Internal / External	

LRQA Assurance Statement

Relating to Indorama Ventures Public Company Limited's environmental and social indicators within the Sustainability Report for the calendar year 2014

This Assurance Statement has been prepared for Indorama Ventures Public Company Limited's in accordance with our contract but is intended for the readers of this Report.

Terms of engagement

Lloyd's Register Quality Assurance Ltd. (LRQA) was commissioned by Indorama Ventures Public Company Limited (IVL) to provide independent assurance on the environmental and social indicators within its 2014 Sustainability Report ("the report") against the assurance criteria below to a limited level of assurance and at the materiality of the professional judgement of the verifier using "LRQA's verification procedure". LRQA's verification procedure is based on current best practise and uses the principles of AA1000AS (2008) - inclusivity, materiality, responsiveness and reliability of performance data and processes defined in ISAE3000.

Our assurance engagement covered operations and activities of IVL's seven subsidiary companies in Rayong, Lopburi and Nakhonpathom Provinces, Thailand and specifically the following requirements:

- Reviewing whether the selected environmental and social indicators within the report have taken account of the GRI G4's Sustainability Reporting Guidelines
- Evaluating the reliability of data and information for only the selected environmental and social indicators listed below:
 - Environmental : energy consumption within the organization (G4-EN3), total water withdrawal by source (G4-EN8), direct energy greenhouse gas (GHG) emissions (Scope 1) (G4-EN15), energy indirect greenhouse gas emission (Scope 2) (G4-EN16), SO_x, NO_x and other significant air emissions (VOC) (G4-EN21), total water discharge by quality and destination (G4-EN22), total weight of waste by type and disposal method (G4-EN23),
 - Social¹ : type of injury and rates of injury, occupational diseases, lost days, and absenteeism and total number of work-related fatalities by gender (G4-LA6), and average hours of training per year per employee by gender and by employee category (G4-LA9).

Note 1: Above social indicators also cover employees in IVL's office in Bangkok, Thailand.

Our assurance engagement excluded the data and information of IVL's operations and activities outside Rayong, Lopburi and Nakhonpathom Provinces, PET production facilities in Nakornratchasima, Rayong, and Pathumthani Thailand, and its suppliers, contractors and any third-parties mentioned in the report.

LRQA's responsibility is only to IVL. LRQA disclaims any liability or responsibility to others as explained in the end footnote. IVL's responsibility is for collecting, aggregating, analysing and presenting all the data and information within the report and for maintaining effective internal controls over the systems from which the report is derived. Ultimately, the report has been approved by, and remains the responsibility of IVL.

LRQA's Opinion

Based on LRQA's approach nothing has come to our attention that would cause us to believe that IVL has not:

- Met the requirements above
- Disclosed reliable performance data and information for the selected environmental and social indicators
- Covered all the environmental and social issues that are important to the stakeholders and readers of this report.

The opinion expressed is formed on the basis of a limited level of assurance and at the materiality of the professional judgement of the verifier.

Note: The extent of evidence-gathering for a limited assurance engagement is less than for a reasonable assurance engagement. Limited assurance engagements focus on aggregated data rather than physically checking source data at sites.

LRQA's approach

LRQA's assurance engagements are carried out in accordance with our verification procedure. The following tasks though were undertaken as part of the evidence gathering process for this assurance engagement:

- Assessing IVL's approach to stakeholder engagement to confirm that issues raised by stakeholders were captured correctly. We did this by reviewing documents and associated records.
- Reviewing IVL's process for identifying and determining material issues to confirm that the right issues were included in their report. We did this by benchmarking reports written by IVL and its peers to ensure that sector

specific issues were included for comparability. We also tested the filters used in determining material issues to evaluate whether IVL makes informed business decisions that may create opportunities that contribute towards sustainable development.

- Auditing IVL's data management systems to confirm that there were no significant errors, omissions or mis-statements in the report. We did this by reviewing the effectiveness of data handling procedures, instructions and systems, including those for internal verification. We also spoke with those key people responsible for compiling the data and drafting the report.
- Visiting selected facilities of IVL's seven subsidiaries located in Rayong, Lopburi, and Nakhonpathom Provinces to sample evidence for the selected environmental and social indicators to confirm their reliability.

Observations

Further observations and findings, made during the assurance engagement, are:

- Stakeholder inclusivity:
We are not aware of any key stakeholder groups that have been excluded from IVL's stakeholder engagement process. IVL has stakeholder engagement processes which collect the views and expectations of its stakeholders.
- Materiality:
IVL has processes in place for identifying and evaluating their material issues which are determined by a set of risk criteria. We are not aware of any material issues concerning IVL's environmental and social performance that have been excluded from the report.
- Responsiveness:
Although IVL has processes and communication channels in place to respond to stakeholders, we believe that future reports should explain in detail how IVL provides adequate information about its progress and challenges in its sustainability performance, for example, employees' safety performance data. Future reports should also explain how each stakeholder group relates to IVL's sustainability strategies.
- Reliability:
Although IVL has data management systems, implementation of these systems is variable among facilities in each subsidiary. IVL should consider improving the existing procedures for data collection, quality assurance, control and security processes at each facility.

LRQA's competence and independence

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

This verification is the only work undertaken by LRQA for IVL and as such does not compromise our independence or impartiality.

Signed

Dated: 10 March 2015



Nit Tanasuthiseri , LRQA Lead Verifier
On behalf of Lloyd's Register Quality Assurance
Lloyd's Register International (Thailand) Limited
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Global Awards and Recognitions

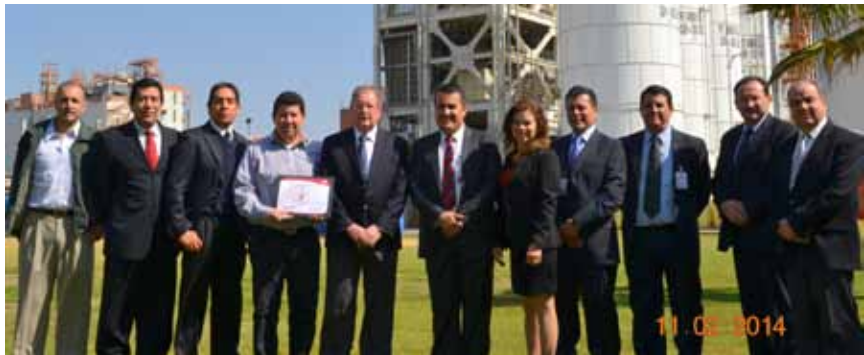
Awards and Recognitions under Economic Dimension

Information on the following awards is given in Chapter 6 of the Report.

- Top Corporate Governance Report Award from the Stock Exchange of Thailand
- Thailand's Private Sector Collective Action Coalition Against Corruption (CAC) Certification from the Thai Institute of Directors Association
- Outstanding Sustainability Report Award 2014 from the Stock Exchange of Thailand
- CSR Recognition Award 2014 from the Stock Exchange of Thailand



The following are some other awards and recognitions under economic dimension received during the year.



▲ Certification Empresa de 10 given to Indorama Ventures Polymers Mexico from the National Institute for the Development of Living Quarters for Workers (INFONAVIT), Mexico. This certification is granted to those industries that achieved total compliance (accurate and in time) for the payment of quotas (5 percent fixed payroll tax) over ten two-month periods.



▲ Good Corporate Governance Award 2013 given to Asia Pet (Thailand) and Petform (Thailand), Lopburi, by the Department of Business Development, Ministry of Commerce of Thailand.



▲ Export Prize 2013 given to Orion Global Pet received the award for exporters in Lithuania, by the Government of the Republic of Lithuania.



▲ Honor Certificate acknowledging compliance with legal requirements given to Indorama Holdings that meet the requirements for the employed and improved the Quality of the Life of the Disabled by the Lopburi Governor.



▲ Quality Supplier of the Year Award given to Auriga Polymers by CareStream, our customer.



▲ Supplier of the Year Award for Excellence in Innovation given to Indorama Ventures by TWE Group, Germany.

Awards and Recognitions under Environment Dimension



▲ ICT Excellence Award 2013 in the category of Core Process Improvement Project given to Indorama Ventures by Thailand Management Association (TMA) in association with National Electronics and Computer Technology Center (NECTEC), Thailand's software industry (Software Park Thailand) and the College of Innovation, Thammasart University (CITU).



▲ Thailand Energy Award 2014 given to Indorama Petrochem by the Ministry of Energy, Thailand. This award is to honor those who have outstanding performance in energy conservation and renewable energy development.



▲ Zero Accident Campaign Award 2014 given to Indorama Petrochem by the Ministry of Labor, Thailand.



▲ Greenhouse Gas Verification Statement given to Indorama Petrochem by SGS Taiwan who verified that its inventory of Greenhouse Gas Emissions 2012 meets the requirements of ISO14064-1:2006.



▲ Good Environmental Governance 2013 (White Flag-Green Star) given to Indorama Polyester Industries (Rayong) and TPT Petrochemicals by the Industrial Estates Authority of Thailand.



▲ River Conservation and Restoration Award given to Indorama Polyester Industries (Nakhon Pathom) by the Ministry of Industry, Thailand. The award has been granted to factories which have practiced good cooperation with the community with regards to river preservation and restoration.



▲ Outstanding Establishment on Safety Occupational Health and Environment Award given to Indorama Polyester Industries (Nakhon Pathom) for the fifth consecutive year (2010-2014) and Indorama Petrochem four th consecutive year (2011-2014) by the Ministry of Labor, Thailand.



▲ Environmental Impact Assessment (EIA) Monitoring Award 2014 given to Asia Pet (Thailand) by the Ministry of Natural Resources and Environment Thailand. The award was given to organizations for having an excellent environmental impact assessment report and environmental management.

Awards and Recognitions under Social Dimension



▲ The Family Responsible Distinctive Award given to Indorama Ventures Mexico by the Labor and Social Welfare Ministry after an successful audit to verify their application of best practices in "conciliation in work and the family".



▲ Certificate of Excellence for 2013 given to Indorama Polyester Industries, Nakhon Pathom by the Department of Skill Development, Ministry of Labor.



▲ Outstanding Industrial Establishment of Labor Relations and Welfare Award 2014 given to Indorama Polyester Industries (Rayong) for the tenth consecutive year (2005-2014) , Indorama Holdings for ninth consecutive year (2006-2014), Indorama Polyester Industries (Nakhon Pathom) for the fifth consecutive year (2010-2014), and Indorama Petrochem for the fourth consecutive year (2011-2014), by the Ministry of Labor, Thailand.



▲ Healthy Workplace Award 2014 given to Asia Pet (Thailand), Indorama Polymers and Petform (Thailand), Lopburi, by the Department of Disease Control, Ministry of Public Health of Thailand.



▲ CSR-DIW (Corporate Social Responsibility - Department of Industrial Works) Award 2014 given to AsiaPet, Indorama Holdings, Indorama Petrochem, Indorama Polyester Industries (Nakhon Pathom and Rayong), Indorama Polymers, Petform and TPT Petrochemicals, by the Ministry of Industry, Thailand.



▲ Seal of Approval Accreditation on healthcare fiber portfolio given to Wellman International by Allergy. The Wellman Healthcare portfolio comprises of a number of smart fibre protection solutions, including wellcare protect which offers a safe, durable and biocide free option for dustmite control and Wellman Health Guard which offers both highly effective broad spectrum microbe function and dustmite function.



Asia's Fab 50 Companies

▲ One of the Asia Fabulous 50 companies (Fab 50) ranked by Forbes Magazine

C&EN

CHEMICAL & ENGINEERING NEWS

▲ Ranked 47th in C&EN's Global Top 50 ranking 2014 of the world's largest chemical producers.

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IVL has the following Industry Associations and/or Business Memberships for Sustainable Development ”

PROJECT MAINSTREAM:

▲ Member of the Steering Board of Project MainStream, a multi-industry, CEO-led global initiative, led by the World Economic Forum and the Ellen MacArthur Foundation, with McKinsey & Company as a knowledge partner.



▲ Member of RAL Gütezeichen, a Germany-based institute that organizes and promotes the recycling of PET.



▲ Member of the Committee of PET Manufacturers in Europe (CPME).



▲ Member of Thailand's Private Sector Collective Action Coalition Against Corruption (CAC).



▲ CSR Club, Thai Listed Companies Association.



▲ Members of Plastics Recyclers Europe (PRE).



▲ Indirect Member of Petcore Europe



▲ The Federation of Thai Industries



▲ The Netherlands-Thai Chamber of Commerce

Key Contacts and Feedback



Indorama Ventures welcomes your feedback on our sustainability performance and this Report.

You can email your feedback to sustainability@indorama.net or provide your feedback online at www.indoramaventures.com/EN/share-your-thoughts.php.

You can also reach out to

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