

## *CREATING DIVERSIFIED VALUES*

<b>2.1 Innovation Prowess</b>	<b>36</b>
<b>2.2 Innovative Products</b>	<b>38</b>
<b>2.3 Customer Relationship Management</b>	<b>44</b>
<b>2.4 Supplier Management</b>	<b>44</b>

# CREATING DIVERSIFIED VALUES

## 2.1 Innovation Prowess

### 2.1.1 Far Eastern Group R&D Center

FENC is the leader of Taiwan's PET polyester and textile industry with an ambition to become a world-leading enterprise. In addition to improving and expanding our businesses, the Company has invested heavily in research, development and innovation to increase our competitiveness.

In 2001, we established Far Eastern Group R&D Center to pursue breakthroughs and innovations. The center mobilizes the manpower and resources of the Group to accelerate the development of new high value-added products, strengthen our competitive advantage and create new corporate values, thereby transforming FENC into a high-tech polyester fiber and textile enterprise. (Please proceed to Chapter 2.2 for more details about our innovative products.)

#### ► R&D Teams



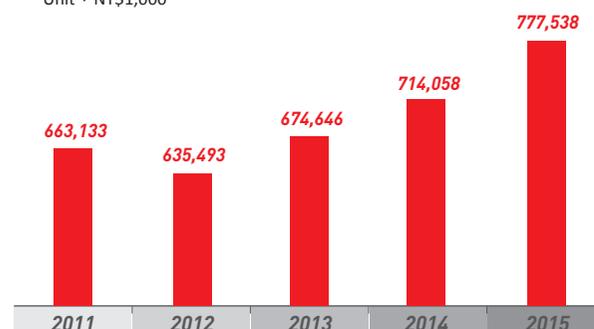
The Center consists of 4 Research Divisions and 10 Development Sections and houses 217 R&D experts. For the short term, we will focus on polyester fibers, environmental protection, energy conservation and carbon reduction. By building upon the PET technologies that we have developed over the years, we will strive to develop PET-based green materials, highly functional materials as well as smart textiles, and continue to extend the application of PET to the high value-added industry. For the mid- and long-terms, we will mobilize our research resources and leverage our core strength to focus our efforts on green energy, biomass and the high-end fiber industry. We will develop green PET materials, energy-saving manufacturing process and new materials and identify the most promising industries in the future in the hope of running our businesses sustainably.

The primary purpose of the Center is to increase the competitiveness of our core products, support our businesses by adding more value to products, lower the cost of production and develop new materials and technologies for strategic purposes, so as to secure a competitive position for the long term and ensure our corporate sustainability. To strengthen our competitiveness, the Company has been collaborating with leading research teams, forming strategic alliances with outstanding suppliers and manufactures and developing strategic products with major brands. We have also applied for patents for our products and technologies and made sure our intellectual property rights are protected.

In the Center, the Innovation Marketing & Partnerships Office has integrated FENC's niche and innovative products from upstream to downstream and established the FE-X platform to provide total solutions and various forms of strategic partnerships for brand owners to consider. The Office is very active in participating in international conferences, exhibitions and competitions to raise the profile of our products.

## ► Funds for R&D and Innovation

Unit : NT\$1,000



## ► Results of R&D and Innovation

2001 (Inception of the Center) - 2015	
No. of Patent Applications	359
No. of Approved Applications	194

## Training for the R&D Teams

In order to familiarize the R&D teams with global trends, the Center has invited celebrated experts to provide training or discussion on various topics including functional textiles, specialty chemicals, medical equipment and nanotechnologies. We have also encouraged our staff to attend seminars at home and abroad. Our training sessions and conferences have focused not only on technologies, but on sustainability related topics such as the latest trends in the industry and applicable laws and regulations, so as to help the R&D teams to incorporate the concept of sustainability into their work.

## Sustainability-related Training and Conferences

- Water Resources Treatment Technologies Conference
- Biomaterials International 2015
- 2015 Taiwan C2C Strategic Alliance Members' Meeting
- REACH and RoHS2 Seminar
- Corporate Water Footprint Inventory Conference
- New Era Green Chemical Industry Forum
- Biomaterial Development and Technologies Conference
- 2016 Industrial Development Trends Conference – New Opportunities for Green Energy and Environmental Industry
- 2015 Annual Meeting and Industrial Seminar of the Association of Bio-based Material Industry

## ► The Center's Training Sessions and Turnout

Type of Training	2013		2014		2015	
	No. of Sessions	No. of Participants	No. of Sessions	No. of Participants	No. of Sessions	No. of Participants
Internal Training	11	385	4	115	17	543
External Training	48	89	47	74	77	169

In 2014, we restructured the Center by hiring more talent and established new divisions. In 2015, many internal training sessions were organized to upgrade the skills of our R&D teams. Our staff were also very active in taking part of external training, with higher attendance figures and more training hours from the year before.

## 2.1.2 Collaborative Innovation

In the past, OEMs generally developed new products based on a brand owner's requirements. Today, FENC is proactive in introducing our new materials and technologies to our brand customers and forming strategic alliances with them. The Company can help them to develop epoch-making products using new materials, thereby playing a decisive role in their product designs. A number of world-famous beverage and sports brands have selected our new fibers and materials for their innovative products. Our staff always takes the initiative to engage our customers to carve out a competitive and profitable niche for the Company.

In order to be more competitive, the Center not only focuses on the research of polyester fibers and textiles, but invests heavily in developing new materials, energy and biotech. We are driven to apply cutting-edge technologies to develop high value added products, which can both meet the market demand and create more business opportunities. Our partners are not only limited to downstream and brand customers. A number of academic institutes and some companies' research units in Taiwan have commissioned us to conduct research for them or collaborated with us in various development projects.

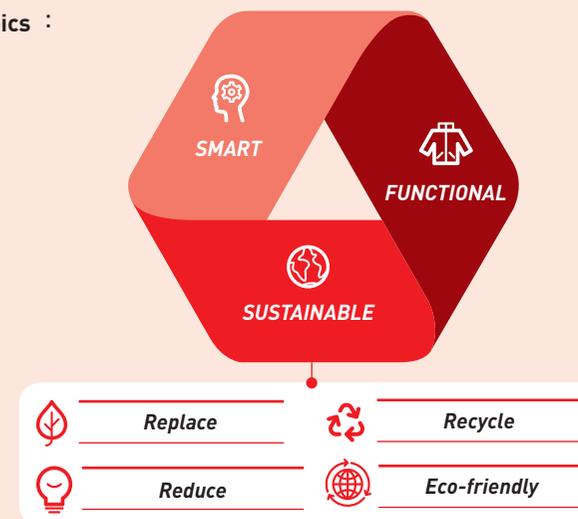
► Our Strategic Partners and Key Projects

Partner	Project
Yuanpei University of Medical Technology	Animal model study of injectable bone graft substitutes
National Taiwan University of Science and Technology	Saturation solubility, co-solvent effect and miniaturization of functional finishing agent under scCO <sub>2</sub>
National Cheng Kung University	Multifunction physiological signal algorithm design
Chang Gung University	Animal model study of collagen bone graft substitute
Yuan Ze University	EL-Panel for furnishing design
Yuan Ze University	2015 TITAS Smart Textile Interactive Section Design
Teh-Tzer Study Group for Human Medical Research Foundation	Clinical study of SavDerm® wound dressing and SavDerm® antimicrobial wound dressing for chronic wound
Taiwan Textile Research Institute	Melt blown nonwoven fabric Evaluation of fiber extrudability
Industrial Technology Research Institute	Chemical conversion technology of HMF to its derivatives
Columbia	Light UTMB clothing
Kangdexin Composite Material Group	Naked Eye 3D Printable PET Sheet
Coca-Cola, Virent	100% Bio-PET

## 2.2 Innovative Products

FENC boasts cross-disciplinary R&D teams and highly vertically integrated value chains. With our R&D and manufacturing capabilities, we have been able to be a major supplier to various global brands. At FENC, social sustainability is essential to our product development. The Company has strived to innovate products to meet the United Nations' Sustainable Development Goals and to pursue innovation with our core strength. Our ultimate goal is to enable people to live a smart, green and functional life.

Three key topics :



### 2.2.1 SMART

#### FERMI™ Smart Garment

FERMI™ is the acronym of Far Eastern R&D Manmade Intelligence, which is an essential technology FENC has used to develop smart products. We have succeeded in developing the advanced conductive polymer matrix for smart fabrics. As the material contains no metal, the garment will not oxidize or discolor, while being hydrophilic, corrosion resistant and washable. FERMI™ can accurately measure physiological data and thus be useful for individual health management and sports training. In the future, we will continue to leverage this technology and the resources from FarEasTone and Far Eastern Memorial Hospital in order to break into home healthcare and telecare markets.



FENC has combined textile with information technologies by developing the advanced conductive polymer matrix for smart fabrics. DynaFeed, for example, is a smart garment solution that can accurately measure heart rate and motion data and provide comprehensive smart fitness information, which can be used to boost an individual's training efficiency and athletic performance. This innovation was awarded the ISPO Asian Gold Winner at the globally prestigious Textrends Exhibition in Munich in 2016.

### TopLumins™ Luminescence Textile

TopLumins™, which contains luminescent materials, can fluoresce in low light or dark conditions for up to 90 minutes after absorbing ambient light to charge for 15 minutes. It is rechargeable for repeated use and suitable for nighttime activities, for leisure and for garments with protective purposes.

## 2.2.2 FUNCTIONAL

### Eagelon® Antimicrobial Filament

Eagelon® is an antibacterial fiber, made using a composite antibacterial additive formula, which has passed US FDA, European EFSA and Japanese SIAA tests for skin irritation and allergy. It can effectively stunt the growth of germs, thereby reducing odor. It is washable and can remain 99.99% antibacterial after dyeing.

### TOPDRY® Hydrophobic and Quick Dry Fibers

FENC partnered with 3M to develop a polyester filament called TOPDRY®, a durable hydrophobic yarn which does not contain PFOS, PFOA or other fluorine derivatives. The toxin-free filament is water repellent, stain resistant and quick-drying and can reduce sweat stains from clothes.

### SUNEX® Anti-static and Thermal Fibers

SUNEX is a heat-generating antistatic filament with superior antistatic function. With its patented powders, the filament's far infrared emissivity is greater than 80% and can thus generate up to 5°C of heat. This material is highly suitable for textiles used in cold and dry weather conditions.

### Multi-functional Staple Yarn

The Company uses Murata Vortex Spun yarns, which shows pilling resistance and low hairiness, to produce high-quality textiles. The fabrics are widely applied in sportswear and leisurewear because they are bright, absorbent, quick drying and not easily deformable. We can mix this type of yarn with natural and functional fibers to create a multi-fiber blend, or a multi-functional staple yarn, which feels like cotton and is thermal, moisture wicking, UV resistant, FIR emitting, antibacterial and eco-friendly. It can be used in fitness, jogging, mountain-climbing or leisure apparel.

### Nylon 66 Functional Yarn

Far Eastern Fibertech Co., Ltd. has developed Cooling Hydrophilic Nylon 6,6 fiber by increasing the hydrophilicity of the fibers to achieve a chilling effect. Cottony UV cut Nylon 66 fiber can significantly absorb or reflect light, giving the fabrics a softer luster and a feel similar to cotton.

## 2.2.3 SUSTAINABLE

With an increasing number of global brands advocating environmental protection, the Company has begun to pool resources to develop forward-looking green products, offer various green solutions and create new corporate values in an effort to run our businesses sustainably and play a key role in promoting sustainable development.

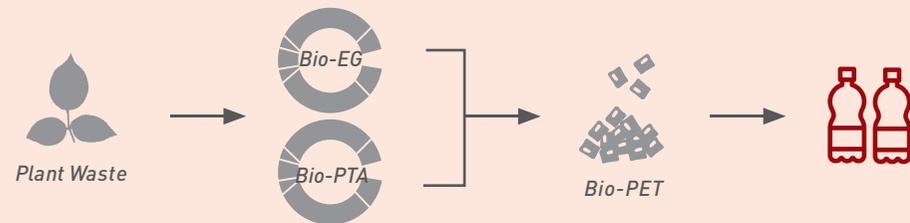


 **Replace**

**100% Bio-PET**

Polyester is composed of PTA, or Terephthalic Acid, (70%) and MEG, or Monoethylene Glycol (30%). After years of research and development, our Bio-MEG technologies have advanced greatly to a profit-making level. FENC has been one of the few leading suppliers of 30% Bio-PET in the world. Now, we have overcome the last mile challenge of the remaining 70% and succeeded in developing 100% Bio-PET.

The Company has endeavored to reduce our reliance on petrochemicals by using polyester synthesis technologies that we have built over the past 30 years. We partnered with Coca-Cola to develop the world's first 100% Bio-PET bottles. In the future, our bottles can be made completely from plant sources.



 **Recycle**

**Pro-green® Food-Grade rPET Resins**

In order to reduce our reliance on petrochemical materials, FENC has utilized high-tech recycling and high-heat melting technologies to turn waste bottles into Pro-green® food-grade rPET resins, the cleanness of which has been accredited by the Food and Drug Administration of the United States and passed the SGS migration test. Our resins have been widely used by many global beverage brands such as Coca-Cola, Pepsi and Danone. In addition, we can halve carbon emissions by producing the Pro-green® food-grade rPET resins instead of the resins produced by using petrochemical materials.

After going through the blow molding process, the food-grade rPET resins become new clean bottles. Without adding any more new materials, using rPET resins not only reduces environmental impact, but helps us achieve Bottle-to-Bottle recycling.



**The World's First 100% Bio-PET Bottles Made Their First Appearance at Expo Milan 2015.**



In order to fulfill its social responsibilities and promote sustainable development, Coca-Cola picked FENC as a partner out of nearly a thousand suppliers to innovate new materials for bottles. In 2013, we succeeded in creating the first batch of Bio-PET bottles in the lab and in 2014, demonstrated this innovation at American Chemical Society Green Chemistry Conference. In the same year, Coca-Cola worked with us again to develop 100% Bio-PET bottles on a larger scale and more importantly, in full compliance with beverage packaging regulations.

In 2015, which marks the 100th anniversary of the Coca-Cola contour bottle, the beverage company and FENC showcased the world's first

100% Bio-PET bottles with Coke inside at Expo Milan 2015. The bottles made one of the most important news in the field of biomass materials.



**Creating Circular Economy by Recycling**

As the largest supplier of rPET, FENC has continued to expand our production capacity to fulfill our commitment to environmental protection and help our brand customers to fulfill theirs. Every year, as high as 100,000 tons of bottles are recycled in Taiwan and there is no room for growth in terms of the materials for rPET. Therefore, the Company established a production base for rPET in Japan. In 2015, we provided a total of 80,000 tons of rPET products and planned to expand our capacity to consolidate our position as the industry leader in the world. By 2019, our capacity is expected to reach 140,000 tons. Our long-term goal is to increase the percentage of rPET to 20% of the total polyester production.

### TopGreen® Recycled Polyester Fibers

Recycled bottles are used to replace petrochemicals as materials to produce this type of polyester fiber, which can help reduce our reliance on oil and consumption of energy. More importantly, resources can be recycled and reused effectively. The material was designated by Nike for football jerseys of its sponsored national teams in 2010 and 2014 World Cups.



### FEFC® Eco Nylon 66 Recycled Yarn

FEFC® eco, or the Nylon 66 Recycled yarn, is another product that we have developed to meet the sustainability goals and achieve energy conservation and carbon reduction. In 2014, FENC began to work with recycled fibers. We used the waste yarn and waste chips generated from the spinning process as materials and put them through the recycling, melting, filtering and re-granulation process to produce nylon chips. After that, melt spinning is applied to melt the chips into long strands. The manufacturing process does not require polymerization, thereby reducing 70% of energy consumption and CO<sub>2</sub> emission.

### TopAgro™ Agro-wast Recycled PET Filament

In order to recycle and reuse materials, FENC use the TopAgro™ technology to burn rice stalks into inorganic materials and add them into the recycled fibers, which are required for making recycled bottles. The technology enables 100% reuse and recycle and has deodorizing effects.



### Reduce

#### Fast Reheat and Energy-saving PET Resins

During polymerization, FIR absorber is added to produce energy-saving resins, so during the blow molding process, the resins can absorb the FIR heat generated by the quartz sleeves, thereby increasing the efficiency of this process by 20 to 30%. These resins are one of our major products. We plan to develop transparent and colorless fast reheat and energy-saving resins for the Asian market and continue to save energy and cut carbon emissions from our supply chain with our downstream customers.

#### Lightweight Preforms

The Company has managed to significantly reduce the thickness of bottles without compromising the quality of our products by refining manufacturing process and adjusting raw materials. Not only has our consumption of materials decreased, but the weight of the preforms of various capacities has been reduced by 10% to 20%. These new preforms can help reduce the use of resources and carbon emissions during transportation.

### New Dyeable CDPET

In general, CDPET can only be dyed under high pressure and in high heat. The new CDPET that FENC has developed can be dyed under normal pressure. The temperature required is only 98°C, 22°C lower than the temperature required for developing regular CDPET, hence much less energy consumed and carbon emissions generated during the manufacturing process. In addition, dyes are easily applied and resistant to fading. We can produce two-tone fabrics by combining this material with heat-sensitive materials such as cotton, wool, rayon and nylon. It can be applied to produce leisure wear or outdoor wear.

### Airtight PET Bottles

The Company has applied Nano carbon coating technology to product 100% recyclable airtight PET bottles. The green containers can hold liquids that are sensitive to oxygen or carbon dioxide such as beer, tea, juice or carbonated drinks. The airtight PET bottles are lighter than glass bottles, thereby reducing the energy required for transportation and water required for recycling and cleaning the bottles. Our technology has overcome the challenge that the airtight PET bottles containing nylon cannot be recycled 100%, and thus created greater sustainable value for packaging containers.



### Eco-friendly

### RF-free PET Tire Cords

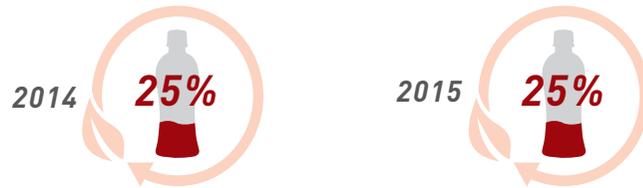
To secure cord-to-rubber adhesion, the RF dip solution is frequently used, but RF, or Resorcinol Formaldehyde, is highly toxic. As a result, the United States and European countries have adopted laws to impose more stringent limits on RF exposure. In order to protect human health and the environment, FENC has succeeded in developing the new generation of RF-free PET cords. Its performance is as high as the traditional cords and serves as the best solution for major manufacturers to achieve environmental sustainability.

### Non-toxic Catalyst PET Resins

A metal catalyst is required for PET polymerization reaction. In order to ensure our products are toxin-free, FENC has begun to use germanium and titanium as an alternative to antimony, so as to produce PET resins. In Japan, the Company is the major supplier of RET resins produced using germanium and our supply accounts for more than 30% of the market. We have also overcome bottlenecks to produce resins using titanium and begun mass production in the hope that the resins will become the next mainstream product.

## Sales and Certifications of Green Products

### ► Revenue Share of Green Products



FENC has received numerous high-standard certifications for our green products, which are listed below. The list is updated regularly to demonstrate that our certifications are up-to-date and our products have met the requirements.

Certification	Products
Global Recycled Standard, GRS Version 3.0	<ul style="list-style-type: none"> <li>100% Recycled Post-consumer Polyester Chips</li> <li>100% Recycled Post-consumer Polyester POY, FDY, DTY</li> <li>Recycled Post-consumer Polyester Staple Fiber</li> <li>Recycled Post-consumer Polyester Fabrics</li> <li>Contains Greater Than 20% Recycled Post-consumer Polyester Combed Cotton Yarn</li> </ul>
SCS (Recycled Content Certification)	<ul style="list-style-type: none"> <li>Post-consumer Recycled PET Content Sheet</li> <li>100% Post-Consumer Recycled PET Content POY, DTY</li> <li>100% Post-Consumer Recycled PET Content Chips (Will be updated in 2016)</li> </ul>
TÜV Rheinland (Recycled Material Verified)	<ul style="list-style-type: none"> <li>Contains Greater Than 90% of Pre-consumer Recycled Nylon Yarn</li> </ul>
Taiwan Green Mark	<ul style="list-style-type: none"> <li>100% Recycled Polyester Fiber</li> <li>100% Recycled Polyester Filament</li> </ul>
bluesign® Standard	<ul style="list-style-type: none"> <li>Knits for Outdoor and Sportswear</li> </ul>
BCI (Better Cotton Initiative) BCI is a not-for-profit association, aims to make global cotton production better for the people who produce it, better for the environment it grows in and better for the sector's future.	<ul style="list-style-type: none"> <li>BCI Combed Cotton Yarn</li> </ul>

Certification	Products
OEKO-TEX® Standard 100 Confidence in Textiles (Tested for Harmful Substances)	<ul style="list-style-type: none"> <li>Filament Yarn Made of 100% Polyester(POY \ DTY \ HDI)</li> <li>100% Polyester Recycled Filament Yarn (POY \ DTY)</li> <li>Nylon 66 Yarn</li> <li>Polyester Staple Fiber</li> <li>Polyolefin Staple Fiber</li> <li>Nylon/PET Bi-component Micro Fiber</li> <li>Bi-component Bonding Fiber</li> <li>PLA Fiber</li> <li>100% Tencel/Modal/Viscose Combed Yarn</li> <li>100% Polyester/Recycled Polyester Blended Yarn</li> </ul>
Organic Content Standard (OCS) Version 1.0 : Organic Content Standard 100 (100% Organic Cotton)	<ul style="list-style-type: none"> <li>100% Organic Combed Cotton Yarn</li> </ul>
Organic Content Standard (OCS) Version 1.0 : Organic Content Standard Blended (Partial Organic Cotton Content)	<ul style="list-style-type: none"> <li>Contains 5-95% Organic Combed Cotton Yarn</li> </ul>
Global Organic Textile Standard, GOTS-NL Version 4.0	<ul style="list-style-type: none"> <li>Contains Greater Than 90% Organic Combed Cotton Yarn</li> </ul>

FENC has continued to gain more certifications for our products and manufacturing processes. For example, in 2015, Kuanyin Dyeing and Finishing Plant met the bluesign® standards for its printing and lamination processes. It also implemented the policies concerning Zero Discharge of Hazardous Chemicals, thereby helping our customers such as Nike, Adidas, Puma and Columbia to eliminate hazardous substances from their supply chain by 2020.

In addition, in order to disclose our products' environmental data, we have begun to carry out the life cycle assessment for 9 products in 2016 and analyze our input of resources, the waste that is generated and the potential environmental impact from cradle to gate. It is expected that verification statements from a third party for 6 of these products will be available by the end of 2016.

## 2.2.4 Accolades

### ISPO Gold Winner



We garnered the highest number of awards among Asian manufacturers for our products in 2016/2017 ISPO Munich :

- ★ DynaFeed- ASIAN PRODUCT GOLD WINNER
- ★ Wind Guard Base \ Aiotex- Textrends TOP 10
- ★ Normal Pressure Cationic Dyeable Yarn \ Bio-TopCool+ \ Storm Guard \ Scorch Guard \ Anti-Static and Heat Generation Function- Textrends Selection

The 45th ISPO was held in Munich, Germany in 2016 and attracted more than 80,000 visitors. Around 2500 suppliers from 50 countries around the world participated in this international event. At the ISPO Textrends Forum, the professional judges evaluated innovative products based on 8 categories, which are base layer, second layer, outer layer, membranes, accessories, trims, soft equipment and insulation materials as well as 7 criteria, which are performance, best hand, creativity, innovation, eco/sustainability, best multi-function and health. Every year, ISPO reveals the trends about sporting goods and presents awards such as Selection, TOP 10 and GOLD WINNER. The prestige of the event is widely recognized by the sporting goods industry.

### 2015 Taiwan Corporate Sustainability Awards - Growth through Innovation Award



We applied for 2015 Taiwan Corporate Sustainability Awards organized by Taiwan Institute for Sustainable Energy and were granted the Growth through Innovation Award for our development of 100% Bio-PET.

In order to provide high-quality products, FENC has developed internal management and implementation processes to ensure quality. We have also offered related training to our employees and used reward and punishment mechanisms to ensure our customers get high-quality, high value-added, innovative, safe and healthy products. We do not manufacture or sell anything that can provoke controversies. During the reporting period, there was no violation of laws and regulations related to product health, safety and labeling.

### 2015 Cradle-to-Cradle Design Contest - Merit Award



Our " Pro-green® 100% rPET " won the Merit Award in a cradle-to-cradle design contest held by the Environmental Protection Administration in 2015. The evaluation criteria included the C2C concept, innovative design and marketability.

## 2.3 Customer Relationship Management



The wide array of products that we have developed over the years has drawn customers to us from all over the world. In order to satisfy their demand and create value for them, FENC has leveraged our strength in research and development and shared information about our product development with our brand customers. Our highly integrated production process from upstream to downstream can create additional values, making it an incentive for customers to collaborate with us. In order to improve our services, we have introduced one-stop shopping and shortened the time required for production, thereby providing better products and services in a more efficient manner.

The Company values the feedback of our customers. We conduct customer satisfaction survey periodically to examine if our products and services have met their expectations, and convene review meetings to discuss various plans to make improvement. The survey is developed and carried out by each business. Every year, we send out questionnaires to customers a couple of times or engage them by phone or email to maintain a close rapport with them.

FENC has been a major supplier to various global brands for years, many of which are leading CSR companies that expect us to fulfill our share of social responsibilities. We are held to a standard higher than legal requirements and industry-wide conventions, when it comes to labor conditions, human rights, occupational safety and health, environment, product innovation, training, supplier management and audits. Our long-term efforts in these areas have been widely recognized by our brand customers, which have given us high scores in different assessments and supplier evaluations.

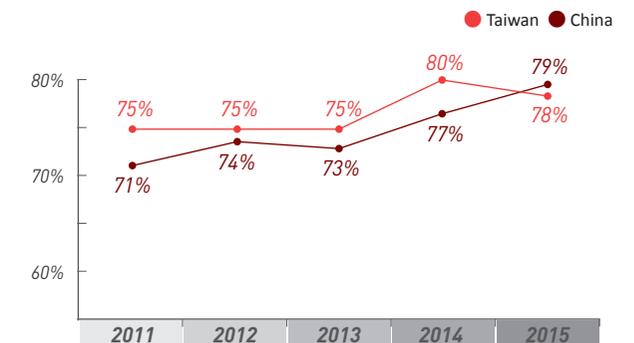
Hsinpu Chemical Fiber Plant, Kuanyin Chemical Fiber Plant and Far Eastern Industries (Shanghai) Ltd. are SEDEX members that have passed SMETA, or SEDEX Members Ethical Trade Audits. The SMETA assessment covers labor standards, health and safety, environment and business ethics. The measurement criteria include management systems, working hours, disciplinary actions, wages and benefits, discrimination, freedom of association/collective bargaining, health and safety, forced or bonded labor and child labor. Our customers such as Coca-Cola, PepsiCo, Danone and Nestle can inquire our audit results from SEDEX to check if we have met certain criteria.

## 2.4 Supplier Management

At FENC, there are five major procurement units which are FEG Purchasing Department, the Purchasing Department of Oriental Petrochemical (Taiwan) Co., Shanghai Purchasing Unit, Suzhou Purchasing Unit and Raw Material Team. The Raw Material Team conducts market analyses of key materials such as cotton, PTA and MEG, formulates strategic plans and purchases materials. Other purchases such as machinery and equipment, or contract awarding are handled by the other four procurement units.

The Company always first considers local suppliers because we want to help boost local economy and obtain immediate and comprehensive after-sale services.

### ► The Percentage of Purchases from Local Suppliers



Note : · While the local suppliers to our Taiwan's businesses are located in Taiwan, the local suppliers to our businesses in China refer to those located in the province where our business is located.  
· The procurement of PX is not included.

## 2.4.1 Supplier Selection Principles and Evaluation



When selecting suppliers, the procurement units carry out assessments on related aspects of various suppliers. In addition to asking them to sign the agreements, the units add clauses in the contract to ensure the suppliers meet the quality requirements. For instance, the suppliers need to prepare ISO documents. If there is major impact found during our assessment, we ask the suppliers to make improvement. If they fail to comply, our collaboration will be terminated. To protect the environment, we ask the suppliers of chemicals and industrial gases to conduct an environmental impact assessment and have established assessment criteria and rating mechanisms. In addition, our labor practice assessment focuses on project contracting and equipment suppliers.

The supplier selection and management principles of each procurement unit are described below :

Procurement Unit	Management Principles
FEG Purchasing Department and Raw Material Team	The Department and the Division demand in unison that suppliers sign the statement regarding avoiding conflicts of interest and conducting cost analyses, and oblige them to comply with Taiwan's Labor Standards Act, related regulations and occupational ethics. To meet the demand of our customers, the Raw Material Team works with international suppliers to introduce organic cotton, BCI cotton and Bio-MEG and visits our suppliers regularly every year.
Purchasing Department of Oriental Petrochemical (Taiwan) Co., Ltd.	The Department requires our suppliers to sign the Environmental Protection Commitment Statement to affirm their promise to protect the environment, and carries out the Supplier Environmental Performance Assessment to examine if the suppliers have an environmental management system in place and how their major products and business activities impact the environment.
Suzhou Purchasing Unit	The Unit always first considers the suppliers that have ISO14001 and OHSAS 18001 to work with, based on its procurement management program, and has established annual evaluation mechanisms. The KPI of the Unit includes the number of visits to the suppliers and their annual evaluation scores. The target is to visit at least 50 suppliers and 85% of the suppliers should score higher than 85 points in evaluation.
Shanghai Purchasing Unit	The Unit has issued the Suppliers Assessment Guidelines, according to which the new qualified suppliers can be divided into level A, B or C based on their evaluation scores. If a supplier fails the evaluation, it will not qualify as a supplier to the Company. As for our old suppliers, we carry out an annual re-assessment to ensure there are qualified. Both the new and old suppliers are expected to sign the CSR Commitment Statement to affirm their obligation to fulfill their social responsibilities.

The table below describes the four aspects of supplier assessment, which are environmental impact, labor practice, human rights and society, in 2015.

Assessment Aspect	Environmental Impact	Labor Practice	Human Rights	Society
Total number of selected suppliers	1,745	1,819	1,735	1,735
No. of suppliers that have or may have negative impact	0	0	0	0
No. of suppliers that have made improvement	0	0	0	0
No. of suppliers that we have stopped working with	0	0	0	0

Note : • Environmental impact assessment criteria include pollution prevention, waste disposal and energy consumption. Labor practice assessment takes into account occupational safety and equality as well as employee training. Human rights assessment deals with child labor, forced labor and rights of the indigenous people. Society assessment covers corruption, monopoly and fraud.

• FEG Purchasing Department and Raw Material Team as well as Shanghai Procurement Unit carry out assessments on local suppliers. Oriental Petrochemical (Taiwan) Co. conducts an environmental impact assessment on suppliers of chemicals and industrial gases and a labor practice assessment on engineering equipment suppliers.

Assessing new suppliers is important to our businesses. In 2015, Shanghai Purchasing Unit conducted an assessment on all new suppliers. FEG Purchasing Department and Raw Material Team assessed all new suppliers in the country. Oriental Petrochemical (Taiwan) Co. did not have any new suppliers. Suzhou Purchasing Unit did not have specific requirements regarding assessing new suppliers. Last year, we had a total of 719 new suppliers, 497 of which were assessed, accounting for 69% of the total. The areas for assessment include environmental impact, labor practice, human rights and society. In 2016, we are requiring our suppliers to sign the Supplier CSR Commitment Statement and strengthening the management of new suppliers. The percentage of the assessed new suppliers is expected to increase considerably this year.



### Supplier CSR Commitment Statement

In order to better select and manage suppliers, the CSR committee began to work on the Supplier CSR Commitment Statement Program in 2015, which focuses on the key CSR topics such as labor and human rights, health and safety, environment and ethics. The statement is provided in both Chinese and English. In the future, our suppliers at home and abroad will be expected to sign this statement, in addition to the procurement contract, and fulfill our requirements. The program is still being developed by the CSR Committee and the procurement units and is set to be implemented in 2016.

## 2.4.2 Haulage Contractor Selection Principles and Management

FENC's exports and imports rely heavily on land and sea transportation. In order to effectively reduce our energy consumption and environmental impact and ensure proper supplier chain management, we require our contracted transportation companies to take actions to minimize environmental pollution, conserve energy and cut carbon emissions.

The destinations of our export span five continents around the world, with more than 200 ports receiving our shipment. When selecting shipping companies, we regard energy conservation during transportation as an important criterion for assessment. Moreover, we demand the shipping companies to comply with environmental regulations concerning calling at port, exhaust emission, fuel consumption and waste oil disposal.

To transport our products in Taiwan, we have signed a contract with established trailer companies and required them to comply with our quality policies.

- All vehicles are required to meet the government's phase 5 emission control standards. Now the limit of NOx has been revised down from 3.5g/kWh to 2.0g/kWh and the limit of soot emissions allowed has been reduced from 25% to 15%.
- All vehicles are required to be equipped with an on-board diagnostics system.
- All haulers are expected to maintain vehicles regularly and reduce emissions from the source in order to minimize pollution.

For all our haulage contractors in Taiwan, we carry out an on-site inspection at least every half year and require them to remedy shortcomings. The focus of the inspection includes empty containers, container handling facilities, container yards, pollution management and worksite safety compliance. In 2014, we began to advocate idling stop when the vehicles pull into the yard. In 2015, all our haulers complied with our requirements. In the future, our haulers will be required to install GPS in their vehicles for monitoring purposes. They will also be expected to build a big data database to improve their operations, increase efficiency and minimize environmental impact.

As for our transportation in China, various measures have been adopted to ensure compliance of our haulers. For example, in order to ensure safety, Far Eastern Industries (Shanghai) Ltd. has monitored the drivers' behaviors inside and outside a plant when transporting goods, checked the vehicle conditions regularly and established reward and punishment mechanisms, based on the Transportation Management Manual. Every month, a hauler meeting is held to review the transportation practices and discuss plans to make improvement. In 2015, in order to reduce unpurified exhaust gas, Far Eastern Industries (Wuxi) Ltd. signed a contract with their haulers to require them to use more green-label vehicles, which meet China's phase 5 vehicle emission standards, and eliminate yellow-label ones, which only meet the phase 3 standards. Oriental Petrochemical (Taiwan) Co., Ltd. and Oriental Petrochemical (Shanghai) Corp have attached great importance to the safety of transporting dangerous chemicals such as PX and AA, which are primary and secondary materials to the companies. If an accident happens during the transportation of these two chemicals, a severe environmental impact may be caused. Therefore, the companies require qualified haulers to carry these dangerous chemicals and conduct periodic inspections to ensure safety practices. Today, two thirds of the haulers of Oriental Petrochemical (Taiwan) Co., Ltd. have introduced the Road Safety & Quality Assessment System. In the future, we will continue to assist our haulers in enhancing safety and improving transportation performance.

In order to reduce the potential impact of transportation, we have communicated our demands to the haulers through related departments and conducted periodic review on fuel consumption by transportation within a plant area. In 2015, there were no environmental pollution incidents caused by our transportation.