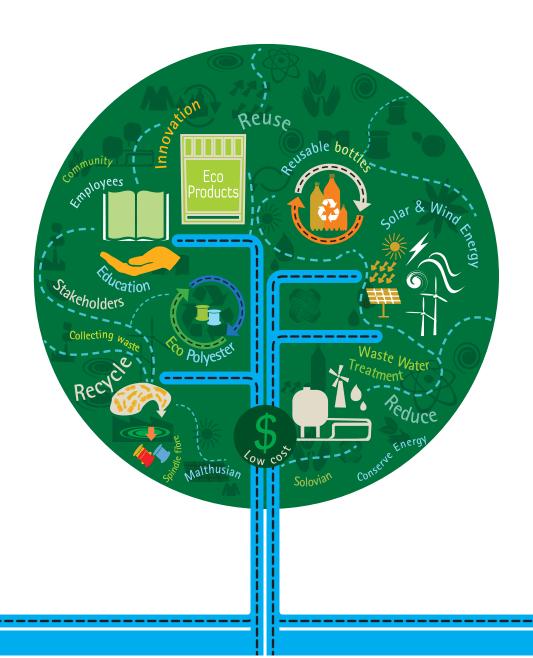


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### Driving Sustainability Through Innovation



## 2011 Highlights

## Recycling

IVL has invested in recycling units producing Recycled Fibers (rFibers) from post-consumer bottles across the USA, Europe and Asia with a total capacity of 152,000 TPA





## RECO - (Reduce, Reuse, Recycle + ECO)

National Student Design Competition in Thailand

Over 300 students designed fashion and furniture from used bottles and clothes. 30 selected teams were given THB 10,000 each to turn their designs into reality.

Prize money of THB 400,000 was given to the winners





### Waste Recycle Bank

IVL, through its subsidiary TPT Petrochemicals, continues to support the Waste Recycle Bank at Ban Nong Fab school in a village in Rayong which setup to encourage students and the community to collect post-consumer PET bottles that is sold for recycling into useful polyester fiber. Over 23 Tons of PET bottles were collected last year, generating more than THB 86,000 in income which will be for students scholarship.











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## Message from the Board

### **Group CEO's Message**

"IVL is committed to create value for all its stakeholders and pursue growth through sustainable development. We are excited about the changing landscape of the polyester industry and see lots of opportunities to serve society further through a balanced ecological footprint. We have reduced our energy consumption, water usage and our recycled volume has increased significantly. Innovation in our products and operating practices will be the key to our sustainable future."

### Aloke Lohia

**(** 

Group CEO, Indorama Ventures PCL







Dear Stakeholders,

 $\bigoplus$ 

2011 was another year of landmark accomplishments by IVL on both business growth as well as our sustainability performance. We doubled our revenue from USD 3.05 Bn in 2010 to USD 6.1 Bn in 2011 and more than doubled the number of our sustainability initiatives from 183 in 2010 to 384 in 2011.

Thanks to the efforts of our sustainability committee and CSR coordinators at our plants, our first issue of the IVL Sustainability Report (2010) published last year received wide appreciation from all stakeholders and we received several enquiries and notes of appreciation from academia, industry and media alike. The report was also, we believe, the world's first sustainability report printed on 100% recycled PET. At IVL, we see sustainability as an ongoing journey of improving our contribution to the society. We understand that today stakeholders expect more than just bottom-line performance and hence, we have taken various steps to balance our ecological footprint and engage actively with all our stakeholders and local communities to create a better life for everyone.

Our operations around the world adhere to the highest standards on quality, health, safety and environment. All our products comply with regulatory standards for health, non-toxicity, and high quality with certifications such as Oeko-Tex 100 and ECO. Almost all our plants are certified for ISO 9001, ISO 14001 and OHSAS 18001 and the few remaining are pursuing the same. Our CSR policy is part of a comprehensive sustainability program that incorporates seven pillars on which we build. Many of our plants are actively pursuing CSR programs such as Responsible Care, CSR DIW and other regional models. Additionally, some of our plants have already conducted LCA studies to gauge their carbon footprint and we are planning to engage with the remaining sites to do the same. All IVL operations globally are engaged in a daily process of improving on our ecological footprint by optimizing processes, reducing waste and using resources efficiently. Our employees have further demonstrated their commitment by supporting local communities around them in a wide range of initiatives – from sponsoring scholarships for students; setting up waste collection points; organizing a national RECO design competition to encourage talent to create eco-friendly articles; preserving forests and fisheries; collecting discarded bottles and clothes and re-using them, and assisting disaster victims in the USA, Thailand and Japan.

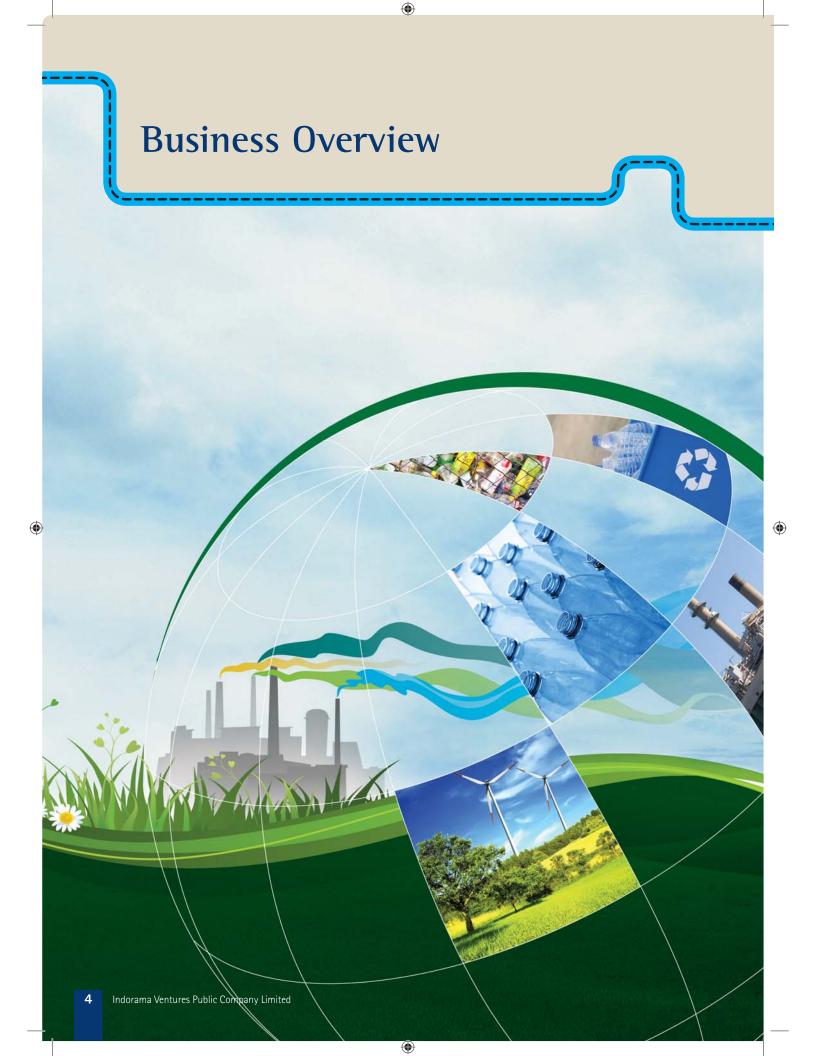
We now have around 9,000 employees globally and many are involved in CSR activities. Our plants reduced their energy consumption last year from 3% to 11%. We recycled around 2.0 billion bottles. On behalf of my team, we are pleased to share with you further details on our 2011 initiatives.

We look forward to continued commitment in 2012 and hope to achieve many more milestones in our journey on sustainability.

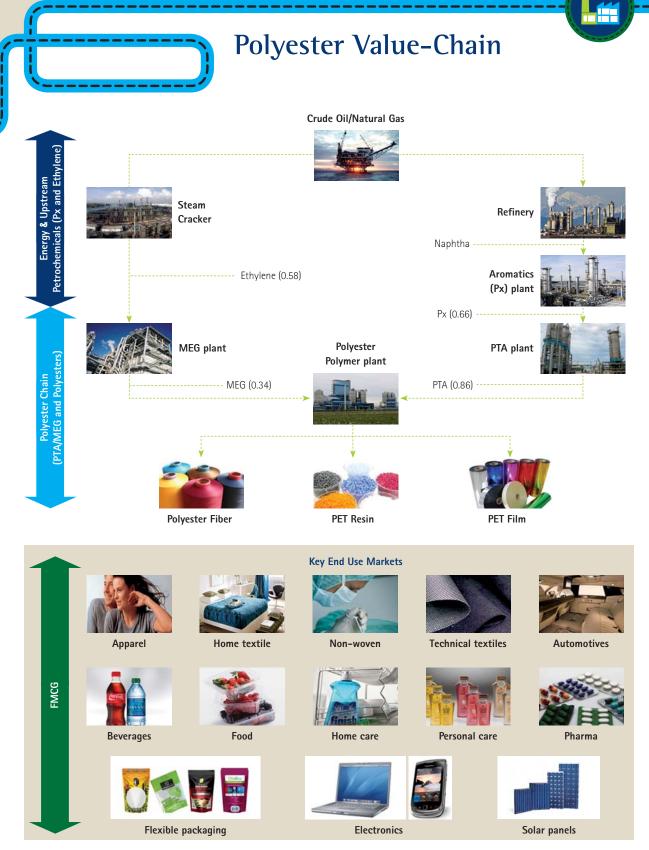
Suchitra Lohia

Director and Chairperson of the Sustainability Committee Indorama Ventures PCL









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Note: 1T of PTA requires .66T of Px; 1T of MEG requires 0.58T of Ethylene; 1T of Polyester polymer requires .86T of PTA and .34T of MEG Source: IVL Analysis





### Uses of polyester

Polyester can be fiber, film or bottle grade (PET) depending on supplementary additions to ester functional group. As a fiber (PSF), polyester finds uses in apparel, home furnishings, blankets, carpets. As a film such

as BOPET, polyester finds uses in insulating tapes, dielectrics in capacitors, wires etc. It's bottle grade is used to make bottle containers for water, Carbonated Soft Drinks (CSD), juices.

Polyester is used for a wide range of end use markets, such as:









Home textiles

Non Woven

**Technical Textiles** 

Apparel









Automotive

Water bottle

Food Packaging

Consumer products

### Myths & Realities of Polyester (PET Basic)



#### What is PET resin or PET?

PET, which stands for polyethylene terephthalate, is a form of polyester (just like the clothing fabric). It is extruded or molded into plastic bottles and containers for packaging foods and beverages, personal care products, and many other consumer products.

### Polyester - A Material of Choice

- Most versatile packaging and textile raw material
- Replaces energy intensive materials Aluminum, Glass
- Light weight: Reduced primary and secondary fuel consumption
- Ecologically and economically replaces scarce cotton, wool and wood pulp
- Can be recycled multiple times with ease

IVL today is the world's largest polyester chain manufacturer with 39 production units in 15 countries across four major continents. We have around 9,000 employees serving customers in over 90 countries.

### Key highlights:

- Current Capacity of 6.7 MM MT
- Largest PET producer in the world
- Largest Recycling entity in Europe
- Member of major stock indices SET 50, FTSE SET Large Cap and MSCI
- A+ corporate rating by TRIS

## World-class customer base

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### Partnering closely with global majors



### Successful track record of growth

### Expansion of IVL production base



1VL total growth 51.40/0 p.a.

**7.8**% p.a.

Global polyester

production

Note: Includes FiberVisons and Wellman, for the period 2003–11 Source: SBA CCI, IVL

IVL in 2011-12 added several new products to its portfolio and expanded its global footprint with the recent acquisitions of Old World Industries (USA), Beverage Plastics (Ireland), FiberVisions (USA, Denmark and China), Wellman International (Europe), Trevira (Germany) and SK Keris (Indonesia)

## Myths & Realities of Polyester (PET Basic)



## Why is PET used to package so many items?

PET is a highly valued packaging material because it is strong yet lightweight, nonreactive, economical, and shatterproof. PET containers are popular for packaging sodas, water, juices, salad dressings, cooking oil, peanut butter, shampoo, hand soap, mouthwash, pharmaceuticals, even tennis balls. It is safe for food, beverage, personal care, pharmaceutical and applications recognized by health authorities around the world. Special grades of PET are used for carry-home prepared food containers that can be warmed in the oven or microwave.



# History and timeline

## 1996



We grew our PET business downstream by producing PET preforms, bottles and closures or bottle tops, through a joint venture with Serm Suk Pcl in Thailand.

## 1997



IVL entered the polyester fiber business in 1997 with the acquisition of Siam Polyester which subsequently re-named Indo Poly, a polyester fiber plant in Thailand, eventually becoming the largest polyester fiber producer in Thailand.

## 2003



The company expanded PET production internationally with StarPet in the U.S.A.

2006

IVL expanded into Europe with Orion Global PET in Lithuania.

## 2008

The company entered into the PTA business in 2008 with IRH Rotterdam, Indorama Petrochem and TPT Petrochemicals. PTA (Purified Terephthalic Acid) is a feedstock for PET and polyester.

We acquired Tuntex Thailand, the largest polyester fiber producer in the country.

IVL acquired two PET resin facilities from the Eastman Chemical Company in Rotterdam, The Netherlands, and Workington, United Kingdom.

## 2009



IVL completed construction of AlphaPet in Alabama, U.S.A.

### 2010

IVL launched its new business plan for the next four years, called Aspiration 2014. The plan calls for a tripling of total production capacity by 2014 to 10 million tonnes. We acquired a business in Italy through joint venture and a utilities company to power our Rotterdam plant.

## 2011-12

Acquisitions in the US, Mexico, Germany, Indonesia and Poland, with entry into R&D through acquisitions in the US and Germany, as well as a joint venture for a PTA facility in Indonesia.

Expansions announced at plants in Indonesia, Netherlands and Poland. Recycling became a major strategy with a new plant in the US and the acquisition of Wellman International in Europe. Entry into value-added hygiene sector with acquisition of FiberVisions in the U.S.A. Acquired Polypet, R&D in Indonesia, BPL in the UK and Old World MEG acquisition slated for April 2012.

## <u> 1994</u>



IVL commenced business in Thailand in 1994 with Indorama Holdings, which was the first worsted wool yarn producer in Thailand. It is now globally recognized as a major producer of premium worsted wool yarns.

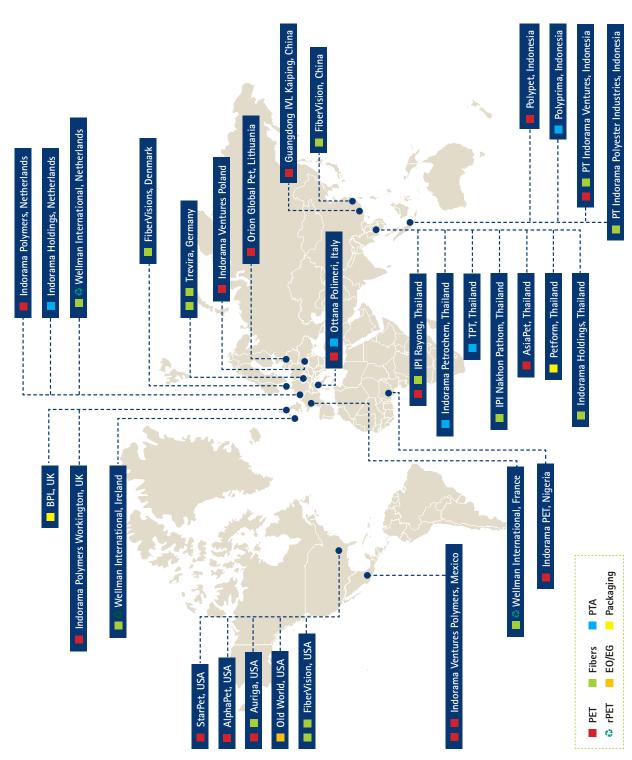
## 1995

We entered the petrochemical industry with the establishment of a PET (Polyethylene terephthalate) resin facility in Thailand.

PET is a key material between the petroleum industry and consumer goods companies that make bottles and packaging as well as apparel, footwear and other items used in our daily lives. IVL has now grown to be the largest PET producer globally

## 39 operating sites in 15 countries across 4 continents

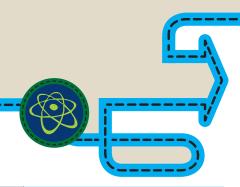




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### **IVL Sites Around The World**





IVL Head Office, Bangkok, Thailand



Indorama Polymers Public Company Limited, Lopburi, Thailand



PT Indorama Ventures Indonesia, Tangerang, Indonesia

### Plant in Thailand:



Indorama Polyester Industries PCL, Rayong, Thailand



AsiaPet (Thailand) Limited, Lopburi, Thailand



PT Indorama Polyester Industries Indonesia, Karawang, Indonesia



TPT Petrochemicals PCL, Rayong, Thailand



Indorama Holdings (Thailand) Ltd, Lopburi, Thailand



PT. Indorama Petrochemicals (Polyprima) Karyesreska, Indonesia



Indorama Petrochem Limited, Rayong, Thailand



Petform (Thailand) Limited, Lopburi, Thailand

### Plant in Europe:



Trevira GmbH, Bobingen, Germany



Indorama Polyester Industries PCL, Nakornprathom, Thailand



Guangdong IVL PET Polymer Co., Ltd, Guangdong, China



Ottana Polimeri S.R.L., Ottana, Italy







UAB Orion Global Pet, Klaipeda, Lithuania



Wellman France Recyclage SAS, Verdun, France



Auriga Polymers Inc., Spartanburg, USA



Indorama Polymers Rotterdam B.V., Rotterdam, Netherland



Wellman International Ltd., Cavan, Ireland



FiberVisions Products, Inc., Athen, USA

FiberVisions Manufacturing Company, Covington, USA



Beverage Plastic Limited, Craigavon, UK



FiberVisions-Suzhou, China



Indorama Holdings Rotterdam B.V., Rotterdam, Netherland



Wellman International Ltd, Spijk, Netherland



IVL Holding S.de.R.L.de.C.V., Queretaro, Mexico



FiberVisions-Varde, Denmark



Indorama Ventures Poland Sp. z o.o., Wloclawek, Poland



AlphaPet Inc., Decatur, USA



Old World, Clearlake, USA



Indorama Polymers Workington Ltd., Workington, United Kingdom



StarPet Inc., Asheboro, USA

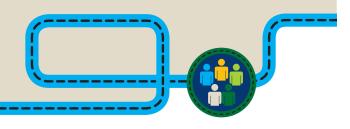
### Plant in Africa:



Indorama PET, Port Hartcourt, Nigeria



## **Organization Structure**



### **IVL** leadership









**Board of Directors** 



William E. Heinecke

Independent Director





**Uday Gill** Executive Director

Dr. Siri Ganjarerndee

Independent Director



Independent Director



Rathian Srimongkol

Independent Director



Chakramon Phasukavanich

Independent Director



Maris Samaram

Independent Director







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### Corporate Center



Sanjeev Bhatia

S.R. Chowdhury

Company Secretary

& Legal



Ramesh Narsinghpura



Ashok Jain Accounts & Audit



**PET** 

G.L. Modi



S.N. Mohta C00



Vivek Kaul



EO/EG

Joel Saltzman



Ashok Arora CMO



Bruce Bush VP operation





Kumar S. Ladha

Suneel S. Jhavar



Sanjay Ahuja

Corporate Finance -

M&A

S.K. Srivastava



Mohan Singaram

Sr. VP

(Manufacturing)

Narayana Swamy CFO

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Sunil Fotedar

CMO

Sanjeev Sharma VP Commercial



Prabeer Mukherjee SVP



Stephen Thallemer CFO



**Richard Jones** 

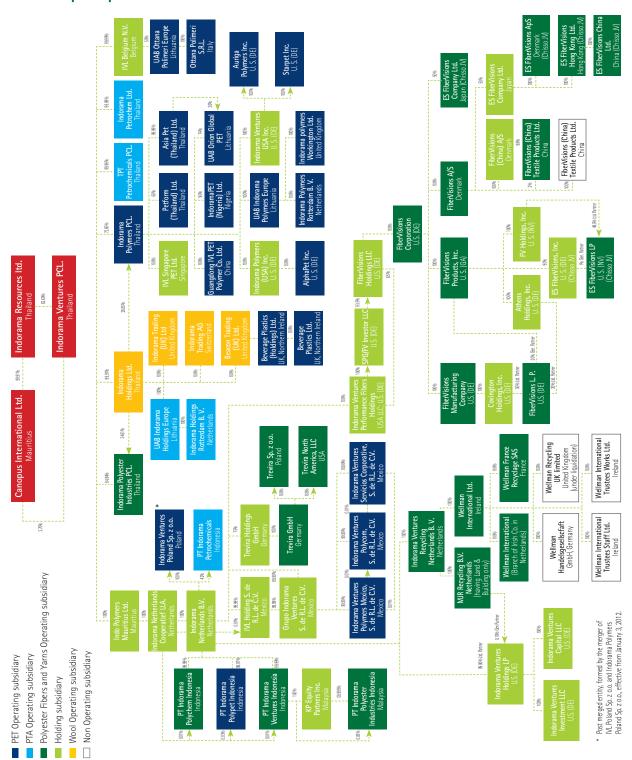
IR, PR & Sustainability



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## **Corporate Structure**

### **IVL Group Corporate Structure**

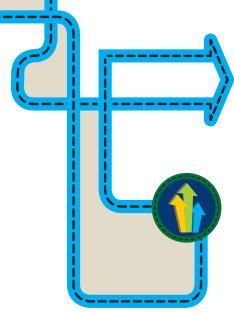


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## **Financial Summary**





2011 was yet another year of rapid growth and sustained high performance for Indorama Ventures Public Company Limited (IVL) with the addition of key specialty products to its existing product portfolio, which serve the evergreen consumer staples, along with its continued expansion into recycling and further integration within the polyester value chain.

We achieved consolidated sales revenue of US\$ 6,102 million in 2011, approximately double the consolidated sales of US\$ 3,055 million in 2010. The Company announced a net profit that rose to US\$ 510 million, or 55% above the US\$ 328 million achieved in 2010. Moreover, after excluding extraordinary items, IVL achieved a net profit of US\$ 297 million, or 38% higher than the US\$ 215 million achieved in 2010 (after excluding an extraordinary gain of US\$ 113 million). IVL was therefore able to achieve earnings per share of Baht 3.29 in 2011 compared to an EPS of Baht 2.46 in 2010.

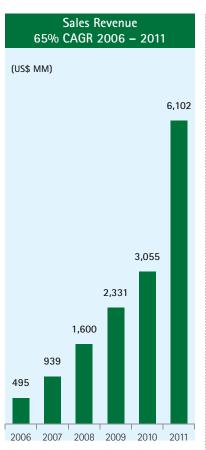
IVL today is financially stronger with Net Debt/Equity of 0.7 times and liquidity of USD 1.4 Billion, which includes cash and cash equivalents and unutilized credit lines. IVL raised equity (through a TSR issue) of THB 17.2 Billion to fund its growth plans and experienced high demand during its maiden debenture issue of THB 7.5 Billion. IVL's value-accretive and strategic acquisitions have brought innovation capabilities, high margin products, access to new markets, and a highly diverse and experienced talent pool that will benefit its existing businesses as well. Polyester continues its steady growth due to its affordability, recyclability, and versatility as a packaging and textile material.

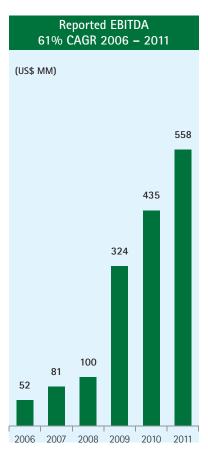
IVL has been consistently delivering high returns to its shareholders with average ROCE of 16% for the last three years

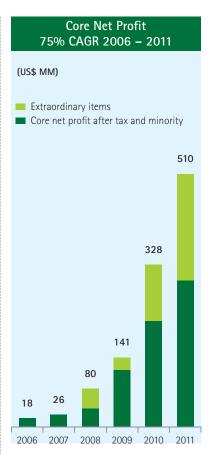




### ...Steady growth in revenue and earnings

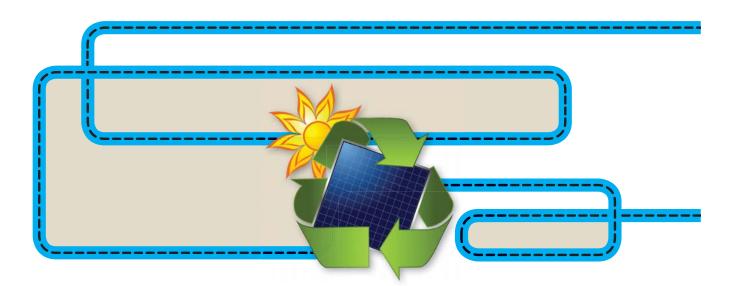


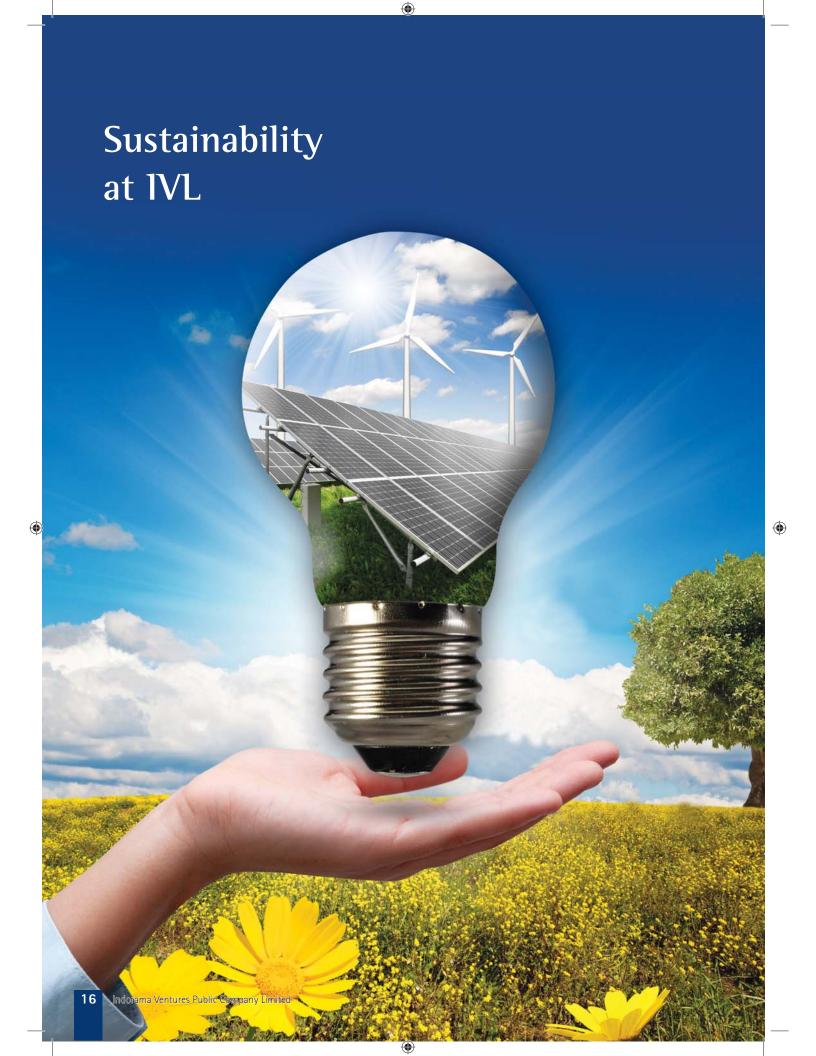




Source: Company information

Note: Average THB/USD: 2006 – 37.94, 2007 – 34.43, 2008 – 33.33, 2009 – 34.32, 2010 – 31.70, 2011 – 30.50







While IVL has been making social contributions since a long time, we have over the years developed a comprehensive Sustainability Program. Sustainability today is an integral part of our business model.

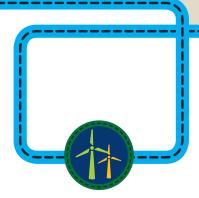
Sustainability is our pre-eminent and ongoing commitment to re-think how we operate to meet the needs of all our stakeholders.



- Reduce the burden on the environment from consumption of resources and energy in business activities, disposal of wastes. Hence, we are trying to conserve energy, effectively utilize resources, and reduce emissions.
- Proactively engage with suppliers, customers, industry and local governing authorities to explore best practices to reduce carbon footprint and ensure health and safety for all.
- 3. Prevent use of toxic chemicals for packaging materials as much as possible.
- Realize a society which is based on circulation and symbiosis by encouraging reuse of waste and adopting recycling of post consumption materials.
- Lead a range of local community enhancement programs that directly fulfill the needs of the concerned communities.







## Sustainability Value Chain

We see sustainability as an ongoing journey where we try to climb up steps from being a responsible compliant to a leading thought-provider.

Polyester is one of the most consumed packaging and textile polymer in the world today because of its versatile performance, affordability and relative superiority on eco-friendly attributes compared

#### Sustainable Growth **Platform** Active Measurable gains through Philanthropy win-win strategy that generates revenue Value-based Self Proactive initiation of through access to new Regulation charitable activities markets, new relations, on social issues that & product / service Legal and Incorporates the serve the needs of local innovations Compliance company's value system communities and code of conduct to guide business behaviour Adherence to laws in the countries of production operation & distribution

## to the other existing alternatives in the market. Moreover, Polyester fiber and PET bottle are easily recyclable. We realize that we must educate people with facts.

### Believe it or Not!

### World's Longest Recycled Plastic Bridge

A 90 foot long bridge made from over 50 tons of recycled plastic crosses the River Tweed in Scotland and is strong enough to carry load bearing vehicles up to 44 tons. The Scottish bridge is the first of its kind built in Europe and makes up the longest spans constructed from recycled plastic.

http://edition.cnn.com/2011/12/06/world/recyclable-bridge/index.html?hpt=hp\_bn6



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## Polyester is the most affordable and environment friendly textile





Much has been said about how bio-based fibers are more environment friendly than synthetic man-made fibers. However, it was to avoid the competition between food and textiles for land, that the synthetic fibers gained its initial acceptance. If today, we were to use land for producing fibers such as cotton and wool compared to the synthetic alternative such as polyester, we would need around 40 times more land. The implication would be that 1/3 of the world's land area would be unavailable for food production.

It has also been said that synthetic fibers such as polyester are consuming a lot of crude oil, which is a non-renewable source. However, less than 1% of globally produced crude oil is consumed in the production of synthetic manmade fibers. Moreover, one tonne of polyester

consumes 4 m3 of water compared to 25,000 m3 consumed by cotton. Consider that 8,000 times more water is consumed in natural fibers than polyester.

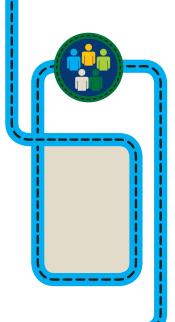
Furthermore, polyester production emits lower CO2 than all other alternatives except wool. On cost also, polyester is cheaper than natural textile materials such as cotton, wool as well as other synthetic fiber alternatives such as polycarbonate or polystyrene. Hence, amongst all the alternatives available to humans today, polyester is the most affordable textile material.

It is quite evident then that polyester remains the most affordable, practical and environment friendly material fiber amongst all alternatives.



## Corporate Governance at IVL





Maintaining the highest levels of corporate governance and transparency to its stakeholders is central to IVL philosophy. IVL believes in striking a balance between economic and social goals by executing high standards of Corporate Governance. The Company firmly believes in transparency, accountability and ethical conduct in pursuit of its mission and acts in accordance within its framework for sound corporate governance to enhance the Company's competitiveness and to best serve the interests of its stakeholders. IVL has in place a written Corporate Governance Policy. Our commitment to good Corporate Governance principles reflects our adherence to what is fair, right and legal. The Company has never been penalized by local authorities for breaching rules and regulations.

In order to maintain the highest corporate governance standards, the Board constituted a Nomination, Compensation and Corporate Governance Committee. Among the duties and responsibilities of the NCCG Committee are developing and recommending to the Board a set of corporate governance principles. It ensures processes are in place for maintaining the integrity of the Company - the integrity of the financial statements, the integrity of compliance with law and ethics, the integrity of relationships with customers and suppliers, and the integrity of relationships with other stakeholders. It also ensures processes are in place for preventing and mitigating conflicts of interest for the best interest of the Company and its shareholders.

The company has a code of conduct for Directors, executives and employees, approved by the Board and communicated to everyone. The Company, through this Code of Conduct, strives to achieve observance of ethical practices, honesty, and accountability, as well as a responsibility to all stakeholders and external agencies.







### Sustainability Policy

IVL's Sustainability Policy is based on our Corporate Values and the 7 Pillars that we have identified as our focus areas. Our Corporate Values put people first that means all stakeholders including investors, customers, suppliers, employees, regulators, local communities are to be engaged with proactively. The 7 Pillars encourage us to continuously optimize our plants and processes to reduce our ecological footprint by reducing energy consumption, water use, waste and minimizing emissions. As a global leader in polyester manufacturing, we are committed

to investing in recycling and renewable energy assets. As a socially responsible entity we engage with the local communities near our operating locations to fulfill their pressing needs. However, the activities should be relevant to us. Our CSR activities should be designed for the maximum impact on the lives of people and should not lead only to charitable donations. We would rather teach a villager to fish than to give him free fish. We do support social programs on a case by case basis where we see a fit with our Sustainability Program.

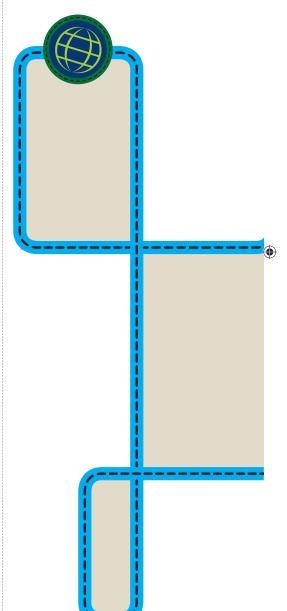
### **Sustainability Committee**

IVL has a Global Sustainability Committee based at its headquarters in Bangkok to oversee the creation and communication of its Sustainability Policy; monitoring and assessing the impact of its policies towards the stakeholders on a regular basis. Each business office or plant is responsible for the creation of activities for its employees and community in line with IVL's Sustainability policy. Local working groups are set up to coordinate

activities with employees, communities and local authorities. All activities are monitored locally for effectiveness and feedback. The Global Sustainability Committee monitors and assesses all CSR activities on a quarterly basis and benchmarks the group based on its centralized database, assisting local working groups to learn from the experience of other working groups and benchmark themselves to the group as a whole.



From Left to Right: 1) Ms. Sayumporn Laovachirasuwan, CSR Specialist. 2) Ms. Naweensuda Krabuanrat, Public Relations Manager. 3) Mrs. Suchitra Lohia, Director and Chairperson of the Sustainability Committee. 4) Mr. Richard Jones, Head of Investor Relations and Corporate Communications. 5) Mr. Prateek Rajvanshi, Executive Assistant to Group CEO





## Sustainability through Innovation

Innovation is a key focus area now at IVL. In 2011-12, we completed a number of acquisitions that added R&D assets and specialty products to our business portfolio. These have provided us a strong platform for new product development and process innovation. We believe innovation will be a key

to sustaining our competitive edge and our growth in the future.

We have created an Innovation Council to plan and execute strategic initiatives to achieve our business targets and sustainability agenda. Some of our specialty products are:





### **Innovation in Americas**

### Some of our key product innovations are



Nylon free, nitrogen free oxygen barrier.



Acetaldehyde blocker technology for mineral water bottles.



EBM resin for extrusion blow molding containers, clear & recyclable.







### Innovation in Europe

### Some of our key product innovations are



Trevira CS is the world's leading brand in Flame Retardant Textiles that meets international standards on fire safety, because they consist of fibres and yarns with "built-in safety". The materials impress with their fresh effects, special structures and pleasant handle.



Trevira Perform offers the perfect balance between looks and comfort. These are special fibres for corporate & work-wear, including a new moisture-control version.



Trevira Bioactive fibres protect textiles by inhibiting the growth of microbes in or on the fabric, used in medical applications.



Vapour management fibres designed to control humidity levels, used in geo-textiles, filtration, and interlinings.



Comprehensive range of asthma & allergy friendly™ fibres, certified by international accreditation body Allergy Standards.



Eblend of two-D and three-D fibres dramatically increases warmth insulation levels by up to 35%, without the burden of additional weight.

### Innovation in Asia

### Some of our polyester fiber innovations are



Ambs cool range of antimicrobial fiber for hygiene and antiodour application.



 $X ext{-Flame}$  range of fire retardant polymer and fibers.



Coolcomf range of moisture wicking fibers for active wear.



Afron heavy metals free polymer for packaging film and fiber for textile.



Kroma range of cationic fiber for silk look.



Ecorama range of post consumer recycle (PCR) fiber.







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## **eco-core**SUSTAINABLE FILLING

Eco-core™ is the new name for our truly sustainable polyester staple fiber (PSF) in Europe. This premium ingredient fiber brand represents guaranteed, traceable, sustainable, raw material content and validated sustainable production processes, ensuring a significant reduction in harmful carbon emissions into the earth's atmosphere. The Eco-core brand facilitates consumer recognition in the retail situation, empowering the consumer to make a sustainable choice, and in turn make a contribution to all our futures.

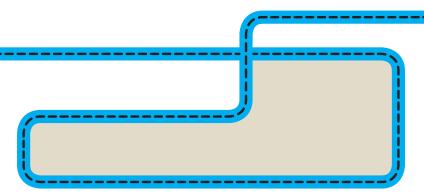
**Eco-core™** is partnering with leading global organizations for a 'Turn A New Leaf Campaign' where Wellman International will donate 1 Euro for every 'like' on their Facebook page.



In 2010, Trevira has introduced fibers made from PLA (based on IngeoTM) into the product range. This raw material is made from 100% renewable plant resources. In PLA production up to 85 percent less greenhouse gas are emitted, and up to 69 percent less energy required to manufacture into resin when compared to traditional polymers. After use, products made from these fibers are recyclable, can be industrially composted or in a downcycling process be degraded into lactic acid, its basic raw material.



Ecorama™ is a 100% recycled fiber manufactured from PCR flakes to fibers and developed by IVL Nakhon Pathom, Thailand. Ecorama will match the quality and performance of virgin staple fibers. IVL executives launched the brand at IVL Pavilion at BOI Fair earlier this year and the t-shirts made from Ecorama fiber were found to be excellent in comfort and washability. The full commercial production of the same is expected to start by mid-2013 and the capacity will be 50,000 TPA.



### Believe it or Not!

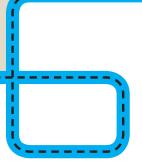
#### Villas made from PET bottles in Nigeria

With a serious housing shortage but no shortage of plastic bottles littering the streets, the Development Association for Renewable Energies (DARE) – an NGO based in Nigeria – decided to build this incredible two-bedroom bungalow entirely out of plastic bottles! Although many in Kaduna were dubious when the project began construction in June this year, the nearly-complete home is bullet and fireproof, earthquake resistant, and maintains a comfortable interior temperature of 64 degrees Fahrenheit year round!

Read more: Africa's First Plastic Bottle House Rises in Nigeria | Inhabitat -Green Design Will Save the World







## Did you Know?

Amongst the many attractive aspects of PET and Polyester, one is that they are 100% recyclable. PET Bottles and Polyester Clothes can be reused and recycled easily to make useful things.

### Plant Pot from PET Bottle

Refreshing greenery around you in just a few minutes from a used bottle...





#### STEP 1

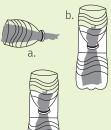
Cut the top part of the PET bottle. Remove the cap



# b.

### STEP 3

- a. Take some soil and put it on the top
- b. Take the plant and put it into the soil



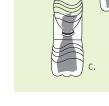
### STEP 2

- a. Take the end of the cloth and pass it through the neck of the bottle
- Place this part of the bottle with the cloth facing down in the second half of the bottle
- c. Pour some water inside



### STEP 4

Here you have a nice pot for the plant







### **Lamp from PET Bottle**

An easy to make lampshade for a cozy corner at home from used bottle bottoms...





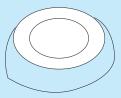
### STEP 1

Cut the bottom parts out of 12 bottles, about 3 inches



### STEP 3

Then make a lamp body by attaching the bottle parts together, using a rivet



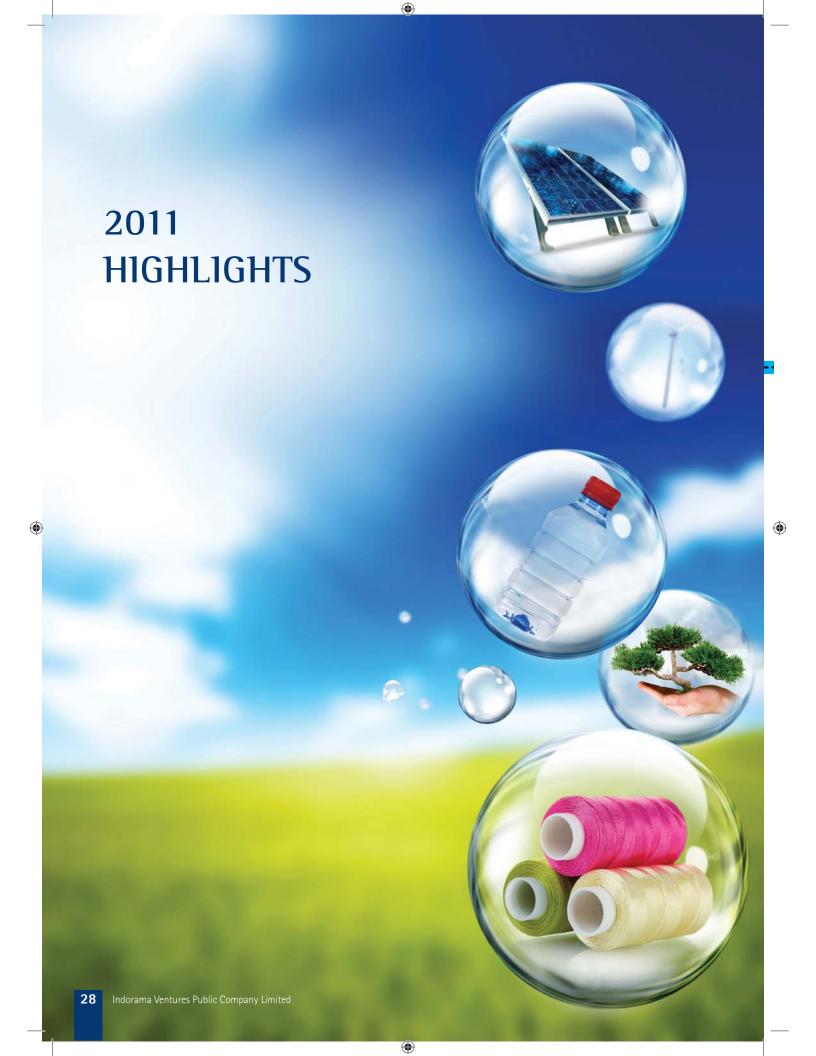
#### STEP 2

Then make a lamp body by attaching the bottle parts together, using a rivet



#### STEP 4

Insert the light bulb in the middle of the lamp, then connect it with the socket and it's all done!



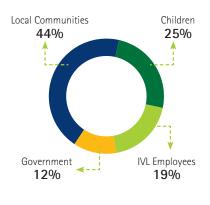


## **Snapshot**

#### Sustainability Projects (Count by Category) Helping Local Communities 202 **Developing Employees** 52 **Engaging Stakeholders** 12 Reducing Waste 36 18 Recycling Reusing Resources Disaster Aid 31 Producing Renewable Energy 3 Total 384

Helping Local Communities (Category Break–up)	
Education	24
Healthcare	14
Environment	12
Sponsorship	68
Employee Initiatives	18
Events & Celebrations	66

## Who will receive the benefits?

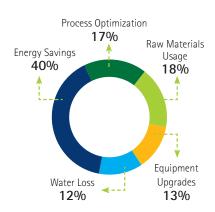


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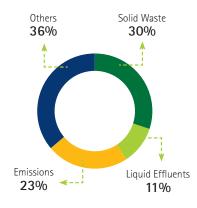
### Developing Employees (Category Break-up)

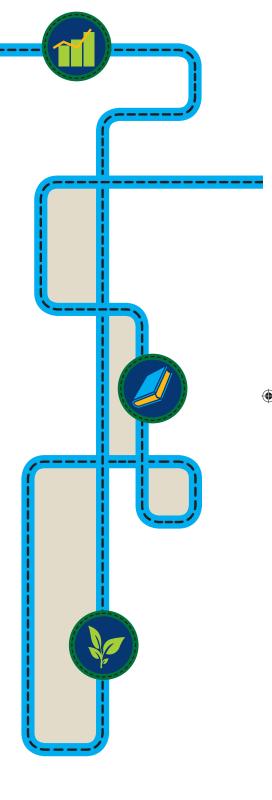


### Reuse Resources (Category Break-up)

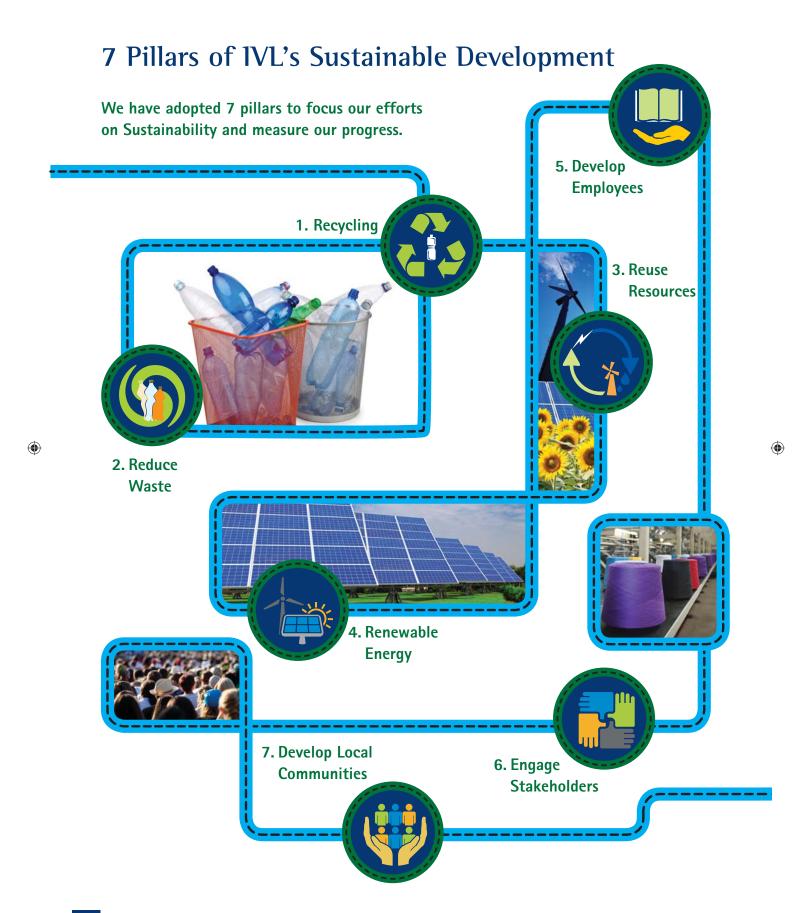


### Reduce Waste (Category Break-up)









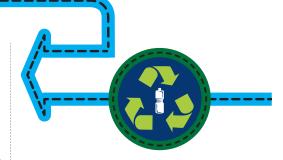


## Pillar 1 Recycling

Recycling Polyester is a major thrust area to address concerns on environmental pollution. We believe Polyester & PET being easily and 100% recyclable allow them to be more environment friendly than the existing alternatives.

IVL acquired Wellman International in 2011 to become the largest recycling entity in

Europe. Wellman International recycles 1.6 Billion used bottles to make 70,000 tonnes of flakes per annum that goes into making a range of fibers used in hygiene, home furnishings, and automotive interiors. Wellman operations saves annually equivalent to 200,000 barrels of oil and eliminates 300,000 tonnes of harmful air emissions.







Wellman International (now IVL) is actively involved in a national project RX3 (Rethink, Recycle, Remake) which is an organisation tasked with developing markets for recyclables







### Myths & Realities of Polyester (PET Basic)



## How can I distinguish PET bottles and containers from other plastics?

PET plastic containers are identified by the #1 recycling code - the triangular "chasing arrows" symbol with the number 1 in the center and the acronym PET or PETE underneath. The recycling symbol can usually be found molded into the bottom or side of the container or bottle. Only PET carries the #1 identification code.









IVL is setting up a new recycling plant in Nakhon Pathom Province, near Bangkok, the current location of its subsidiary Indorama Polyester Industries' Polyester Fibers and Yarns plant. Under the new project, discarded, or "post consumer," PET bottles will be collected and recycled to produce high quality resin for making containers for consumer drinks; yarns for premium garments of environmentallyconscious brands and colored fibers for automotive and non-woven end applications. The new investment will be able to recycle 36,000 tonnes of bottles a year to make about 28,500 tons of recycled polyester. Wongpanich, Thailand's leading private waste recycler will deliver discarded PET bottles to the Nakhon Pathom facility for recycling. The project will be located in Nakhon Pathom Province in Thailand.





IVL uses office stationary such as pens, business cards made from 100% recycled PET.





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## Pillar 2 Reduce Waste

IVL sites around the world have reduced waste quantity to much below the regulatory requirements and industrial norms by process improvements, equipment replacement or upgradation and reusing waste streams.

IVL today is proud to have some of the most efficient and environment friendly operations in the industry and other plants are learning from these beacons to achieve similar standards.

Many IVL sites engaged a certified consultant to conduct LCA studies to gauge the carbon footprint of their operations. We are planning to have all our global sites conduct similar studies so as to enable us to track accurately our progress in reducing our ecological footprint.





### **Key Initiatives:**

IPI Rayong reduced their oil consumption and carbon footprint by optimising their processes and replacing HTM.

OGP recycled 30% of plastic waste, 74% of paper waste, 40% wooden waste, 25 % composite packaging waste with "Green Dot" to reduce its waste.

Alphapet reduced the amount of paper waste by replacing paper towels with automatic hand dryers.

Wellman International (now IVL) is actively engaged in 'Zero waste to landfill project' - an innovative national project which diverts waste from landfill to a 'waste to energy' facility.

### Myths & Realities of Polyester (Uses for PET)



## Are PET containers made for use in the oven or microwave different from PET containers used for beverage bottles and food jars?

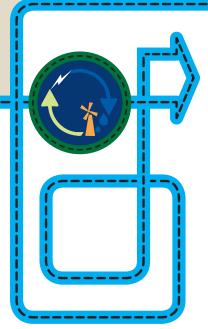
Yes. Special grades of PET are used for take-out food containers and prepared food trays that can be warmed in the oven or microwaved. These "dual ovenable" trays and containers have the same basic chemical formula as PET bottles and jars, but have special additives that crystallize and toughen the PET so it can withstand the much higher temperatures of oven and microwave heating. Ovenable PET is approved as safe by the FDA and other health-safety agencies around the world.











## Pillar 3 Reuse Resources

All IVL sites regularly benchmark against each other on various aspects including

- 1. Energy Consumed
- 2. Water Used
- 3. Raw materials and Catalysts Used

Despite capacity increases due to debottlenecking, several IVL sites reduced energy consumption from 3% to 11% over previous year by replacing old equipment, upgrading processes and replacing lights with more energy-efficient LED lamps.



### Myths & Realities of Polyester (Uses for PET)



## How do I clean PET bottles for re-use? I'm concerned about accidental bacteria growth.

Although PET bottles are approved for both single and repeated use, the refilling and re-use of any bottle first requires careful cleaning. Always use soap and hot water. Dry thoroughly to make sure it is sanitary and free of moisture, which can promote bacterial growth. Consumers should avoid re-using any bottle that has been scratched inside, since bacteria can become lodged in scratches.

#### **Key Initiatives:**

At IVL, our Head-Office observes a voluntary shutdown of all ventilation/air-conditioning equipment for 1 hour daily. Our employees have adopted a number of internal initiatives to reduce our paper and energy consumption.

IRPL installed a new VAC system reducing energy consumption by 77.3 KW and removing use of toxic CFCs.

IRH Lopburi reduced their energy consumption by 11% over 3 years by replacing lamps with energy efficient lights and other operational improvements.

Indorama Polymers Workington reduced energy consumption by 4% by various initiatives.

At several sites such as Auriga Polymers and IVL Poland, equipment replacement has been done to reduce water loss and energy consumption while minimizing emissions of gases such as nitrogen.

Starpet added exhaust fans and replaced lights with energy efficient lights to reduce energy consumption. They also reduce water and chemical losses by equipment upgrades.

Alphapet recycled containers to reduce its resources and environmental footprint.

TPT reduced its raw material consumption by optimizing its process and reduced energy consumption by a number of equipment upgrades.

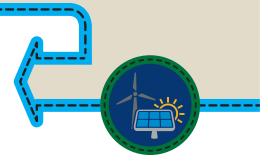








# Pillar 4 Renewable Energy



As an 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.

#### Solar Farm at Lopburi, Thailand:

We have setup a solar farm in Lopburi with installed capacity of 2.376 MV and Total Power Generation: 3,500,000 kWh/Year. The project with a Total Area of Solar power plant: 25 Rai will lead to Total Annual CO2 reduction: 2,000 Tons of equivalent CO2. However, due to floods in Lopburi, the solar farm has been shut since October 2011 and will resume operations later in 2012.



#### Wind Turbine at Workington, UK:

We have wind turbines in Workington that generated 6,015,331 kWh in 2011, equivalent to 16.7% of the site energy consumption. The energy produced by the wind turbines was 33% more than that in 2010.





#### Solar Energy from Trevira Roofs

Trevira was thinking about generating energy in environmentally friendly ways. For some time now roof modules have been supplying green electricity in the industrial park Bobingen. Trevira has contracted with Inventux Technologies AG (Berlin) to use roof modules at its Bobingen plant for the installation and operation of solar systems. Inventux operates the system, feeding the power produced into the network. Trevira profits from the rent received. Two large-scale photovoltaic systems have already been set up and are operational, while a third is under construction. The roof of building 620 is fitted with 670 square meters of solar modules, with a capacity of around 0.8 MW p.a. Building 640 has a similar installation. The total amount of electricity produced annually by the two systems corresponds in peak times roughly to 14-16 % of site consumption, which is approximately 120-30 kWh in the Industrial Park at Bobingen. Of this Trevira accounts for some

40 % directly and/or 60% indirectly (energy and media production for Trevira by the local infrastructure supplier ABB are included in this figure). With the systems Trevira is actually being ecological twice over, since all the power produced is consumed directly in the plant. And therefore Trevira does not draw upon the public supply network. The project for 2012: A similar contract for Trevira's Guben plant has been signed, where roof area is to be let out to produce green electricity too. This system is currently under construction and will have a capacity of up 3 MW in peak times. In addition, Trevira also meets the requirements of Section 41, Para. 1, No. 4 of the German Renewable Energy Law (EEG), and constantly identifies energy savings potentials in the processes. An energy management system according to ISO 50001 is currently being implemented, with certification expected to be finalized in mid 2012.



Photovoltaic roof installations in the factory at Bobingen.

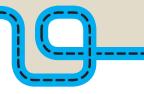








# Pillar 5 Develop Employees



Myths & Realities of Polyester (PET Safety)



Is PET safe? Is it approved by the FDA or other health-safety agencies?

PET has been approved as safe for contact with foodstuffs and beverages by the FDA, Health Canada, the European Food Safety Authority and virtually every other health-safety agency in the world. It has been used for food and beverage containers for nearly 30 years without any known adverse effects. Extensive studies of PET and PET packaging have repeatedly shown it to be safe.

"People First" - we believe that people are our core strength. All personnel of IVL and its subsidiaries are considered to be valuable assets, critical to the growth and profitability of the company and its subsidiaries, and strive 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.

To retain high quality manpower, and to drive the business efficiently, employee training, health camps and fire drills are the norm at most of the IVL plants around the world.

Seminars and events have been conducted on a range of topics to educate the employees. Some of the topics are: Breast Cancer, Time Management, Domestic Violence, Leadership Development, Team-work, "Applying Dhamma" etc.

In addition, IVL also encourages its employees to participate in local sports competitions such as Basketball, Cricket and Football

#### **Key Initiatives:**

IRPL achieved new safety record of its operation passing 719 days without any accidents and conducted a range of workshops to improve employee soft skills and technical skills such as positive thought leadership, team leadership, first aid skill, fire-fighting skill

IVL Workington sponsored an employee taking part in Great North Swim, one mile in Lake Windermere 18th June in aid of Royal National Lifeboat Institution. Another employee was sponsored for individual run across the length of Britain. Workington plant also initiated a Cycle To Work Scheme allowing employees to cycle to work rather than using car.

Head office Bangkok held the 2nd Breast Cancer session for Indian's wives on February 2011.



On April 25, 2011, the HR Department arranged a Training Class on the topic of "Happy Work Life Happy Work Place" by Phra Maha Sompong Talaputto. The objective of this activity was to encourage our staff to apply Buddhist Philosophy to their daily work, living and also adapt themselves in the workplace and working environment with happiness and effectiveness. The results of this activity are happiness, knowledge and good ideas for their working life.







TPT Petrochemicals plc. arranged the Team Building Activity, the purpose is build up good relationship and teamwork between employee and management and relaxation.



IRPL cooperated with the NPC Safety & Environmental Service Company to hold basic fire training for employees to develop fire fighting skills and use fire equipment to protect against fire.



IVL Team Building 2011.

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Leadership Training for Employees.



FiberVisions Suzhou organized a mountain trek to enhance team spirit amongst the employees.



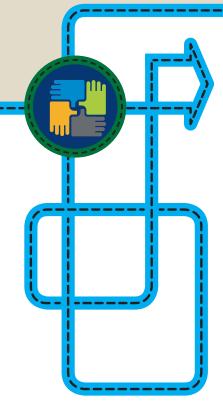
### Myths & Realities of Polyester (PET Safety)



### Do PET bottles or containers contain BPA?

No. PET does not contain BPA and never has. Bisphenol-A (BPA) is a compound used to make polycarbonate, a different type of plastic that's found in some baby bottles, the lining of metal cans, and reusable sports bottles. Some legislators and consumer groups are concerned there might be a possible connection between BPA in polycarbonate and possible developmental or reproductive disorders, although BPA has been extensively studied and ruled safe by international health authorities. These concerns have caused some confusion about which plastics contain BPA, but PET does not contain BPA.





# Engage Stakeholders

IVL gives equal importance to all of its stakeholders both internal and external, such as shareholders, personnel, business partners, customers, competitors, creditors, community, environment and society. The Company is fully aware that support from each stakeholder will

sustain and reinforce its competitive advantage and profitability. We issue a stakeholder magazine four times a year that reports on our business as well as attempting to inform and educate stakeholders on our activities and aspirations.





It is the Company's top most priority to protect Shareholders' and Bondholders' rights, irrespective of their holding, and encourage them to exercise those rights as spelt out in relevant laws. IVL also recognizes the equal rights of all Shareholders and Bondholders to obtain accurate, adequate and timely information from the Company, for their decision-making and will always strive to provide the same. IVL and its subsidiaries strive to conduct its business in a transparent and efficient manner with a view to enhancing shareholder value and returns.

IVL's Corporate Communications Department ensures that all pertinent information is released to the public on a timely basis and the Investor Relations Department deals

directly with shareholders and bondholders for the provision of in-depth and accurate information about our business and operations. The key policies of the IR Department are to disclose all information that will assist shareholders' and bondholders' forecast the company's performance. We do not lean towards brokers or investors who appear favorable toward the company and also do not treat brokers or investors who are unfavorable toward the company any differently from others.

Our annual report is substantive and meaningful so that our stakeholders may truly understand our business and feel part of it. We also arrange for factory visits for stakeholders as well as the media, which reports to a wide

audience internationally. The Company gives utmost importance to its website, which is both in Thai and English, and regularly reviews it to ensure all information provided is current and up-to date.

IVL endeavors to maintain and strengthen its long-term and loyal relationships with its customers and is determined to ensure customer delight by providing high quality products and services that best fit customer needs at competitive prices, supported by a high standard of service and accurate information regarding our operations and products. IPI Rayong plants a tree in its premises every time a senior level officer from our customer or supplier visits us.



#### **Key Initiatives:**

Indorama Ventures Mexico hosted a gathering where issues related to safety and labor health were addressed. The meeting took place at Indorama facilities in Querétaro from November 4th to November 5th, 2011. The event was organized by the Secretariat of Labor and Social Welfare and was attended by neighboring companies. Among the activities workshops were conducted on issues such as the regulations and norms applicable to Mexican industries.

Our Querétaro Complex in Mexico played host to 64 students of the secondary school Charles Dickens College who wanted to learn about the Indorama Ventures Company and its products. With the objective to see the modern technology application and to know how raw materials can be transformed in a range of consumption products used daily to meet necessities, the students watched the Indorama Ventures corporate video and they were conducted by a production tour in the facilities.

OGP Lithuania organized a presentation and visit of the plant for a group of 42 students studying international business in USA, and another tour for a group of 24 students studying technological sciences at KVK. It provided a means to engage with the future generation.

OGP is a regular sponsor of the Klaipèda jazz Festival and the cultural and educational international conference "Body in the Cinemas of South Asia" held at Vilnius University. OGP supported the traditional annual fest organized by public companies and coordinated by Klaipèda city municipality, which lasted for 6 days with more than 100 different events with hundreds of thousands of city guests.

Wellman is actively participating in ECOLIS (CIRFS Ecological Committee) at the pan-European Level to shape current and future environmental legislation affecting manmade fibers industry for a sustainable future.

On May 12, 2011, Mr. Udon Rattanapun, Operation Sr. Manager, TPT Petrochemicals Plc. welcomes the federation of Thai industries on the occasion of their visit to the TPT Reverse Osmosis Plant.



Mr. Avinash and Mr. Wirat from our Lopburi site welcomed the Deputy Director General of Intellectual Property and his team when they visited the facility's solar farm during the Lopburi, City of Renewable Energy Day on August 4, 2011.



IRPL together with all other plants in (AIE) jointly organized the AIE Open House activity 2011. This is the first time of mutual agreement and joint effort among all plants in AIE. The purpose is show the transparency of business and help local villagers to understand the business operations, production and good safety and health management and environment management.



### Myths & Realities of Polyester (PET Safety)



#### Can PET bottles that are left in a hot car or put in the microwave release dioxins?

No. PET does not contain dioxins, nor can it produce dioxins, and no dioxins are created in the manufacturing of PET. Dioxins are a group of compounds sometimes formed by high-temperature combustion (over 750 degrees F.) and certain types of industrial processes involving chlorine. Dioxins can't be created without the presence of chlorine, and PET does not contain chlorine. Consequently, dioxins can't be produced when a PET container is heated or microwaved or frozen (all common urban myths).













Retails shareholder visit to IPI Rayong and TPT Petrochemicals on November 18, 2011.





### Believe it or Not!

### **IVL Pavilion from PET bottles**

IVL constructed a Pavilion for the BOI Fair in Bangkok, Thailand that used 25,000 PET bottles and other recycled materials in its design. The Pavilion showcased a wide range of useful articles made from reused & recycled PET & polyester fiber encouraging over 70,000 visitors to embrace reduce, reuse & recycling in their daily lives. The Pavilion was voted as one of the most educative Pavilions in the international fair with over 2000 exhibitors.

Graphic linked to IVL Pavilion at BOI Fair









# Pillar 7 Develop Local Communities

IVL is a part of the larger community and our foremost focus is to partner with the local people around our plants to develop those communities. We try to actively participate in all activities that support and care for environment and society and promote the cultures in which the companies operate.

We treat and dispose of waste in a manner that will have least impact on society, environment and people. IVL has taken various steps towards the sustainability of not only the company, but of the community as a whole. We want to ensure that we provide a favorable working environment for our employees, who are often a part of the local communities, and ensure that we are a good community neighbor. Besides the economy and ecology of communities, we get involved in their lives and engage with them in local activities, such as teaching at local schools and providing scholarships and small libraries to schools.

IVL Rayong (TPT Petrochemicals) continues to support the Waste Recycle Bank at Ban Nong

Ban Nong Fab school in a village in Rayong which setup to encourage students and the community to collect postconsumer PET bottles that is sold for recycling into useful polyester fiber. Over 23 Tons of PET bottles were collected last year, generating more than THB 86,000 in income which will be for students scholarship.

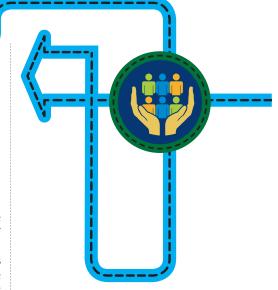
Starpet initiated a Corporate Sponsorship that enables the zoo to maintain and upgrade exhibits. Starpet also sponsors "Zoo To Do" which helps to complete projects at the North Carolina Zoo.

Alphapet sponsored 7 'Edge Student Leadership Scholarships' to encourage students and provide financial support to them. Alphapet also sponsored the Austin High School team to participate in the National Robotics Championship. They also provided support to several local charitable agencies of Decatur/ Morgan County Wellman International supports community based projects, such as support for building local community centre and 'tidy towns' competition.



- Donated THB 6 Million to help Flood victims in Thailand also made and delivered 4 boats for rescue operations, distributed relief packets to Lopburi residents and ran a community kitchen to feed flood-hit
- 2. Donated THB 1.5 Million to help Typhoon victims in USA
- 3. Donated THB 500,000 to help Tsunami victims in Japan





### Myths & Realities of Polyester (PET Safety)



#### Does PET contain phthalates?

PET contains no phthalates. Phthalates (i.e., phthalate ester plasticizers) are not used in PET, and PET is not a phthalate. Plasticizer phthalates are sometimes used to soften other types of plastic, but they are not used in PET. Some consumers may have incorrectly assumed that PET is a phthalate because PET's chemical name is polyethylene terephthalate. Phthalates are low molecular weight monoesters made from ortho-phthalic acid. By comparison, PET is a high molecular weight polyester made from tere-phthalic acid. Chemically they are very different.











 Indorama Ventures PCL donated food, life jacket, money, do community kitchen and other necessities to over 1,500 people including employees and villagers whose homes have affected by the floods at Lopburi province.



DOCAMA



 Indorama Ventures PCL and subsidiary companies donated 569,530 baht to M.R. Piyangsri Watanakun, Assistant Secretary-General of the Thai Red Cross, to support flood relief in the South of Thailand.



 Indorama Ventures PCL presented H.E. Yingluck Shinawatra, the Prime Minister of Thailand, with a donation of one million baht for the Prime Minister's office to use in aiding flood victims around Thailand at government house in Bangkok.



7. IRPL, led by Mr. P.C. Gupta, and TPT, led by Mr. Sunil Fotedar, donated items to help flood victims. Together with employees and families they packed disaster relief bags at Royal Thai Naval Air Division, Ban Chang, Rayong Province. The management and employees and families together with other volunteers completed a target of making 5,000 disaster relief bags ready for being transported to flood victims in many provinces by the navy.







 TPT's employees and family donated life jackets, relief Packages, a float, and mobile toilet to Sainoi, Bang Bua Thong people.







 IVL sites in Rayong - Indorama Petrochem together with Indorama Polyester Industries and TPT Petrochemicals - buying fruit form local Rayong farmers to help relieve the impact of low fruit prices.



 Indorama Polyester Industries (Rayong and Nakhon Pathom) arranged a family visit to plant mangroves at the Mangrove Forest Resource Development Center 1 in order to boost the dwindling forests.



11. Representatives from Indorama Holdings Ltd. teaching the woman's club of Bang Yi Nang Community how to make Camphor Fancy Dolls. The purpose is to help the woman's club earn extra money between agricultural seasons.

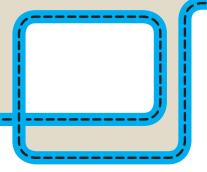


12. Every 3rd week of each month a group representing Asia Pet (Thailand) donated rice, snacks and milk to Wat Thum Tako School. The schools have 120 children. The purpose is to provide food and lunch for children for 1 month.









13. Indorama Ventures cooperated with the Bangkok Breast Cancer Support Group to host "Breast Cancer Training Sessions" for female employees and the wives of employees. This helped to raise awareness of breast cancer and gave basic instruction on how to conduct self-examination.



14. TPT Petrochemicals PCL joined the "International Coastal Clean-up day" activity helping to clean and collect garbage at Maepung Beach.



 Volunteers from Indorama Polyester Industries (Rayong) helped to clean and reduce garbage on the beach at Tambon Pak Nam.



16. TPT Petrochemicals Public Company Limited, a subsidiary of IVL, played a central role recently in reducing waste in the community. As much as 11,118 kilograms of waste has generated income of around Baht 40,012 for the students.



17. The CSR committee from Indorama Polyester Industries in cooperation with the Department of Fisheries, Nakhon Pathom Province, Villagers and the community joined to release fish into the Tha Jeen River in order to increase the number creatures in ecosystem.











18. Indorama Holdings Ltd. arranged "English class" to teach English to children in Khok Salut Community. For this occasion the expat wives and IVL staff are volunteers, teaching and arranging free lunches for children. The teaching program is arranged every Saturday (3 months) from 9:00–11:30 a.m. till September at Wat Klong Mao School.



 Indorama Ventures supports Book Donation Project by The Nation and donated book shelves for libraries of 6 district schools in 3 provinces.



 Indorama Petrochem Ltd. hosted free lunch and games for children with multiple disability at Rayong Punyanukul School.



Indorama Polyester Industries (Rayong)
donated water filter equipment under the
project "Drinking Water to Students in Ban
Mapthaphut School" at Ban Mapthaphut
School, Tambon Mapthaphut, Amphur
Muang, Rayong.



22. The AsiaPet and Petform Lopburi CSR team support the construction of mushroom farms at Ban-Mutjarin and Ban-Pran Kok Tha La to act as learning centers and create a strong community. It also supports villagers to earn extra money from the project.



### Myths & Realities of Polyester (PET Safety)



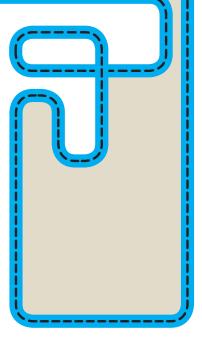
### Does PET contain endocrine disruptors?

No. PET contains no known endocrine disruptors, and there is no credible scientific data to suggest that PET produces estrogen or endocrine modulating activity. Studies that exposed both male and female laboratory animals to terephthalates during all phases of the reproductive cycle found no reproductive or developmental effects in either the test animals or their offspring.









23. Indorama Polymers Lopburi CSR team support Ban-Ladchado villagers to have extra money through a project called "The Repair Pallets" by providing pallets for villagers to repair at 30 baht per piece.



24. Indorama Holdings Rotterdam supported a new building for school in Bodopoda India and replaced all old desktop computers with new computers. The old computers were given to an organization that recycles computer/printer components and an amount of 2239 was received. Indorama Rotterdam decided to donate this amount to the SAC foundation (Stichting Actie Calcutta).



25. PT Indorama Ventures Indonesia (IVI), led by Mr. Shin Yong Sig, Senior Vice President (7th from right) donated white board, text books, uniforms, school bags, writing books and cleaning equipment to SDN III Cihuni School under the program "IVI Edu Care". The students give a drawing as their thanks to IVI. The drawing is called "Aku Cinta Indorama" (I love Indorama).



26. AlphaPet in Decatur, Alabama contributed USD 7400 to the American Red Cross for aid to tornado victims.













### **Awards & Recognition**

IVL takes pride in being awarded recognition around the world for some of its initiatives as listed below

February 7, 2011 - Mr. Aloke Lohia was awarded a certificate of thanks by H.E. The Prime Minister, Mr. Abhisit Vejjajiva, for accepting the position of Honorary Investment Advisor to the Board of Investment.



Indorama Ventures Chairman, Mr. S.P. Lohia was presented the "Pravasi Bharatiya Samman Award" by HE Mrs. Pratibha Devisingh Patil, The President of India, on 9 January 2012 at Jaipur, India. "Pravasi Bharatiya Samman" is the highest award conferred by the Indian Government on non-resident Indians and Persons of Indian Origin (PIOs) for their outstanding contributions in serving the Indian Diaspora and enhancing India's image in different parts of the world.



H.E. Prime Minister Yingluck Shinawatra and Mrs. Suchitra Lohia share a few moments at the Foreign Correspondent's Club of Thailand dinner following the Prime Minister's speech. Mrs. Lohia donated money on behalf of Indorama Ventures to assist the Club provide money to schools affected by the floods last year.



April 1, 2011 - Mrs. Suchitra Lohia received a certificate from the Ministry of Education on the occasion of her support for the Ministry of Education.





#### Myths & Realities of Polyester (Recycling & Sustainability)



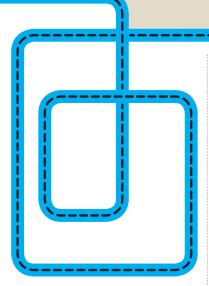
### Can PET bottles and containers be recycled?

Absolutely. PET is recyclable and highly sustainable. It can be recovered and recycled again and again back into containers for foods, beverages and personal care products or into carpet and clothing fibers, automotive parts, construction materials, industrial strapping as well as other packaging materials. More than 1 billion pounds of used PET bottles and containers are collected in the U.S. each year for recycling. PET is the most recycled plastic in the U.S.









Indorama Ventures Public Company Limited has been given a "Very Good" rating by the Institute of Directors in Thailand (IOD) in its first year as a listed company. The criteria looked at by the IOD included five categories: the rights of shareholders; equitable treatment of shareholders; Role of stakeholders; Disclosure and transparency; and Board responsibilities. Indorama Ventures is proud to have reached this high achievement in its maiden year as a listed company (2010).









OGP received a Gold Medal for its product Ramapet R1L from the Chairperson of the Parliament of the Republic of Lithuania, Ms. Irena Degutiene (2nd left). The event was conducted at the Lithuanian Parliament attended by the fellow Industrialists and Members of Parliament amongst others.



Auriga Polymers Inc has been honored, at an awards luncheon held by the Spartanburg Area Chamber of Commerce, by being named an Economic Champion for 2011and was one of only 10 outstanding companies whose confidence and collective investments are providing a healthy economic climate for upstate South Carolina.



### Myths & Realities of Polyester (Recycling & Sustainability)



What process is used to recycle PET?

PET can be recovered, and the material reused, through a series of washing processes or by chemical treatment to break down the PET into its raw materials or intermediates, which are then purified and converted into new PET resins.

Wellman International, recipient of the 2011 'Waste to Business Resource' Green Award.



The Waste to Business Resource Award

Wellman International announced as recipient of International Green Award (National History Museum, London, November 2011).







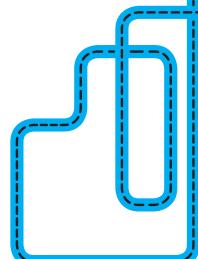


Indorama Polyester Industries PCL received the ISO 50001 Energy Management System Certificate from Mr. Chaiyong Krittapholchai (2nd from left), Secretary General of Thai Industrial Standards Institute (TISI) at Ministry of Industry. Currently, Indorama Polyester Industries PCL is the first only Thai company to achieve the world class ISO 50001 Certificate.



PT. Indorama Ventures Indonesia received a blue level certificate as PT. IVI commitment in program "performance rating of the company in maintaining the environment 2010–2011" from Ministry of Environmental.





TPT Petrochemicals Plc and Indorama Polyester Industries Nakorn Prathom received the award "Green Industry Level 3 - Green System" certificate on September 26, 2011. The award is presented to companies where the Environmental Management System has been systematically performed, monitored and evaluated, reviewed for continuous improvement and where the company has received other well-known environmental awards and/or certificates for achieving other environmental standard.



Indorama Petrochem obtained an "Excellent" rating from Industrial Estate Authority of Thailand (IEAT) as its audit ratings in all topics under the "Pollution Reduction and Mitigation Plan" were high three times in succession.



Indorama Ventures Polymers México received a "Clean Industry Certificate" from the Federal Attorney for Environmental Protection (PROFEPA) for industries which fully meet and exceed the commitments derived from environmental audits.



### Myths & Realities of Polyester (Recycling & Sustainability)



## Can I put PET containers in my recycling barrels for curbside collection?

Yes. Virtually every municipal recycling program in North America and Europe accepts PET bottles and containers, which can easily be identified by the #1 recycling code found on the label or stamped into the side or bottom of the container.





AsiaPet (Thailand) Limited, Indorama Holdings Ltd. and Indorama Petrochem received the CSR-DIW Award 2011. Indorama Polyester Industries Plc. (Nakhon Pathom and Rayong) maintained their CSR-DIW Award in 2011.



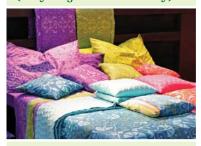
September 14, 2011 - Indorama Holdings Ltd. received the National Outstanding Industrial Establishment on Labor Relations and Welfare Award 2011 for the sixth consecutive year (2006–2011).



September 14, 2011 - Indorama Polyester Industries Public Co., Ltd. (Nakhon Pathom) received The National Outstanding Industrial Establishment on Labor Relations and Welfare Award 2011 for the third consecutive years (2009–2011).



### Myths & Realities of Polyester (Recycling & Sustainability)



September 14, 2011 - Indorama Petrochem received The National Outstanding Industrial Establishment on Labor Relations and Welfare Award 2011.



### What kinds of products are made from recycled PET?

Bottles, jars and other containers made of PET can be collected and recycled into a wealth of products. PET can be recycled into new PET bottles and containers, carpet and clothing, industrial strapping, rope, upholstery fabrics, boat sails, automotive parts, fiberfill for winter jackets and sleeping bags, construction materials, and many other items.

June 2011 - Jesus Sauza, Leonardo Pacheco, Oliver Mondragón, and Tiburcio Villanueva from Indorama Ventures in Mexico, have been recognized by the Queretaro State Labor Authorities, due to their performance and constancy during their working lives; their behavior has been an example for their coworkers and community. This recognition was granted by the Queretaro Governor.



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Indorama Polyester Industries Plc (Nakhon Pathom) and TPT Petrochemicals PCL received a certificate signifying they have achieved the Thai Labor Standard TLS 8001-2010 Certificate Completion Level Initiative Phase from The Ministry of Labor's Department of Labor Protection and Welfare effective July 11, 2011.



Indorama Polymers Workington Limited received "Gold Standard training award" .



Indorama Petrochem and Indorama Polyester Industries Nakhon Pathom received "The Best Manufacturer Award for Safety Occupational Health and Working Conditions" from the Ministry of Labor.



September 14, 2011 - Indorama Holdings Ltd. received the Provincial Safety Award 2011 organized by the Department of Labor Protection and Welfare, Ministry of Labor.

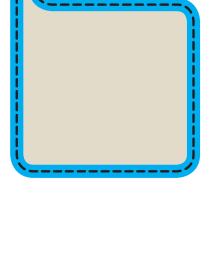


March 4, 2011 - Seventeen Outstanding Women received awards from Mr. Chatchai Promlert, the Governor of Lopburi, to mark International Women's day. Mr. Kasorn Thongmark from Indorama Holdings Ltd. and Mr. Nuttha from Petform (Thailand) received 2011 award on behalf of the women.



March 8, 2011 - Mr. Prapai Palakawong Na Ayudhaya, Sr. Manager (Personnel & Administration) received the Outstanding Women Award under the Management category on International Women's Day from Mr. Chidphon Ritprasart, Nakhon Pathom Governor.





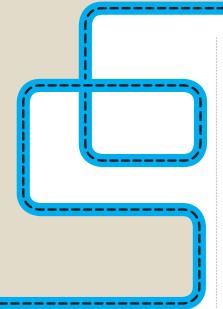
### Myths & Realities of Polyester (Recycling & Sustainability)



### Can new PET bottles be made from recycled PET?

Yes. Recycling used PET bottles and jars into new food-grade PET bottles and containers is a key example of the environmental benefits and sustainability of PET as a packaging material. The development of modern and efficient plants dedicated to the closed-loop recycling of PET bottles continues to increase around the world.





September 8, 2011 - Ms. Prapai Palakawong Na Ayudhaya a representative from IPI-N received Workplace Learning Award for year 2010 from Mr. Phadermchai Sasomsub, Minister of Ministry of Labor.



March 23, 2011 - Orion Global PET received ISO 22000:2005 certification for the production of PET polymers for the Food Industry.



### Myths & Realities of Polyester (PET Safety)



November 2011 - the Queretaro Site got an ISO 9001 recertification after an external evaluation that was carried out by BVQI Mexicana. This is an internationally recognized standard for quality management of businesses whose requirements are aimed at achieving customer satisfaction by preventing nonconformity at all stages from design through servicing.



#### I've heard that a hot environment can create harmful levels of antimony oxide in PET-bottled water. Is that true? Should I be concerned?

There is no reason for concern. No studies have found any toxic amounts of antimony in PET-bottled water or containers. Unfortunately, there has been some consumer misunderstanding of studies showing higher-than-normal levels of antimony when water bottled in PET was exposed to extreme heat (176 degrees F) for extended periods of time. Even then, the highest measured levels paralleled established safe levels for antimony in drinking water. In short, the very small amounts of antimony that might be found in PET-bottled water are of no concern and do not pose any health risk.

November 2011 - the Queretaro Site passed through an external audit curried out by BVQI Mexicana, in order to achieve recertification of the ISO 14000, which is an internationally recognized Environmental Management System Standard. This aims to assist Indorama Ventures to implement a management system and continually improve its environmental performance, whilst complying with all environmental applicable legislation.





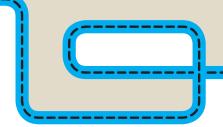






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### News Highlights -Media Coverage



### IVL to acquire European recycler

SET-listed Indorama Ventures Plc (IVL), the world's largest polyester-chain manufacturer, said it will acquire the recycling business in Europe of Wellman International from Aurelius AG.

The acquisition, the value of which was not disclosed, is expected to be completed within 2011, the company said.

CEO Aloke Lohia said Wellman had expertise in blending recycled polyethylene terephthalate (rPET) and industrial waste and could potentially contribute to make IVL a "zero waste" company with a low carbon footprint serving both the beverage and fibre customer markets.

Wellman International is Europ leading producer of high-quality po ester staple fibres made from recycl post-consumer PET bottles. It is Europ largest PET recycler, processing 1.6 billi bottles annually.

Wellman International has three pr duction facilities in Europe with 153,0 tonnes of output each year: a polyes fibre plant in Mullagh, Ireland and cycling plants at Spijk in the Netherlan and Verdun in France.

"We will have both economies of so and lower production costs to serve of customers in both the bottle and file segments," said Mr Lohia.

IVL shares closed yesterday on t LETTHE SUN SHINE SET at 33.75 baht, down 25 satang. trade worth 324.56 million baht.

### INDORAMA VENTURES BUILDING FIBRE, YARN RECYCLING PLANT IN NAKHON PATHOM

Indorama Ventures, the world's largest fully integrated polyester company, is setting up a polyester fibre and yarn recycling plant in Nakhon Pathom. The facility, which will be the largest of its kind in Thailand, is expected to be operational in 2013.

While declining to disclose the investment cost of the plant, the com-pany said yesterday that it would have an annual recycling capacity of about 30,000 tonnes. "We have already started the con-

struction of our first recycling plant in Thailand, in Nakhon Pathom," said Suchitra Lohia, director and chairman of the CSR Committee at Indorama Ventures. "The plant will start opera-

Indorama Holdings as the Kingdom's first wool-yarn producer. It started a recycling business in 1995, and polyester and purified terephthalicacid(PTA) production in 1997 and 2008 respectively, making the company a fully integrated poly-ester player, and now the largest in the world, she said. Indorama Ventures has manufac-

indorama Ventures has manufi turing operations in Rayong, Lop Buri and Nakhon Pathom. It is based in Bangkok and listed in the local stock exchange. "We supply recycled resins to the world's leading soft-drink and food companies, including Pepsi-Cola, Coca-Cola and Nestle, all over the world. "Wealso supply PET bottles and closures in Thailand, said

in demand to PET resists world-wide is about 9 percent perannum. In Asia, demand growth is about 11 per cent a year on aver-age, far higher than in Europe and the US, for which the figure is 3 per cent.

About 90 per cent of recycled resins is used for making bever-age bottles, while the remainder is for producing films, such as screen-protection film for mobile phones

phones.

Meanwhile, Indorama Ventures, in collaboration with the Chanapatana International Design Institute, yesterday announced the organisation of the "RECO Young Designer Competition 2011, which will challenge entrants to create items through the medium of both fashion and furniture design by using recycled PET bottles and polyester.

using recycled polyester.
Some of the space at Indorama
Ventures' pavilion at the "Bol Fair
2011", to be held between





เรด 50001 รายแรกของไทย

#### INDORAMA TAKES RECYCLING BUSINESS IN EUROPE

Wellman International is Europe's largest recycler of PET (polyethylene terephthalate) bottles as well as a leading European producer of polyester staple-fibre products and rPET.





มะเร็งเต้านม...บริษัทในเครือ บริษัท อินโดรามา เวนเจอร์ส จำกัด (มหาชา กลุ่มผู้ช่วยเหลือผู้ป่วยมะเร็งเต้านม กรุงเหพา จัดอบรมให้ความรู้เรื่องมะเร็งเต้านมแก พนักงานและภรรยาพนักงาน พร้อมร่วมบริจาคเงิน 55,000 บาท ให้กลุ่ม BBCS ด้วย ที่บริษัทฯ เมื่อเร็วๆ นี้



### RECO Eco Products to Save the World

Krungthep Turakij Section: Eureka Date: 25 August 2011

You might see the hat from soft drink cans and lamp from used water bottles. They are colorful but stain and it is simple reuse products that do not present the creative idea. Therefore, it is the origin of the RECO Young Designer Competition 2011 project and the objective is to present the ECO design in terms of RECO to add value and reduce global warming in the different view.



signers and furniture designers who have creative idea from PET bottles and polyester. It is a big door for the designers to present their products to domestic and overseas investors and it is to pave the way to be designers for environment.

Richard Jones from Indorama Ventures Thailand, producer and exporter of PET bottle, proposed the idea that in the future, designers could develop the

e product from ifficult to torn, portswear, wa-

### Indorama Ventures Pic donates funds for the flood relief

ASTV Manager Daily Section: Marketing Date: 3 October 2011



Ramesh Narsinghpura and Ashok Upadhya, executive of Indorama Venture PIc donated funds for the flood relief scheme via the Prime Minister Vinoluck Shinawatra.

#### IVL's green pavilion at BOI fair 2011

Krungthep Turakij Section: Eureka Date: 11 October 2011

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The atmosphere of the World Expo 2011 will be replicated at the BOI FAIR 2011 which is launched under the theme "Going Green for the Future". This year's BOI Fair is set to occupy the space equivalent to the size of 33 soccer fields and consists of 84 high-tech pavilions of more than 30 Thai and foreign priyate companies from various industries.

At the fallooking a square r of Indora plastic r world.

Richard

porate of

ASTV Manager Daily Section: Industry Date: 13 October 2011



Labor Minister Padermchai Sasomsap presented the National Outstanding Industrial Establishment on Labor Relations and Welfare Award to Asoke Arora and Sunanta Lonopparat, who are representatives of Indorama Polyester Industry Co., Ltd. (Rayong).

### RECO project to help promote designer's dreams, professors want to make it a reality

Thai Post Section: X-Cite Date: 22 October 2011



RECO is new interesting project that should be kept an eye on and it has proposed the idea to Reduce, Reuse, Recycle and ECO which is friendly with the environment.

There are young male and female designers across



Da-Wiyada Sokaku and Noon-Benjamas Supeng, second-year student of high vocational certificate in the faculty of domestic science, cloths department, Chiang Rai Vocational College, come with Professor Pakkaporn Paiboon to listen to the sug-

### Gathering around Christmas Tree

Bangkok Post Section:

company came up with the PET pavilion

designed to meet the concept of lives

in the future. The pavilion reflects this o

construction in the future world, which is

decorated with plastic bottles. The pavilic

Date: 9 December 2011

The trees, too, are a pretty news-worthy lot.

PET water bottles were never more beautiful than when reinvented as a sparkling

Futuristic Douglas Fir by Indorama's in-house artists.

"The inspiration for this tree came from our company policy of reducing, reusing, and

Recycling waste," explained PR Manager Naweensuda Krabuanrat, a rare point of poise in the nerdy world of petrochemicals.

Practically speaking, that meant fishing discarded empties out of the bins and giving them a good wash before handing them over to the artists



using on the om PET tied his compleskills in fu-

Titani

edly

Aluminium urniture dehe products ducts in the of the prodand fit with luxury and nable price

Six legs as a whom the Charles on C a sile and the Appen Bids showing 1 would seem to make the control of the c

DIES AT LAFAYETY



#### PRETTY DRESSES FROM TRASH

Kom Chad Luek Section: Entertainment Date: 8 November 2011







trashes after consuming to be valuable.

Who said leftover materials cannot be used as fashion? The ideas of young-blood designers have created new creative results which are totally kindle worthy. To show those ideas to the public, RECO Young Designer Competition 2011, the fashion contest of making fashion from leftovers of polyester and PET by Indorama Venture PIc (IVL), is seeking new and young designers in RECO style who care of environment and try to concretely present the ideas when the contest comes to the stage of rea production process and testing real dresses, whic need to fit clothes to models' bodies. Their work must also receive advises from fashion experts be

Viyada Sokaku, Da, and Benjamas Supeng, Nur two sophomore students in highly vocational pro gram from the Faculty of Clothes and Dresses of Chiang Rai Vocational College, and Phakaporn Phi boon, a teacher from the college, came to pick u few advices from experts in order to make real dres from drafting in the paper named Malee Reused They brought completed dress to test with models bodies who will present their work in BOI Fair. The

fore making them real from drawn papers.

said that to make polyeste in order

and add "เส้นใยรีไซเคิล" คิดต่อยอด ประสิทธิ์ ยกตัวอย่างผลงานต้นแบบสำหรับนักคิด บระสาธ ยายายางผลงานสาแบบสาราบนาสต ผลิตงาน Roco คือ Pod เก้ายื่ผลิตจากเส้นโยวีโรเคิต นำมาขึ้นรูปใหม่ ซึ่งมีคุณขอบัติเต่นในการบ้านเลียง สร้าง พื้นที่ส่วนตัว โดยดีไซเนอร์ได้โอเคียจาก ผักถั่ว ไว้ปกป้อง

> ริชาร์ด โจนต์ จากบริษัท อินโดรามา เวนเจอร์ส บระเทศ เพลง หากบระทำ อเนตราม เราแขอส ประเทศไทย ผู้ผลิตและส่งออกระทำผลตลิติกไล (เช้า) เตเอเนะพิตว์ โนยนาคติดีเซเอร์สหมารถต่อยอดสู่การ ใช้ "เส้นใน" ซึ่งเป็นผลิตภ์ไตท์วี่ไซเดิจจากพลาสิก อาจ เก็กขอเป็นกระทะผักกาก เลื่องก็เส้นผลิตม์สไขน่า จูด เม็กให้กระบายความรัฐมากระเท็กในน้ำ แกะน้ำหรือพรม ไม่ติดไฟ หรือแม้กระทั่งยางรถยนต์

ดให้ หรือแม้กระทั่งเรางายเทต ทั้งนี้ หากนักออกแบบน็อมใช้เส้นในที่ได้รี่ใชเดิล จากหลาดจัดนากที่ได้ ริชาร์ต กล่าวว่า โทยพะไม่ใช่ เพียงชัทหลายออร์ส่งออกชาตน้ำ หรือกล่อง หลาดติกที่ใช้แล้วไปยังจักเหรือญี่กุ่น แล้วเป็น ผู้ชื่อวัตถุสินภาแปลงเป็นเสียที่เล่าทำ เท่านั้น แต่ยังสามารถเป็นแหล่งผลิตเส้นใบได้ด้วยตนเย พื่อสร้างรายได้จากการผลิตและส่งออกเล้นใบไป

 ถ้าจ่าเป็นถึงชัดสุดที่จะจัดการพลาสติกในฐาน ผู้ก่อการร้ายของโลก ไม่ต้องลดปริมาณการใช้ ก็ได้และเมื่อทำลายไม่ได้ จึงต้องใช้ "มันสมอง" กรอง ไอเดีย" ออกมาสร้างสรรค์ผลิตภัณฑ์ที่มี "ดีไซน์" เอาไว้กู้โลก As for a student from Chanapatana International De-

sign Institute, Pisitpol Klinbuakaew with the design named Hope in the Blue Sea, he proudly presented a creative design from polyester and fiber of sacks, and he also felt glad to join the project; he said that previously he had attended some contests to seek

Section: Society

The Nation

Date: 26 January 2012

Indorama picks a winner

Suchitra Lohia, director and chairwoman of the CSR Committee, Indorama Ventures presents the first prize valued at Bt100,000 to Priyabodee Srilamsingh, winner of RECO Young Designer Competition 2011 in the field of fashion design. Also pictures are Dr. Atchaka Sibunruang, second left, Secretary General, Thailand Board of Investment and Indorama Ventures' brand ambassador, Natalie Glebova

#### **TURNING TRASH INTO CASH**

Bannkok Post Section: Business Date: 16 December 2011



Map Ta Phut residents are recycling rubbish and socking away savings at a unique

Bank, writes Nareerat Wiriyapong in Rayong

At the age of 12, Kantaporn Duenjam is a bank manager. But unlike others in the field, her routine is not dealing with large sums of money. She recycles waste

"My main duties are taking care of garbage weighing, calculating the value of the waste and recording all the data," said the Prathom 6 student from Baan Nhong Phab primary school in Rayong's Map

Kantaporn and her colleagues, all students at the school, are in charge of Baan Nhong Phab waste recycling bank, established about a year ago.

The bank was initiated by TPT Petrochemicals part of the SET-listed Indorama Ventures PIc (IVL), which provided 280,000 baht in initial funding for the bank's storage facility and equipment and training for the staff.

From 1.30 to 2.30 pm every day, students, teachers and other villagers come to sell garbage to the bank

and deposit the money in their savings accounts.

Garbage is priced differently, for example, four baht per kilogramme for corrugated box paper, five baht for white paper and 14 baht for PET plastic bottles.

For students, the amount in the savings book is normally used to finance further study after graduation from school.

Baan Nhong Phab is the closest community to TPT's purified terephthalic acid (PTA) plant at Map Ta Phut Industrial Estate.

Despite the close distance to the sixth largest petroleum and petrochemical complex in the world, residents of Baan Nhong Phab are mainly lowincome earners.

The waste-recycling bank provides the community with additional income while reducing garbage to better the environment, says Richard Jones, head of IVL investor relations.

At present, the bank's 215 members include 135 students and 14 teachers. Some 11,120 kilograms of garbage has been sold to the bank with a value of 40,000 baht, including 410.3 kg of PET plastic

2 19 14 C / V 19 2 2 3 33

worth 4.940 baht.

Teacher Boonpa Kaewdecha says the bank's membership has topped the school's original goal of 200 and the amount of waste in the community has declined significantly.

"In the early days of the bank, we saw a long queue of people coming to sell the garbage they collect-ed," said Ms. Boonpa, who supervises the project.

"Nowadays, the queue is a lot shorter because the garbage is more difficult to find."

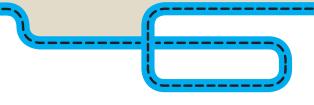
Originally known as Tuntex Petrochemicals (Thailand), TPT is the country's first PTA producer. IVL, the world's leading polyester chain manufacturer, acquired a majority stake in TPT in 2008.

TPT plans to introduce a waste recycling bank at another school next year.

The Baan Nhong Phab bank, meanwhile, won a gold medal for projects in Rayong that encourage good deeds. The project will join a regional competition to be held next year.



### Glossary



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IVL	
CSR	
PET	
PTA	
MEG	
NGO	
OGP	
PCR	
IPI-NPT	
IPI-R	
IPWL	
IRH	
IRPL	
Polyester	
Polyester fibers and yarns	
TPT	
TPA	
RECO	
LCA	
DIW	
OHSAS	
MSCI	
FTSE	
SET	
TRIS	
EO	
EG	
PEO	
DEG	
TEG	
rPET	
EPS	

### Definition

Indorama Ventures Public Company Limited
Corporate Social Responsibility
Polyethylene Terephthalate
Purified Terephthalic Acid
Mono Ethylene Glycol
Non-governmental organization
UAB Orion Global Pet
Post Consumer Resin
Indorama Polyester Industries PCL. (Nakorn Pathom Branch)
Indorama Polyester Industries PCL. (Rayong Branch)
Indorama Polymers Workington Limited
Indorama Holdings Ltd.
Indorama Petrochem Ltd.
A synthetic polymer made of purified terephthalic acid (PTA) and monoethylene glycol (MEG).
A quick-drying resilient synthetic fiber consisting primarily of polyester.
TPT Petrochemicals Public Company Limited
Tons per Annum
R + ECO, where R= Reduce, Reuse, Recycle; IVL student design competition
Life Cycle Analysis, study done to measure material usage in production
Department of Industrial Works
Occupational Health Safety and Security
Morgan Stanley Commodity Index
Financial Times and Stock Exchange
Stock Exchange of Thailand
Thai Credit Rating Agency, named Thai Rating and Information Services
Ethylene Oxide
Ethylene Glycol
Purified Ethylene Oxide
Di Ethylene Glycol
Tri Ethylene Glycol
Recycled PET
Earnings per Share
Transferable Subscription Rights





Return on Capital Employed

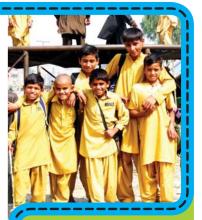
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### 2011 Summary



384 sustainability initiatives worldwide

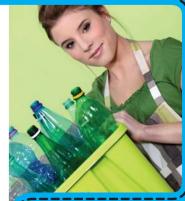


Recycled Volume 2.0 Billion Post Consumption bottles





Energy Reduction was 3%-11% at different sites





No. of people engaged 3600





#### Seven Pillars of Sustainability for IVL's Global Excellence

Recycling Reusing Resources Reducing Waste

Producing Renewable Energy

Developing **Employees** 

Engaging Stakeholders

Helping Local Communities



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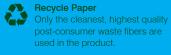






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<sup>¢κ¹ SE</sup>Αζ Green Seal The mark of environmental

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