His Majesty’s Work on Fish Breeding

One of the King’s early projects involved fish breeding. In 1952 His Majesty invited the Department of Fisheries to Chitralada Villa to use some wells for fish farming. The most prominent breed at that time was the Tilapia mossambica, called Pla Mo Thet in Thai. The first fish were initially raised in the swimming pool of Amphorn Villa, where His Majesty was living at the time. The Tilapia were chosen as a breed that had particular advantages for the Thai people in that the fingerlings are easily raised and breed rather rapidly.

In March 1965, Japan’s Crown Prince Akihito, later to become the Emperor of Japan, gave His Majesty fifty Tilapia nilotica, called Pla Nil in Thai, a breed that he believed would be of better nutritional value and taste.

By 1967, every fishery station throughout the nation began giving the fish to farmers. Every month His Majesty donated the fish grown in the eight ponds at his new home of Chitralada Villa. Demand became so high that in 1969 His Majesty had another, larger, pond dug, personally supervising the raising of 300 specimens.

His Majesty believed that fisheries should be integrated into the development of projects aimed at the poor, saying, “Fisheries development should be appropriate to the local area and should aim to develop natural water resources, such as rivers and marshes, both as breeding locations and in order to encourage the local inhabitants to derive benefit from such places.

The King therefore suggested that in order to put the nation’s fishery resources to better use, it would be necessary to register them. His Majesty noted the significance of fishing controls. At that time fish breeding was in the hands of fishery stations. His Majesty advised the stations to help farmers to benefit from such studies. He instructed the farmers to form groups to improve their marketing capability and eliminate unfair practices as well as maintaining fish levels. In this way, the people would gain long-term benefits and enable them to take control of their own lives.

The Food and Agricultural Organization requested some of these protein-rich fish bred by His Majesty as a donation to alleviate famine in Bangladesh in the late sixties. His Majesty immediately donated 500,000 Pla Nil fish to the People’s Republic of Bangladesh through the Food From Hunger Campaign of the United Nations International Children’s Emergency Fund (UNICEF).

Editor’s Note

The Beacon is a way of communicating with our stakeholders. We don’t want to inform just about our products but about all those things that surround our business, from CSR to technical innovations of our customers. Therefore, we try to offer a mix of general information and more specialized topics. Each issue focuses on a different business line and the interesting ideas surrounding that.

In this issue we continue to look at the PET business, especially innovative uses of PET in engineering and the automobile industry. Our series on branding continues with the valid question “What do I get out of it?” Our regular In the Vicinity column looks at Guangdong Province, where we have one of our largest PET facilities.

To go with that article, read a little on doing business in China. People too often believe that everyone is like themselves, which can lead to problems in business communications later. For those with kids in school in the Rayong area, we continue our series on children’s art.

We very much want to receive contributing articles from our readers on subjects as diverse as technical innovations and human resource management. If you are interested to provide your expertise on an interesting but related topic, in English or Thai, just drop us an email.

Naweensuda Krabuanrat
Another year is over and IVL achieved reasonable performance considering the problems with the global economy. I am pleased that we have been able to show continued improvement on our operational excellence front and I thank our colleagues around the world for their contribution to the overall success of the company.

I had the opportunity to meet many of our PET segment management from new acquisitions in Warsaw, Poland in 2012 and expect to meet more in March for our Polyester meeting in Atlanta, in the United States, in March this year. I had a day-long and fruitful interaction with our Feedstock segment management, which incorporated our EO/EG business in 2012. I have been impressed by the passion and motivation of everyone to give us their experience in order to keep raising the bar of our performance.

By now, you will have enjoyed your seasonal break and I hope feel refreshed and ready for the coming year. As usual, we face challenges but it is now clear that our strategies of global diversification and upstream integration are proving to be the key to our continued robust performance during these economic times. I hope you will carry on contributing your ideas and experience so that we continue to be a global leader in our space.

It was also a pleasure in 2012 to see that besides work, many of you are contributing to your local communities and assisting those less fortunate. This is something I want to encourage as I believe that we are part of the community and therefore should be proactive in our support whenever possible.

Aloke Lohia
Group CEO
Indorama Ventures Pcl.
In The Beacon Volume 3, we discussed a little of understanding Chinese culture when doing business. As China is such an important market, and IVL has two factories there today, a little more understanding of business etiquette is important. As a foreigner, you might feel embarrassed if what you assume to be true in your country proves ill-advised in China.

One key aspect of Chinese culture is the concept of “face” or Mianzi in Chinese. It may sound like the exotic East but is easily understood as showing respect in order to build relationships. Although there are strict policies about bribery and corruption at IVL, gift giving is part of Chinese culture and we must see it that way.

Causing someone to lose face through public humiliation (“I heard your business is going downhill”) can seriously damage business discussions. On the other hand, praising someone in moderation in front of their colleagues is a form of “giving face” and can earn respect, loyalty and aid negotiations.

The Chinese, and many Asians, see refusing invitations and gifts as deep personal insults. Losing one’s temper is seen as a childish tantrum, even if billions of dollars are at stake. Maintain one’s patience, formal politeness and modesty in the face of pressure is seen as a formidable attribute. Don’t think the business partner won’t notice your self control. He will.

Attending and Conducting Meetings

The Chinese value punctuality, so arrive on time or even slightly early for meetings or other occasions. If you are hosting the meeting, send someone to meet the Chinese team outside the building or in the lobby and personally escort them to the meeting room. Your top person should be waiting in the meeting room to greet everyone.

Check the Chinese calendar. If you are scheduling a meeting, avoid all national holidays, especially Chinese New Year, when the entire country effectively shuts down and it can be very difficult to organize meetings with key individuals. May Day and other national holidays should be noted. Be well prepared in advance. A Chinese businessman will likely know you and your business quite well so go prepared with a detailed proposition. Take along an interpreter if your hosts don’t speak English much, if at all. Chinese-language materials help a lot. While your contact in the organization may speak perfect English, the decision makers in the company may not. If you’re not sure how to dress, dress formally – it will convey respect and seriousness. Don’t forget also, it is important to demonstrate humility and modesty when speaking as exaggerated claims are always viewed with suspicion.
RECO Young Designer Competition

Indorama Ventures is pursuing its encouragement of young designers who find innovative ways to reduce post-consumer waste by re-using or recycling PET and Polyester fibers and yarns in fashion and furniture. The first time that we implemented this competition was in 2011, with the final held at the BOI (Board of Investment) Fair in Thailand in 2012.

The objectives of RECO are to Reduce, Reuse and Recycle waste to make Ecologically friendly products. This means that we aim to make people aware of how what others think of as waste can actually used beneficially as fashion and furniture. We also wanted to help kick-start careers for young people who are about to enter, or recently entered, the design world by giving them an awareness of alternative materials.

The focus is on Fashion and Accessories Designs and Furniture Design. Contestants are 17 to 30 years old and may be students or graduates of high school, universities or colleges where they studied design, or freelance designers. Contestants must not be currently working in the fashion, textiles or furniture business and their designs must never have been entered in other competitions before. We stipulate that 60% of the raw materials used in the design must come from re-used or recycled PET or polyester fiber but any re-used material in addition is encouraged.

The judges look for creativity, originality and nonconformist designs, produced largely from recycled or reused PET or polyester. Judges also look at the beauty of the production and verify that it is distinctive and unique.

Success of First RECO Competition

Last year’s fashion design winner was Ms. Priyabodee Sriamsing, who has a Bachelor degree from the Faculty of Architecture, Rangsit University. She now works as a freelance architect and plans to launch her own fashion brand. Following the competition, she was interviewed by Seventeen Magazine.
The Winner of the Furniture Design competition 2012 was Ms. Preeyachat Choomsai Na Ayutthaya, who has a Bachelor degree from the Faculty of Commerce and Accountancy, Thammasart University plus a Master degree from the Faculty of Information System from Assumption University and a Diploma in Interior & Product Design from CIDI, a local design institute. She is now working for an Interior design company. She was given an interview in Home & Decor Magazine.

Ms. Priyabodee happiness moment. Ms. Priyabodee was given an interview by Seventeen Magazine

RECO in 2012

This year’s competition commenced with a Press Conference attended by Mrs. Suchitra Lohia at the Digital Gateway store in Bangkok’s young and trendy shopping center, Siam Square on 26 October, 2012, which was when we started to accept applications. Digital Gateway was also our venue partner and provided the area in which we held the final.

We then held a special workshop at Kasetsart University on November 30, 2013 to give candidates an overview of IVL and the aims of the competition with some hands-on tips from our judges, who were all experienced in the design industry. Some local celebrities were on hand like Sunisa Jet, an actress, and Khun Moo from the well-known local high fashion house, ASAVA.

Following the workshop, our judges selected 15 fashions and 15 furniture finalists on December 17 from all that applied and sent in their drawings and ideas. The next day we announced the first round results of the final 15 fashion and 15 furniture competitors and on December 17 got them in with the judges who gave an expert consultation session so that the young competitors could improve their designs.
On March 1, 2013, the fashion competitors came to IVL Head office to do a fitting of their designs on the fashion models and get the last consultation from the judges.

RECO Final Round

On March 9, 2013, the Company held the final round of our RECO fashion and furniture competition at Digital Gateway, a part of Siam Square in the heart of Bangkok. The contenders for the furniture and accessories award were displayed at the entrance of the department store from 10 a.m. that morning and acted as a magnet for young people to take a closer look and discover that all were made from recycled PET.

A catwalk was built running the length of the ground floor and overlooked by balconies to dizzying heights. We had arranged for dancers and loud music to herald the start of the show and our bilingual mistress of ceremonies welcomed everyone in Thai and English. People passing by stopped to see what was going on.

We were extremely proud that the fashion show part of the final was keenly attended by VIP guests such as H.E. Mr. Joan A. Boer The Netherlands’s Ambassador, Dr. Atchaka Sibunruang, Deputy Permanent Secretary, Ministry of Industry Ms. Prae Kavitanon from Seventeen Magazine and Mr. Tunchalong Rungvitoo from the Chanapatana International Design Institute (CIDI). All the judges were there to see the final turn as a series of Thai supermodels paraded the 15 final entries. The enthusiasm of the audience was amazing as the designs made from reused polyester and recycled plastic would not have looked out of place on a Paris catwalk.

The winner of the Furniture Section was Ms. Nattamarn Thanertnid for her recycled PET stools called: “Let’s Make a Seat” and the winner of Fashion Section was Mr. Adirek Kamnoi “Weave in White”. Next issue: Interview with the winners.
ET is used in a wide range of applications. While it is still a small segment of IVL’s business, as a niche it adds value to the bottom line. Among the advantages of PET film is the wide range of thicknesses available and that it is chemical and solvent resistant. For design purposes, its light transmission properties are very broad and can produce packaging that is optically clear to opaque. Its surface is also treatable for adhesion to a variety of materials and it is also resistant to tearing. Rather than focus on the staple products PET is renowned for, let’s look at some of the more niche applications.

Polyester film can be produced in a wide range of thickness (from one to several hundred microns) and visible light transmission from essentially 0% to 99+. Polyester film’s ability to be customized through both polymer and surface modification to fit the specific application adds to its versatility and value as a film of choice. Today, there are many industrial and specialty uses for PET such as adhesive tapes, plastic cards (including “smart” cards), labels, lamination films, brightness enhancement films (for computer screens), solar/safety window films, medical test strips, and so on. One segment here are performance polymers, used for highly specialized uses in the transportation, automotive, electronics, appliances, industrial and consumer markets. Mechanical, thermal, electrical, and other physical properties determine which polymer will be selected, though performance polymer applications emphasize the performance more than cost.

The fastest rising demand for PET films is in automotive electronics. Such engineering polymers are used to manufacture a broad range of components, including parts such as windscreen wiper holders and exterior mirror housings. Engineering polymers can allow manufacturers to include the latest technological advances at minimal weight penalties, like ground insulation, as slot liners and wedges, as well as phase insulation. The high electrical breakdown voltage, coupled with polyester film’s high durability, makes it perfect for mechanical barriers in wire and cable applications. In transformer and high-voltage distribution equipment applications, polyester film is used to wrap the conductors. Polyester film is also effective in hermetic applications, such as refrigerator and air conditioner motors or compressors. Thin polyester films, two microns and below, are an integral component of capacitors.

There are so many niche applications of PET or Polyester film that people are generally unaware of, that it is a subject we will return to later.
Mr. & Mrs. Lohia with Indorama Petrochem management welcome H.E. Mr. Mark Kent, British Ambassador to Thailand, who was given a plant tour at Indorama Petrochem Rayong.

In the presence of H.E. Prime Minister Yingluck Shinawatra (center), Yashovardhan Lohia, (left) representing Indorama Ventures Pcl., contributes 350,000 Baht to the reconstruction of Ban Kluay School, Lopburi, which was destroyed by fire on January 22, 2013. Receiving the check from Mr. Lohia is Mr. Nirmal Ghosh of the Foreign Correspondent’s Club of Thailand, which arranges for the Prime Minister to speak with foreign journalists based in Thailand every year.

Smt. Monika Kapil Mohta (top, 3rd from left) and H.E. Mr. Bansarn Bunnag, Ambassador Extraordinary and Plenipotentiary of Thailand (below) joined Global PET Conference’s Gala Dinner in Warsaw, Poland, on September 5, 2012.

AlphaPet received the Quality System Evaluation Certificate from AIB, which is a hallmark in Food Safety and Quality system evaluation. It is only the third company in the USA to get this coveted certificate and the only one in the PET resin industry.

Mr. Aloke Lohia was nominated for the CNBC’s 11th Asia Business Leaders Awards (ABLA) on November 16, 2012.

Mr. Aloke Lohia spoke to retail investors at Bualuang Securities trade room on December 7, 2012.

Mr. Chanitr Charnchainarong, Senior Vice President of the Stock Exchange of Thailand paid a courtesy call on Mr. Lohia to congratulate him on Indorama Ventures being added to the SET High Dividend Index (SETHD) on 13 December 2012.

IVL organized a presentation on November 20, 2012 to announce a new debenture issuance.

Global PET Conference at Warsaw, Poland, on September 4-6, 2012.

IVL Board of Directors and Thai media visited IVL Wloclawek Plant in Poland on September 7, 2012.
Wellman International Ltd. (Ireland) won the Irish Sustainable Exporter of the Year 2012.

The IVL Oxide & Glycols team from the U.S visited IVL Head Office on November 27, 2012.

The DEG Bank team visited Mr. Aloke Lohia at IVL Head Office on 11 January 2013.

AsiaPet (Thailand) and Indorama Holdings Ltd. received Honor Certificates acknowledging compliance with legal requirements for employing and improving the Quality of Life of the Disabled from Lopburi Governor Pichet Piboonsiri.

Subsidiaries of Indorama Ventures - Indorama Polyester Industrial Nakhon Pathom, Asia Pet, Petform, Indorama Polymers, Indorama Petrochem and TPT Petrochemicals - received the CSR-DIW Continuous Award on December 19, 2012 at Muang Thong Thani, Bangkok.

Aurus Speciality received the Outstanding Enterprise Award on Safety, Occupational Health and Environment at the Provincial Level from Chalothorn Phakoad, Saraburi Deputy Governor, on December 20 2012.

Indorama Polyester Industries (Nakhon Pathom) received the Green Industry Level 4 (Green Culture) Award from the Ministry of Industry.

Dr. Nop Siwasilchai represented Indorama Petrochem to received the “Environmental Governance Award (Green Star Award)” from Khun Peravatana Rungraungsri, Deputy Governor (Industrial Port) representing the Governor of the Industrial Estates Authority of Thailand. This was the second consecutive year that the company has won.

Orion Global Pet was recognized as the Best Chemical Company in Lithuania for 2012 by the Lithuanian Industrialists Confederation.

Richard Jones, representing IVL, visited the Bangkok Post, Post Today and Thansettakij newspapers to wish them a Happy New Year 2013.
AlphaPet Receives Prestigious AIB Certificate

The team at AlphaPet was justifiably proud to receive notice they had gained a much awaited Quality System Evaluation Certificate of Achievement from AIB International in September 2012. AIB provides Food Safety Inspections, Audits, and Certifications, Food Safety Education, and Research & Technical Services to companies and certifications under the Global Food Safety Initiative.

The AIB Quality Standards Evaluation (QSE) looks at the roles of quality policies and management; document control; food safety, personnel practices and housekeeping; product security; HR development and training; equipment calibration; raw material management and supplier selection; process controls and verification; finished product quality, storage and shipping.

These standards as a whole describe the requirements for a superior food and safety program and are used by world-class companies as a measure of their business. Some compare the AIB QSE as the best of ISO9001:2008 (Quality Management System) and ISO FS2200 FSSC (Food Safety). Suffice to say, AlphaPet has now become only the fourth company in the United States to receive this coveted certificate and is the only business in the PET industry to receive one. With this certification, the company will be able to assure customers in the food and beverage industry of its commitment to safety and quality.

At least one customer requested Alphapet to get a high score before supplying them with PET. Companies who receive this award have certainly received a score of 90% or above and with no score in the critically deficient categories.

AIB audits are backed by more than 60 years of experience in the field for food manufacturing, beverages, ingredients and packaging. AIB conducts audits in more than 120 countries ranging from multinationals to small, independent producers.

Art Imagine

Dear Readers,

It’s nice to see you all again for the creative activity “Art Imagine”. Though the weather has been changing all the time the working team of Art Imagine has never stopped. We’re together with all the children here as usual. The Beacon has continued to keep this space for children’s art work and imagination.

This time we had arranged a painting activity at Ban Map Tha Phut School, Rayong. The topic is Youth of Thailand; Far from Drugs. The children actively joined this activity. They spend a lot of effort expressing their ideas through painting: how they realized the dangers of harmful drugs! They know how to avoid drugs through exercise, reading, playing music and painting. Let’s see what the children would like to be.

Thank you Mr. Thirat Suphaphorn, Ban Map Tha Phut School Director and all teachers who supported us.

Contact: Ban Map Ta-Phut School 152 Sukhumvit Road Tum bon Map Ta-Phut, Aurnphur Muang, Rayong 21150 Tel: 038-681-557, Fax: 038-691-989
Trevira Heimtextil arranged a press conference on November 30, 2012 at the Hilton Hotel in The Square, Frankfurt Airport. The room interior was decorated with Trevira CS materials.

FiberVisions’ Athens plant held a fundraiser for the United Way in October. There was an employee barbeque cookout and over $2,000 was raised for the charity.

Richard Jones, IVL, helped clean Mae Ram Phueng beach with volunteers for the Adopt a Beach Project on November 24, 2012. 1.9 tons of garbage was collected.

Ashok Upadhya joined the Plastic Night Gala Dinner 2012 hosted by the federation of Thai industries.

IVL Head office took Thai Analysts to IVL’s Lopburi plant on December 11, 2012.

IVL and FiberVisions met in October and December with JNC, our partner in ES FiberVisions, to advance bicomponent fiber expansion plans in Asia.

Auriga Polymers Operations personnel visited FiberVisions’ Covington and Athens, Georgia, plants to share and exchange ideas on improving plant operations.

Successful test of the new reheat resin, RAMAPET R182C, from IVL Workington at Coca Cola Hellenic.

Ashok Upadhya joined the Plastic Night Gala Dinner 2012 hosted by the federation of Thai industries.

Derek McDonnell, representing Wellman International at the National Skills Competition in Dublin, won the 2nd runner-up prize.

IVL Indonesia was audited by SGS Indonesia regarding The Supplier Ethical Data Exchange (SEDEX), on January 7-8, 2013.

O.P. Mishra visited the Mayor of Wloclaweck city, Poland, on Christmas Eve to express gratitude for his support and cooperation.

The Department of Intellectual Property, Lopburi, visited IVL Lopburi for an evaluation of social responsibilities and to study the IVL Solar Power Plant on January 24, 2013.

Indorama Holdings cooperated with Ta Klong Police Station in the White Factory Project, an anti-drug campaign at the workplace, at our Lopburi plant on January 28, 2013.

Anand Agrawal, CFO of Indorama Ventures Mexico, Mr. Chirachai Punkrasin, Ambassador of Thailand in Mexico, and his wife celebrated the 85th Birthday Anniversary of H.M. King Bhumibol Adulyadej on December 3, 2012.
IVL Lopburi donated 7,000 Baht to the event commemorating H.M. King Narai the Great at Lopburi on February 14–22, 2013. IVL Lopburi staff also supported this event by wearing traditional Thai costume throughout February 2013.

FiberVisions Denmark received the 2012 FOX (FiberVisions Operational Excellence) site award at FiberVisions FOX Conference in Athens, Georgia on December 6, 2012.

PT Indorama Ventures Indonesia donated IDR 1,000,000 to orphanages and poor elderly people in Cihuni area on November 25, 2012 on the occasion of Islamic New Year’s Day.

The chemistry students from Maryport’s Nethrelands School visited Indorama Polymers Workington Limited in UK.

Employees from the Querétaro Complex held a celebration in honor of the Guadalupe Virgin, a tradition to share the values of the company. As part of the festivity, there was a group of dancers, cultural activities, health promotion and craft classes.

Indorama Petrochem Limited provided toys to Wat Prachummirt School on the occasion of Children’s Day.

Aurus Specialty Co., Ltd. arranged a Pooja ceremony at the running R.O. Plant on Wednesday January 16, 2012 at the Biogas Plant.

Funds are provided to teach how to weave plastic baskets from plastic to supplement income for local women’s groups and create good relations with the community.

Ms. Lanid Kerdthong representative from Indorama Polyester Industrial (Rayong) participates in the contest “Miss Rayong Factory” and won the Miss Congeniality prize.

Customer Service Desk colleagues at Tervira in Hattersheim pose with a Trevira CS fabric submitted by a customer for trademark testing.

Volunteers from AlphaPet worked with Habitat for Humanity to paint one house and put vinyl siding on two other houses in a neighborhood southeast of Decatur.

Mr. Richard Jones, Head of Investor Relations and Corporate Communications, and the Indorama Petrochem Rayong team welcomed representatives from the Securities and Exchange Commission Thailand and the Stock Exchange of Thailand who visited the factory and went on a plant tour.
E. Paramasivam representing Aurus Speciality handed over a reverse osmosis drinking water system plant to Prasert Siriwat, Chief Executive of FiberVisions. Recent global Lean Six Sigma Conference held at our Athens, Georgia plant. Participants discussed projects undertaken in 2012, shared learning, and developed plans for 2013.

IVL Mexico Management granted Seniority Awards to 76 employees to commend their responsibility, loyalty and effort to achieve the company goals.

FiberVisions Received Seniority Awards to 76 employees to commend their responsibility, loyalty and effort to achieve the company goals.

PTIVI Indonesia - Jamsostek’s Scholarship Program provides student scholarships. Awards were given as Indonesian Rupiah 2.400.000/ person per year for high school and university level, IDR 1.800.000/ person/ year for elementary - junior high school level.

New Year Party at Aurus Speciality Co., Ltd.

New Year Party at IVL Lopburi on December 28, 2012.

New Year Party at Orion Global Pet

New Year Party at IVL Oxide & Glycols celebrated Dewali Festival at S.N. Mohta’s house.

New Year party at IVL Poland

IVL Oxide & Glycols celebrated Dewali Festival at S.N. Mohta’s house.

New Year party at IVL Poland
After discussing the logo as a symbol of the brand, we might wonder what exactly is the benefit expected by all this laborious branding process? Can seeing a logo make someone run out and buy our products? No, of course not; but if they have a choice of purchasing one of two brands, we would like the emotions attached to our brand to make them choose us over someone else.

Many of you may say we sell a commodity. We don’t need to promote a brand because our sales people deal directly with customers. We’ll get sales with or without spending on branding. If you say this, then you are already promoting the brand in a way. How a sales person communicates, his/her body language, how they sound (enthusiastic? bored?) is the branding process from the buyer’s view. What this means for a salesperson and a company at the end of the day is that people will buy if they feel a sense of honesty, sincerity, and confidence from the salesperson. This is the emotional attachment to the brand represented by the sales person.

In this case, why spend money on “branding” instead of just training the sales person to be more enthusiastic and passionate? This is the most important point to understand: if you do not spend time building the brand the salesperson has nothing to feel passionate about. You cannot just hire a person and order passion with a payslip. Time spent brand building creates passion first with the employees (as they learn what a great company this is) and secondly with the customers who deal with these passionate sales people you have created.

How can we expect to see the results of this money spent on branding?

If the churn of customers declines; if suddenly someone you never heard of calls the sales team to find out more about your products; if a current customer introduces a potential new customer to you; if a supplier is willing to go the extra mile to serve you better; if people at industry fairs and conferences approach you and introduce themselves because they have “heard of Indorama Ventures” then that maybe an indication. Normally, global companies will survey customers and suppliers to establish whether the branding is working positively or not, but that is a very specialized field so we won’t get into it here.

We expect branding to bring in sales, but it is also meant to stop the loss of sales. It is meant to create enthusiasm for a company that wouldn’t otherwise stand out from the crowd of players in the market.

Although Indorama Ventures does not sell any products directly to consumers, we are a listed company that sometimes raises money in the bond market. Branding makes us well-known. It is supposed to make bondholders want to hold our bonds; it makes shareholders want to hold our stock. It is meant to make the ordinary investor feel that this is a company they can trust.

We acquire businesses all over the world. Branding is supposed to make the employees whose businesses we acquire feel passionate that they are about to belong to a great company. Branding attracts capable employees because they want to feel part of the brand.

If all of the above has created some interest in branding, the next question will be one you already know the answer to. Who creates the branding?

Of course, the answer is everyone and not just Indorama Ventures and its subsidiaries. Customers and suppliers build our brand when they tell others what a great customer or supplier we are, or ask us for our opinion on something because they respect our opinion. Everything builds brand — you just have to want it to happen and invest real passion and emotion into it.
Do you Know VOCs?

You’ve probably heard of or seen this word “VOCs.” Someone may know but some may not be sure what it is. Some may be confused. I wonder what exactly VOCs effect on the environment is. I would like to offer some clarity to thoroughly understand this.

The definition of Volatile Organic Compounds (VOCs) refers to a group of organic compounds that evaporate easily. Dispersed into the air at normal temperatures and pressure, the main components of the material are atoms of carbon, hydrogen, and other elements like oxygen, fluoride, chloride, bromide, sulfur and nitrogen.

Volatile Organic Compounds in the atmosphere are toxic when we breathe them on a daily basis. VOCs come from multiple products such as paints, smoke, liquid bleach, solvents in printing, Industrial cleaning liquids and detergents for curling hair, hair dye and pesticides. Substances released by burning provide contamination in the air and water, in food and beverages.

VOCs form two groups according to the nature of the molecules.

1. Non-chlorinated VOCs or non-halogenated hydrocarbons as volatile chlorinated hydrocarbons. VOCs are a group of substances from the environment. Burning garbage, plastic materials, solvents, paints, etc., have a material adverse effect on health. It is often observed that fireman, coal miners and incinerator workers often suffer from respiratory diseases because there are approximately 144 types of VOCs released from smoke and fuel.

2. Chlorinated VOCs or halogenated hydrocarbons as volatile hydrocarbons with elemental chlorine in the molecule. Synthetic chemicals used in the chemical industry provide chlorinated VOCs. This is more toxic and stable in the environment than the first material, (non-chlorinated VOCs) because the bonds between carbon and a halogen element groups are very durable. They are difficult to decompose via natural biological, physical or chemical methods. Stability and deposition time is significant. Biodegradation can be difficult to interfere with or inhibit DNA reactions or biochemistry in cells. It is also a potent carcinogen, that is, it stimulates cancer.

Effects of volatile organic compounds that is healthy

VOCs substances can enter the body in three ways: 1. breathing. 2. eating and drinking. 3 skin contact. VOCs entering into the body will pass through the liver. They contain enzymes and metabolic pathways. Toxins are metabolic changes in the liver at an early stage via the enzyme system. The type of enzyme will vary depending on the type of material that up the VOCs. The final form is acid excretion through urine as a Tri-chloro-ethylene compound. When excreted it is Tri-chloro acetic acid.

The impact of volatile organic compounds (VOCs) on the environment. VOCs affect the environment. They affect the ozone layer high in the atmosphere protecting against ultraviolet light. But VOCs affect the ozone layer high in the atmosphere. Near the Earth the ozone will be harmful to humans. The symptoms are sore throat, respiratory discomfort, eye cornea irritation, chest, nose, throat irritation, coughs and headache. In addition, the ozone is also damages buildings.

Effects of volatile organic compounds that is healthy

VOCs substances can enter the body in three ways: 1. breathing. 2. eating and drinking. 3 skin contact. VOCs entering into the body will pass through the liver. They contain enzymes and metabolic pathways. Toxins are metabolic changes in the liver at an early stage via the enzyme system. The type of enzyme will vary depending on the type of material that up the VOCs. The final form is acid excretion through urine as a Tri-chloro-ethylene compound. When excreted it is Tri-chloro acetic acid.
This issue we will use only three reused bottles but get two new items. Let’s take a look!

**Green Corner**

**Pet bottle coin purse**

**Step 1**
Cut the bottom part of the bottle off. It looks like a small cup.

**Step 2**
Sew the zipper along the edge of the bottle bottom.

**Step 3**
Sew the other one so the edges connect together.

**Step 4**
And here is your trendy bottle coin purse.

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**Pet bottle pencil sharpener**

**What you need**
- A pair of scissors
- Two old PET bottles
- A sewing needle
- Some string
- A zipper

**Step 1**
Cut to make a hole in the middle of closure.

**Step 2**
Put the sharpener inside closure and glue the sharpener to the closure.

**Step 3**
Screw the closure with sharpener back onto the bottle.

**Step 4**
So cool! The PET bottle pencil sharpener is outstanding.

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**What you need**
- Old PET bottle with closure
- Sharpener
- Cutter
- Glue
In 2011, the Company acquired a PET plant in Kaiping City, Guangdong Province, on the mouth of the Pearl River, on the South China Sea coast of the People’s Republic of China. This is an important province and has surpassed Henan and Sichuan to become the most populous province in China in January 2005, registering 79 million permanent residents and 31 million migrants who lived in the province for at least six months of the year.

Guangdong’s GDP in 2011 reached CNY 5,267 billion, or USD 815.53 billion, making its economy roughly the same size as the Netherlands and well over half of India’s. The name Guangdong is made of two parts, “Guang” meaning “expanse” or “vast”, and has been associated with the region since the creation of Guang Prefecture in AD 226.

Chinese administration in the region began with the Qin Dynasty (which constructed the Great Wall of China). Being a trading port, many nationalities were said to visit there. From the tenth to twelfth century, Persian women were to be found in the provincial capital Guangzhou (known to Westerners as Canton).

Guangdong was also the major port of exit for laborers to Southeast Asia and the West in the 19th century. Much of North American infrastructure, like railways, were constructed by Chinese labor from this province and so many overseas Chinese communities have their origins in Guangdong. It is said that there are more Kaipingnese people living abroad today than there are Kaipingnese in Kaiping. The Cantonese language therefore has proportionately more speakers among overseas Chinese people than other mainland Chinese.

One of the key things to see on a visit are the Kaiping Diaolou, fortified multi-storey towers which were constructed in the Kaiping area from the early Qing Dynasty, reaching a peak in the 1920s and 1930s, when there were more than three thousand of these structures. Today, approximately 1,800 diaolu are still standing. The diaolou served two purposes: housing and protection against bandits. The Kaiping diaolou and surrounding villages were added to the list of UNESCO World Heritage Sites in 2007.

Another of the major towns in Guangdong is Huizhou, also called Goose Town, as there is a legend that the hill to the south of the city was formed by a flying goose ridden by a celestial being.

Among the famous sons of Guangdong is Kwan Tak-hing, MBE (27 June 1905 - 28 June 1996). He was a Hong Kong actor who played the role of martial artist folk hero Wong Fei-hung in at least 77 films, between the 1940s and the 1980s. No-one else in cinema history has portrayed the same person as many times. In total he made over 130 films.
Both local and foreign media have highlighted the amount of waste on the beaches of Rayong on the Eastern Seaboard, an area that, besides being home to the country’s largest petrochemical industrial estate, is a part of the nation’s important tourism industry. With three factories in Rayong, our management’s concern was the possible economic impact this issue could have on our locale’s environment and tourism, so a project was devised to “Adopt a Beach.” Realizing that while we could not have much of an impact on the nation’s beaches in general, we could take some responsibility for one local beach and make it our own, Mae Rampheung beach was chosen as it is a favorite with local and foreign visitors alike.

We thought that by setting an example, we could instill in employees, local schoolchildren and local people that by keeping this beach clean, we could help the nation to remain proud of its wonderful coastline.

Mae Rampheung beach is an eight kilometer stretch of beach that is part of Ban Pae Municipality. From the famous island of Koh Samed to the East, to the tourist hub of Pattaya in the West, this area is a Mecca for tourists, especially at weekends. When we started the project on July 28, 2012, we invited Ban Pae’s Mayor Mr. Pairat Arunvessasetta and representatives of the National Parks Department to join us. Under Thai law, Thai beaches actually fall under the jurisdiction of the National Parks Department of the Ministry of the Interior, while from the beach inland the local municipality is responsible.

We interviewed Mayor Pairat to learn why the beach was so full of trash. He believes that many of the more obvious flotsam and jetsam consists of plastic bags found embedded along the waterline. These are empty fertilizer bags that were thrown into rivers further inland and had washed out to sea and been brought back to the beach by the tide. The smaller items were discarded by visitors to the beach and seemed to consist of the usual remnants of a day out: juice boxes, straws and HDPE bottle tops. Our research shows that most of the world’s waste is paper or cardboard and plastic is still a relatively small portion of the total.

We asked Mayor Pairat why we hardly found any plastic bottles among this detritus and he noted that there were people who came early in the morning to collect the plastic bottles as they had an economic value to local recyclers.

The Mayor and his colleagues were very pleased that IVL has committed to visiting the beach on a regular basis because they clearly understand the importance of the beach to the community’s economic prosperity.

The three factories that are supporting the adoption of Mae Rampheung beach are Indorama Petrochem, TPT Petrochemicals and Indorama Polyester Industries, who rotate as hosts of our visits to clean up the beach. Such was the enthusiasm for this worthwhile project that we have no shortage of staff and their families offering to remove the trash! We divide them into 12 teams, who each take care of about 200 meters of beach area. We usually invite a local school to come along and try to explain to the children that not dropping litter would be even better than having to pick it up!

After each session, garbage is bagged and weighed. While it is being weighed, our staff entertains the children with simple (but very fun) games. We have prizes for the team that collects the most garbage and two runners-up.

This first time we helped clean the beach, Indorama Polyester Industries was the host on 28 July, 2012 and we were joined by students from Rayong Wittaya School and their parents. We collected 1.7 tonnes of trash.

The second time, in November 2012 TPT Petrochemicals hosted the event and we collected 1.9 tonnes. This time Rayong Wittaya School students and their parents were joined by other volunteer students and a couple of foreigner tourists. The most recent event was held on 23 March, 2013 with Indorama Petrochem as the host and the total garbage collected was an astounding 4.3 tonnes.

We decided to interview some Swedish tourists who were on the beach and asked what they thought of the project. They were all extremely enthusiastic and pointed out that they were permanent residents with a home in Rayong who invited friends to visit every year. However, after seeing the state of the beach, no one ever asked to come back a second time. They were grateful that a company had decided to be proactive in maintaining the beach, which they saw as very important for the local community.

Today, our project has collected a total of 6.2 tonnes of litter from Mae Rampheung beach and we always celebrate with a lovely seafood lunch at a local restaurant.
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