



# **Esquel Sustainability Report**



ESQUEL GROUP

# Social Responsibilities ● ● ● ●

Through the company's e-culture, business ethics are strongly promoted. Providing fair working conditions to its employees is a key focus for Esquel. We strongly believe that the sustainability of the community in which we work is fundamental to the sustainability of our business. In keeping with this philosophy, Esquel and its employees are committed to supporting programmes that improve the social welfare of the children and families in the community.

## Employees

As of June 2005, the Group employed a total of 44,894 personnel around the world. Approximately 94% of our staff are factory workers with 26,982 (60%) of them based in China. Together with management / administrative staff, the total work force in China is approximately 65%. Compared with 2003, management / administrative staff has increased from 2,694 to 3,493, a 30% increase.





Country	Total Employee	Factory / non-admin Worker	Management / Administrative Staff
China	29,212	26,982 (65.17%)	2,300 (63.82%)
Sri Lanka	5,566	5,285 (12.76%)	278 (7.96%)
Malaysia	3,829	3,661 (8.72%)	218 (6.24%)
Mauritius	3,122	2,831 (6.84%)	291 (8.33%)
Vietnam	2,256	2,160 (5.22%)	96 (2.75%)
Japan	19	0	19 (0.54%)
Hong Kong	526	503 (1.21%)	23 (0.66%)
Hong Kong Headquarter	344	29 (0.07%)	315 (9.02%)
USA	18	0	18 (0.52%)
UK	5	0	5 (0.14%)
<b>Total</b>	<b>45,646</b>	<b>41,401</b>	<b>3,494</b>

(Last Update: June 2005)

# Social Responsibilities ● ● ● ●

## Human Rights

Business ethics are strongly promoted at Esquel. We have developed our own code of conduct based on international labour guidelines with a focus on providing our employees with fair and safe working conditions.



In addition, we voluntarily adhere to the United National Global Compact, which promotes observance of universally recognized standards in the areas of human rights and environmental principles. It facilitates dialogue and experience sharing among businesses, the NGO community and trade unions.

Through the adherence to these internal and external codes of practices, our working environment has naturally embodied respect for the rights of our employees, and helped to develop the workplace into a safe and healthy working environment which is free of discrimination, harassment and abuse. Moreover, we have taken significant steps throughout the development of our business around the world to ensure that local cultural sensitivities are understood and respected. In this regard, we have ensured that local culture and customs are borne in mind when preparing training materials and to ensure that they are provided in the local language.

### Case Study: Gaoming

In Gaoming, where 37% of our employees work, we have adopted a hiring policy in line with local Government labour regulations which permits young adults (16 - 18 years of age) to work. We have ensured that these young adult workers are assigned to specific work processes as per local labour laws and permit them to work normal working hours only.

In general our workers are paid at US\$0.10 per garment produced, with a minimum wage of around US\$50 per month. If overtime work is required to meet client orders, workers are paid at a scaled up rate of up to 300% of normal rates. However, we strictly adhere to local regulations and limit the allowed overtime work to 3 hours per day and 36 hours per month for each worker, excluding young adults who are not permitted to work overtime.

Moreover, our employees are provided with clean and well-ventilated accommodations within the city and are provided coach pick-up and drop-off services. Employees' rooms have been designed to allow sufficient sunlight to filter into the rooms and air-conditioning facilities provided for the hotter months of the year.



### **Case Study: Providing a Healthy and Safety Working Environment**

At Esquel, we place great importance on health and safety within the workplace. Three of our main areas of concern are occupational air quality, the handling of chemicals and fire safety. All of our facility management teams have implemented health and safety systems within their facilities, addressing these three main concerns among others, to ensure that working conditions are safe and do not represent a health hazard.

Fumes generated through the dyeing, washing and drying processes have the potential to affect air quality within these work areas. These fumes can also lead to health hazards for workers in these areas. Recognizing these potential health risks, we make every effort to minimize, if not eliminate, such potential hazards from the workplace. Where risks still exist, the necessary personal protective equipment, and the training on their use, is provided to all employees working in the affected process areas. In Gaoming, workers in the dyeing, washing and drying process areas are provided with proper masks to prevent inhalation of fumes. They are also required to wear uniforms, change shoes in workshops and need to wear gloves and goggles to avoid injury due to chemical exposure.



Fire drills are also carried out and participated in by all employees to ensure that the appropriate response measures are taken in the event of an emergency. All employees are required to attend an initial fire safety training course provided by the company.

Driven by international industry-wide efforts to establish socially responsible business practices, Esquel is subject to regular external ethical compliance audits. On average, the ethical practices of each of our factories is audited 20 to 30 times per year. The findings from these audits are used by our management teams as a learning tool and as a means of identifying improvement areas in the work place to the benefit of our staff and the company.

# Social Responsibilities ● ● ● ●

## Employee Benefits

In accordance with our internal and external codes of practices, we take into account local labour laws in determining fair wages and benefits for each and every one of our staff. In some instances, due to the nature of the labour force (i.e. migrant workers versus local workers), we have also provided subsidized housing to our employees and their families. Other benefits that have been given to our employees are discounted meals on the factory grounds, transportation to work and paid public holidays.

In some of our facility locations, there are a number of non-local employees, who upon their initial arrival are unfamiliar with their surroundings. To encourage the development of a strong sense of belonging within the Esquel "family", an "Esquel Social Club" has been organized by some of the factories to give employees the opportunity to participate in social activities together.

At Esquel, the health of our staff is also very important to us and as such regular information and medical seminars are organised to educate staff on critical issues such as AIDS and SARS. To this end, Esquel has also established on-site clinics at most of their factories, which is over and beyond local legal requirements, as part of the medical care provided to its employees.



### Case Study: Employee Support Plan (Mauritius)

In 2003, the company decided to close down one of our production plants on the island of Mauritius. In preparing the close down plans, we voluntarily committed ourselves to developing an Employee Support Plan (ESP) to take care of the soon-to-be released staff. Under the ESP, retraining and redevelopment programmes were organized to build employee's confidence and assist employees to find new job placements prior to the facility's closure.

Half of the local workers participated in the retraining programme with 60% of them finding employment. Another 650 employees also attended our executive development programme and 10% of these executives became self-employed. The factory continued to operate until closure without any disruption to our production activities. We believe that this undertaking continues to demonstrate to our clients and stakeholders our commitment and recognition of responsibility to the social infrastructure of the community in which we operate.



# Social Responsibilities ● ● ● ●

## Professional Development

At Esquel, we recognize that employees are the company's greatest asset. As such, targeted, practice-oriented training programmes are regularly developed to meet the needs of each employee and continual on-the-job training programmes are offered for those with high development potential.

Environmental, health and safety knowledge sharing are encouraged and fully supported at Esquel. Our employees are able to access the company Intranet which holds information on the company's overall environmental education programme including examples of energy efficiency practices as well as cost saving measures and the results of water preservation studies. Out of respect for the cultural differences amongst the communities we work in, the company has also produced an environmental education booklet that is provided to all factory workers in their respective native languages.

Training programmes at Esquel are designed to serve all levels of staff. Training programmes range from sales and marketing to executive and management development, and from technical to operational training. Language courses are also offered for expatriate staff to help encourage dialogue and development of good working relationships with local staff.

To further expand staff expertise and knowledge, the company has coordinated a joint international MBA program between MIT and Tsinghua and Fudan Universities in China. Staff members showing management development potential are selected to attend the program to hone their decision-making and management skills, which they can then bring back and apply to the workplace. Our training programme represents one of the company's investment initiatives in its human resources, and has successfully created a team of highly qualified staff for continued improvement in production and growth.





#### Case Study: Skills Certification Programme (Malaysia)

In 1999, our Malaysian operations implemented a Skills Certification Programme (SCP). The SCP involved the provision of both the theoretical as well as hands on training on machines operation procedures to machine operators, followed by a job knowledge evaluation assessment. Certificates were then issued to successful operators and those who did not succeed were offered retraining. However, after three failures, in the interest of the safety of those operators and the overall safety in the facility work environment, those operators were reassigned to other duties by the Human Resources Department.

During the SCP monitoring period (in year 2000), we achieved successful results:

- Total manufacturing time (including processes such as cutting, sewing, embroidery, trimming, pressing, packaging and QA/QC) was reduced from 30 days to 18 days per garment; and
- Average manufacturing first pass yield, representing the quality of garments produced, increased from 52% to 69%.

Regular reviews involving the sampling of operators to measure consistency of performance has shown to surpass the majority of pre-set targets.

At Esquel we fully support the on-going training and build up of target-oriented qualifications of our employees. In this regard, 79 staff in our Hong Kong operations participated in our scholarship programme and, all of who either completed a degree in tertiary institutions in China or Hong Kong, or obtained other professional qualifications. At the company headquarters in Hong Kong, over 200 employees completed various training programmes including sales and marketing, computer, technical and executive development.

#### Training Programme for Esquel (Headquarters) 2004

Topic	No. of Staff	Total Hours	No. of Programme
Sales and Marketing	518	40	21
Executive Development	140	69	7
Management Development	74	570	8
Technical	634	1,034	35
Operational	115	37	9
Computer	93	27	6
Language	33	45	2
Others	719	109	35
<b>Total</b>	<b>2,326</b>	<b>1,940</b>	<b>123</b>

# Social Responsibilities



## Community Activities

We continue to contribute to the development of the communities in which we operate in, as the company firmly believes that a sustainable community is fundamental to the sustainability of our business. To this end, the company, together with our employees, is committed to supporting programmes that improve the social welfare of the children and families in the community, including the provision of basic education, health awareness programmes and aid relief.

### Education

We believe that the provision of basic education to all children is important and as a result have designated the teaching of children on environmental concerns as a focus of education programmes since 2002. It is hoped that through these programmes, children will become more aware of environmental issues from an early age.

The focus of our education programmes has primarily been in the remote region of Xinjiang in Northwestern China, which is where 30% of our organic cotton is grown. We have helped to broaden the opportunities for Xinjiang children to read and learn by donating books, establishing libraries and renovating schools in the most needy areas of the region. Donating libraries has shown to be an effective way to enhance learning in young children, and as of August 2005, over 266,900 books have been donated to 803 schools in Xinjiang. Safe learning is also essential for students and as such, Esquel has financed the renovation and building of 12 primary schools in various parts of Xinjiang ensuring that the buildings are structurally safe and sufficient lighting provided.





For families that do not have the financial means to pay for their children's' education, Esquel has set up an education programme through which over 1,000 children have been given the necessary financial support to return to school. In 2004, Esquel also awarded 4 University scholarships covering full tuition and boarding fee for selected students in China and Hong Kong.

In summer 2004, the **Esquel-Y.L. Yang Education Foundation** co-organised an exchange programme entitled "Love, Faith, Hope", through which 24 high school students from Hong Kong and 10 American students were brought together to interact with local Xinjiang students in Urumqi and Hetian (China).



Young leaders who joined the programme were able to broaden their minds to the World and advance their personal development through:

- Learning about the culture, customs and language of the people of another country;
- Sharing their knowledge on cultural, social and environmental issues with one another; and
- Increasing global awareness.



#### Case Study: Eco-Mobile Laboratory

Recognizing that children are the leaders of tomorrow and that awareness in the environment begins through the education of these children, our Esquel team undertook the task to construct a mobile laboratory to be taken to 7 cities and numerous communities in the Xinjiang Autonomous Region. Hands-on experiments and displays were developed on key issues with relevance to Xinjiang people such as the control of water use, prevention of soil erosion, usage of pesticides and fertilizers, energy usage and family health. All-in-all, this Eco-Mobile touched the lives of over 16,000 young people who will become the leaders of tomorrow.



# Social Responsibilities ● ● ● ●

## Health

### AIDS Prevention

While the Xinjiang Autonomous Region is relatively closed off to the western world, a global matter such as AIDS has already infiltrated communities in Xinjiang.



Because of poor education and the low

income of rural villagers, this disease is commonly transmitted through either illegal blood transfusions, which are seen by villagers as quick ways of making money, or via intravenous drug abuse, by those who are unemployed, poverty stricken and fear they have no future. An international aids charity (Avert.org) reported that between 1998 and 2000, the number of reported HIV cases more than doubled, from 2125 to 4416.

In some villages, families have one or both parents who are HIV positive and some of whom also have children who are also infected, either through birth or through injury contact. For such families, there is little financial means by which to support any of their non-infected children to school. During a visit to Xinjiang villages in 2005, the plight of these innocent children was raised. Instead of making direct monetary donations in fear of being taken by their parents or others to fund drug habits, we established an education programme, investing 250,000 RMB (35,700 USD) to directly pay for the education and education materials of these children. It is expected that over the course of the next 5 years, this programme will be able to assist at least 90 youngsters to return to school and offer them an opportunity to gather life-long skills and education.

In addition to addressing the needs of the children, it was recognized that many of our own workers were not fully aware of the AIDS issue. Given the lack of public education on this issue, we incorporated this topic into our in-house training programme and invited qualified personnel to give seminars to our local staff on what AIDS is, how it is transmitted as well as the measures to prevent contracting AIDS. In total, we have provided such training to over 30,000 employees in our Gaoming and Xinjiang operations in 2005. It is hoped that by providing such means of continuous learning to our employees, that through them, the community at large will also become more aware of the AIDS issue and take a pro-active position on preventing its spread throughout the nation.

## Provision of Aid Relief in Response to Natural Disasters

In December 2004, a tsunami devastated a number of Southeast Asian countries, including Sri Lanka where Esquel has a production facility. Soon after the tsunami struck, on-site staff began to assess the situation and the Hong Kong Head Office set up an emergency relief fund and help desk to assist in the coordination of humanitarian efforts. Our factory in Koggala, Sri Lanka was unharmed, however a number of our employees' homes were leveled to the ground. Factory management could not locate a majority of the 1000 + workers the first day after the tsunami. Realizing that colleagues might be in danger, factory management initiated efforts to find employees who they could not get in contact with in Koggala. Staff members were sent on motorbikes to every missing employee's home to check on their situation. Within 48 hours after the tsunami occurred, our local factory management staff had managed to reach most of the missing employees and had distributed food and clothing to them.



To date, our Tsunami Relief Fund has raised approximately USD250,000. We are now focused on reconstruction efforts and also plan to set up a Child Care Centre in the hard hit Koggala region. The centre, to be operated by qualified professionals, will give priority to children of Esquel employees and charge them a nominal fee. This will allow parents to return to work without having to worry of the safety and care of their children. It is estimated that the cost of getting the centre up and running will be in the range of RS 1million (USD10,000).



# Environmental Sustainability

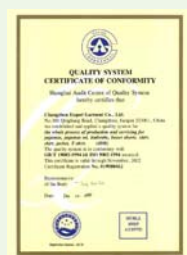
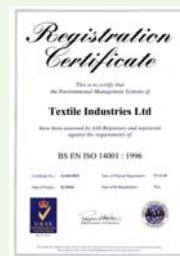


At Esquel we take our responsibility for the environmental impacts caused by each step of our activities very seriously and have made comprehensive efforts to identify, monitor, minimize / reduce the overall environmental footprint of our operations. This is achieved through our ability to take direct, immediate and effective actions at any point of our fully integrated production process, which includes cotton farming, spinning, dyeing, weaving, knitting, sewing garment, producing accessories, finishing and packaging and exporting products all over the world, to control any environmental impacts.

Furthermore, we continuously strive to promote environmental awareness at all of our factories and offices, and we encourage our cotton farmers to incorporate environmental awareness in managing their farming activities.

## Management Systems and Auditing Compliance

To support the effective management of our environmental impacts, we support the implementation of a management system in line with the international certification system of ISO 14000 (Environmental Management) and ISO 9000 (Quality Control Management). To ensure best management practices are carried out in Esquel, our plants in China, Malaysia, Mauritius and Sri Lanka have all been certified to both ISO 14000 and 9000.





A summary of environmental impacts and issues associated with our operations is given below:

Esquel Group	Resource Input	Environmental Impacts / Issues
Cotton Farming	Water Energy Fertilizers Heavy Oil	Resource Consumption Energy and Water Conservation Wastewater Waste Management
Factories Spinning Dyeing Weaving / Knitting Garment	Water Electricity Resource Consumption Cleaning Solvent	Energy and Water Cosenrvation Wastewater Indoor Air Quality Material Handling / Storage Waste Management (Including Chemicals) Noise
Powerplant	Coal Water	Local Air Quality Emissions Wastewater Noise
Wastewater Treatment Centre	Water Electricity	Wastewater Noise
Packaging	Plastic Bags, Covers Carton Box Reusable and Disposable Item	Resource Consumption Waster Management
Transportation	Fuel Engine Oil	Fuel Consumption / Efficiency Emissions to Air Noise
Office & Retail Shops	Electricity Office Supplies	Resource Consumption Energy Conservation Waster Management

# Environmental Sustainability



## Resource Consumption

In recent years, Esquel has made substantial progress in reducing resource consumption while continuing efforts to increase the use of recycled material. We have analysed and altered factory processes to achieve environmental benefits, including reductions in our the use of water, electricity, chemicals in the finishing and dyeing processes and by eliminating the use of heavy oil.

### Water

**Manufacturing (Gaoming):** The greatest consumption of water is in garment manufacturing , with about 90% used in the weaving and knitting processes. The combined factories in Gaoming represent the largest manufacturing base in the company, producing 2,014,450 dozen garments in 2004. During 2002, water usage was estimated at 0.37m<sup>3</sup> per dozen of garment manufactured and this has since decreased by 18% to 0.3m<sup>3</sup> per dozen in the year 2004 while the weaving process has also shown an overall decrease by 7% in water usage over same period.

		2004		2003		2002	
Garment Produced in Gaoming (Million Doz)		2		1.8		1,67	
Yarn in Tons (Gaoming)		3,511		3,356		3,284	
Woven in Yards	Knit in Yards	45m	9,964	41.8m	8,425	41.6m	8,979

During 2004, factories in Gaoming used about 731,000m<sup>3</sup> of water per month (on average).

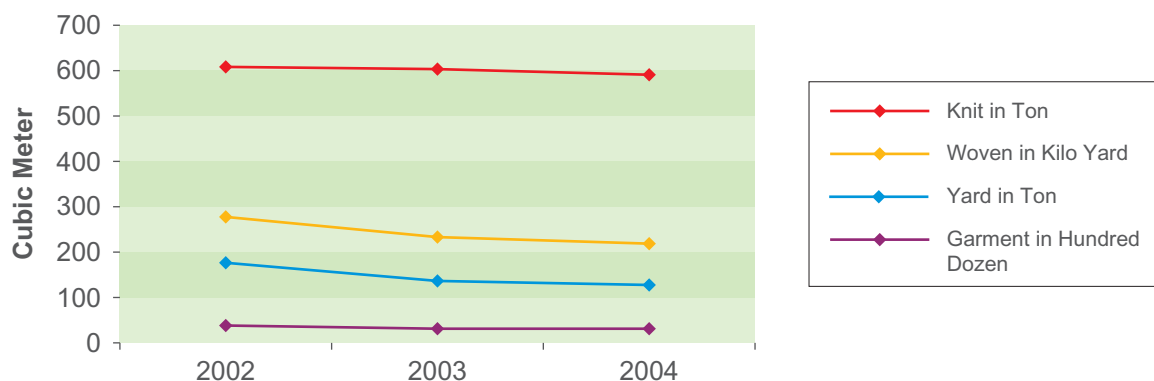
	2004	2003	2002
<b>Water Consumption in Kilo Cubic Meter</b>	8,767 (100%)	7,888 (100%)	8,102 (100%)
<b>For Garment</b>	325 (3.7%)	312 (3.95%)	345 (4.26%)
<b>For Spinning</b>	484 (5.5%)	344 (4.37%)	447 (5.52%)
<b>For Weaving</b>	4,352 (49.7%)	4,138 (53.47%)	4,340 (53.57%)
<b>For Knitting</b>	3,606 (41.1%)	3,093 (39.21%)	2,970 (36.66%)

	2004	2003	2002
<b>Water Used by (Cubic Meter)</b>			
<b>Garment in Dozen</b>	0.2956	0.3155	0.3746
<b>Yarn in Ton</b>	93	103	136
<b>Woven in Kilo Yard</b>	96	99	104
<b>Knit in Ton</b>	373	367	331

The production of YMA was taken out since the finishing process is mainly operated in EGM, Malaysia.



### Water Consumption



During 2002, water usage was estimated at 0.37m<sup>3</sup> per dozen of garment manufactured and this has since decreased by 18% to 0.3m<sup>3</sup> per dozen in the year 2004. Also, the water usage for woven has also decreased by 7% in same period of time. However, water usage for Knit had been increased.

#### Case Study: Cotton Coloration (Gaoming)

By changing the cotton coloration technique, two of our production centres were able to reduce water consumption by over 40,000 cubic meters over an 11-month period, while also leading to improved effluent quality and annual energy savings of 435,000 kWh.

Traditional pretreatment prior to the dyeing process required hot water for washing and the addition of hydrogen peroxide reagents to remove residual bleach. These processes consumed significant quantities of electricity as well as water and produced an unpleasant odor. To reduce dyeing-related effluent pollution, the commonly used phosphorus-containing reagent was replaced with a natural, non-toxic chemical (GEO) in the bleaching process and residual bleach was removed using a non-toxic bio-enzyme.

The adoption of a new alternative hydrogen peroxide stabilizer and remover has been found to reduce the effluent loading at our wastewater treatment plant in Gaoming, with significant reductions in COD and BOD levels recorded. In addition to the environmental benefits, the switch to these alternative materials has improved product quality (less crease marks, even dyeing), shortened process time and thus increased production rates. This change has also resulted in considerable cost-savings of yarn dye (approximately US\$205 at monthly average per ton of yarn yield) and chemical purchases (approximately US\$50,500 annually).

#### Project Results from Adoption of New Cotton Coloration Method:

Parameters:		Reduced by:
Toxicity	COD	50%
	BOD	25%
Volume	Effluent per ton of fabrics manufactured	15 cubic metre
	Effluent per ton of yarn manufactured	10 cubic metre
Production Time	Manufacture fabrics	28 minutes
	Manufacture yarn	25 minutes

# Environmental Sustainability



**Wastewater Treatment Center (Gaoming):** The dyeing and finishing processes of garment manufacturing utilizes significant quantities of water which in turn requires treatment prior to discharge. At our Gaoming factories, some 19,500 tons of wastewater is discharged per day and which requires 10 tons of  $H_2SO_4$  for neutralisation. Through the reuse of  $SO_2$  discharged from boilers we have been able to convert that into a savings of about 0.5 tons of  $H_2SO_4$  per day. In addition to reducing the purchase of chemicals for wastewater treatment, through an assessment of our production plant processes, we were able to save an additional 4,200 tons of water and 13 tons of fuel oil per day, through the recycling condensed steam from our boilers.

**Water Conservation (Turpan / Xinjiang):** Conservation and careful use of water is vital for sustainable development in arid areas, like the Xinjiang Autonomous Region. Recognizing this key factor, we have taken measures to recycle on-site sanitary wastewater and have implemented various measures to minimise water loss at our facilities in Xinjiang. A wastewater treatment plant was installed at our Turpan Plant in 1998 for the purpose of treating and reusing water from their sanitary wastewater stream for irrigation.

Since the operation of this facility over 7 years ago, we have successfully planted over 3,800 fruit trees in the areas surrounding our facility and natural fertilizer is provided by free-roaming sheep from neighbouring land lots. Treated facility wastewater is redirected to irrigate these fields resulting in a closed loop system in the facility's management of their water resources. To further conserve this water resource, the crops are watered at night to reduce evaporation, while grasses are also grown in ditches between fields to reduce water loss. Our project has greatly improved the surrounding landscape, provided much welcomed natural shading for our employees to enjoy during their leisure time and has also inspired the city's environmental awareness.



Before construction of company



Office building in 1996



After completion of the project



Fruit Garden in 1996





## Energy Consumption

The issue of energy consumption has raised both economical and environmental concerns for us. To address these concerns, our technical staff have designed and implemented a number of measures to enhance energy efficiency within our various factories and offices.

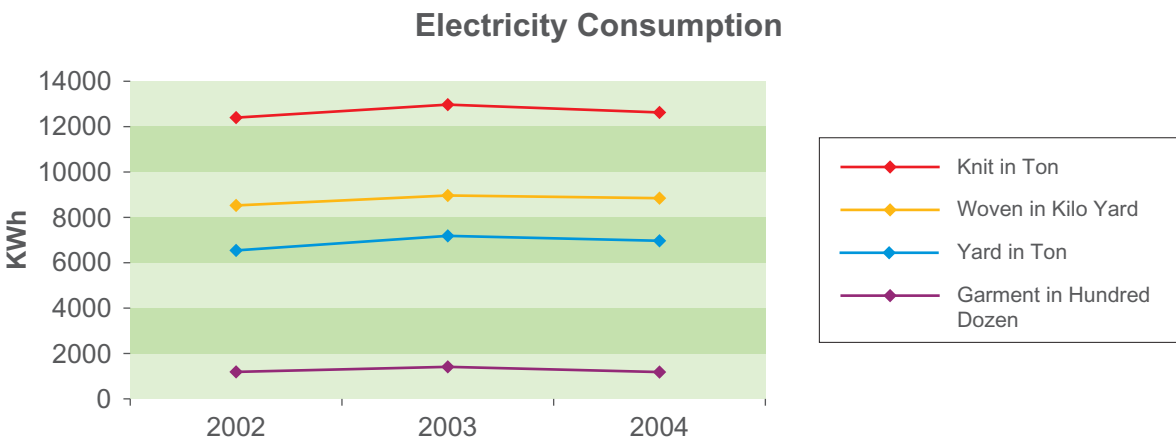
Based on the overall operations of the company, the garment manufacturing process of the business is known to have one of the highest electricity consumption rates. In 2004, factories in Gaoming used over 171,000,000 kWh of electricity. In our efforts to achieve a reduction in electricity usage, many energy reduction initiatives including modifications to cooling, heating, lighting and ventilation systems were implemented resulting in a 10.8% reduction in electricity consumption in 2004 per dozen garments produced.

	2004	2003	2002
<b>Total Electricity consumed in Million Kwh (Gaoming)</b>	172 (100%)	158 (100%)	162 (100%)
<b>For Garment</b>	25 (14.6%)	25 (15.91%)	21 (13.05%)
<b>For Spinning</b>	20 (11.45%)	190 (12.2%)	17 (10.43%)
<b>For Weaving</b>	91 (52.83%)	81 (51.34%)	91 (56.17%)
<b>For Knitting</b>	36 (21.12%)	33 (20.73%)	33 (20.35%)

Electricity Consumed by (Kwh)	2004	2003	2002
<b>Garment in Dozen</b>	12.45	13.94	12.65
<b>Yarn in Ton</b>	5,597	5,664	5,151
<b>Woven in Kilo Yard</b>	2,009	1,944	2,190
<b>Knit in Ton</b>	3,752	3,889	3,674



# Environmental Sustainability



**Case Study: Heat Recovery (Gaoming)**

Hot clean water is required to be used in the dyeing and finishing processes. After use, this high temperature wastewater is normally discharged to the Wastewater Treatment Centre (WTC). However, due to concerns that the effectiveness of the microorganisms used in the WTC process may be adversely impacted by the high temperature, it was decided to install a heat exchanger and redesign the water flow. This initiative resulted in the savings of a considerable quantity of electricity during the heating of clean process water and from the pre-cooling of wastewater prior to treatment.

This was achieved by installing a sophisticated piping system in the dyeing machine outlet to separate low (<60°C) and high temperature (>80°C) wastewater. Low temperature wastewater was directed to the WTC while hot wastewater was redirected through the heat exchanger (to lower its temperature to 50-60°C) prior to discharging to the WTC. Hot clean water (45°C) is designed to be released from the other outlet of the heat exchanger and directed for use in the dyeing machine and boiler, thus reducing the energy required to heat process water. Similarly, a heat exchanger was also installed in our finishing processes to reduce electricity consumption. Moreover, to further reduce heavy oil consumption, our system only operates intermittently and hot clean water is stored in a retention pool, while wastewater is stored in a contained gutter system.

As a result of the installation of a heat exchanger, savings of 164 tons of heavy oil from the dyeing process and 86 tons of heavy oil from the finishing process were achieved on a monthly basis. This meant that a lot less fossil fuel had to be burnt, resulting in the reduction of air emissions pollutants by:

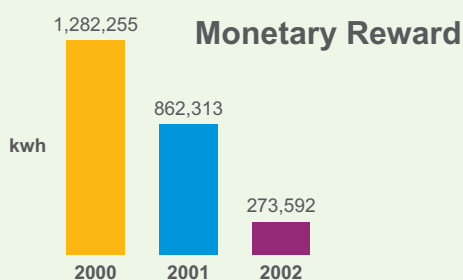
Pollutants	Reduced by month by:
Exhaust air	2.93 million Nm3
SO <sub>2</sub>	1.52 ton
TSP	0.38 ton
NO <sub>x</sub>	1.49 ton



**Air-Conditioning System (Gaoming):** It was identified in 2004 that the electricity consumption for the air-conditioning system in our Gaoming facility amounted to 50% of the total electricity consumption by the facility. By adopting alterations in all 8 cooling towers, 360,000kWh of electricity (60% of original consumption) was expected to be saved annually. Secondly, by better matching the capacity of electricity transformers at the facility with the actual electricity loading required, it was anticipated that some 39,000 kWh (29% of original consumption) of electricity could be saved, equal to RMB 293,790 (US\$37,600) in annual savings.

**Humidity System (Turpan):** The constant temperature and humidity system required for the testing laboratory in our Turpan facility originally consumed significant electricity (36,944Kwh in the first 8 months of 2003) for the cooling system accounting for 50% of the total electricity consumption, while the humidifying system accounted for 41%, and the remaining 9% utilised by the ventilation system. The primary problem identified was that steam was being generated by the humidifying system which caused an increase in demand for the cooling system to counterbalance the increase in temperatures. Our technical staff targeted these two systems to seek a solution to the high electricity consumption. In 2003 a wet curtain evaporative humidifier was installed to replace the conventional steam humidifier system which resulted in a reduction in electricity consumption by about 0.02kWh per kilogram of garments manufactured and decreasing the burden on the cooling units by 0.722KW per kilogram of garments manufactured. In addition, modifications were made to other cooling systems within the facility to enable the reuse of chilling water from the workshop chillers to lower system temperatures in heat exchangers. Moreover, the lab chillers are now switched off during winter months to take advantage of the natural cooling of the contents of our outdoor cool water tower (from low temperatures) to the laboratory cooling units. Through these initiatives, a comparison of electricity consumption in the first 8 months of the year in 2003 and 2004 showed the facility was able to save on average 2,270 kWh electricity per month in 2004 over 2003.

**Air-Conditioning System (Turpan):** In 2001, the energy consumption of the air-conditioning system amounted to approximately 1,282,000 kWh, or 18% of the total power consumption. The original design of the air-conditioning system was based on closed circulation whereby fresh air circulation is minimal, resulting in a very high temperature indoor working environment while consuming increasing quantities of electricity. By increasing the fresh air intake volume and by reducing the temperatures of the inflow (of water) into the pumping system, the burden on chillers and pumps was reduced and a reduction in energy consumption for refrigeration, pumping and cooling was immediately achieved. This amounted to a reduction in the power consumption of the chillers by 62% - equivalent to about 1 million kWh of electricity saved in year 2001/02.



	Investment	Reduction (kwh)	Cost Reduction (RMB)
2001	0	419,942	115,484
2002	0	588,715	200,163
Total	0	1,008,657	315,647

In addition, maintenance fee for chiller can be reduced by 45,000 yuan per year.

# Environmental Sustainability ● ● ● ● ●

**Wastewater**

Wastewater pollution is one of the main issues primarily associated with garment manufacturing processes, which as a result of the various processes (spinning, dyeing, weaving, and finishing), generates organic and inorganic chemical loading into the wastewater stream. Other sources of wastewater include sanitary wastewater from office use, the washing of floors, steam condensate, cooling water and general cleaning operations.

In Gaoming, where we have established a major production base, significant quantities of wastewater are generated primarily from the textiles operations. Recognizing the need to be accountable for our usage of natural resources, the company invested in the construction of a Wastewater Treatment Centre (WTC) in 2000, with another WTC being constructed to meet the expansion needs of the Gaoming facilities. The new WWTP is anticipated to be fully operational by 2006.

**Gaoming Wastewater Treatment Centre's Capacities**

Chemical Wastewater	150m <sup>3</sup> /day
General Wastewater	6m <sup>3</sup> /day
Recycled Cooled Water	8558t /hr (Summer)
	6202 /hr (Winter)

Wastewater from our factories is treated to national regulatory standards prior to discharge to the nearby river. Our environmental performance in reducing pollutant levels in the treated effluent has made Esquel a leader in wastewater treatment in Gaoming.



**Guangdong Esquel Textiles Wastewater Treatment Center (Gaoming)**

## Air Emissions

**Indoor Air Quality:** Textile production involves the use of various raw chemicals. In some cases, the chemicals are used in powdered form and can generate dust emissions. Air quality may be impaired in workshops because of these emissions and the situation may further deteriorate under high process temperatures. Our efforts in reducing the extent of emissions include improved indoor air ventilation, controlled ambient temperature and the provision of fugitive dust controls.

Heavy road traffic is a common problem in China. External air pollutants will mark our fabrics during the washing and drying process. Black spots were frequently found on our hanging fabrics, and dust captured in the washing machines and dryers. In Gaoming, an average of 30.27% of defects were due to black spots, while 80% of defects in the washing process were due to dust.

To improve air quality, we installed the following measures through the course of late 2003 to 2004:

- Screen door at main entrance to reduce dust
- Fan with screen in workshop to improve ventilation
- Extra filter in heat exchanger in dryers to further screen out dust, and
- Evaporative cooling technology in drying and baking areas to effectively reduce the high temperatures generated by the dryers; the washing pad simultaneously purifies air.



Ventilation fans with screen

Results have been quite noticeable since the implementation of these indoor air improvement measures. Dirt defects on our products has been reduced from 80% to 10% and garment defects have decreased from 3.5% to 1.2 % over the course of these installation works. These initiatives have not only improved our product quality but have also improved air cleanliness and air ventilation inside our workshop, resulting in increased productivity and overall improvements in the working conditions for our employees.

Measures	Improvements
Screen door & ventilation fans	80% - 50%
Extra filter in dryer	50% - 20%
Evaporative cooling technology	20% - 10%



Air Quality Certificate

# Environmental Sustainability



**Power Plant:** Recognizing the negative impacts on local air quality from the operation of traditional power plants, the company invested US\$29 million to design and construct a power plant using co-generation technology to generate the energy and super heated steam needed for our Gaoming facilities. This power plant, built in 2002, uses low-sulphur coal as the feedstock, and thus minimizes gas emissions and reduces our reliance on less environmentally friendly fuels such as heavy oil and diesel for our steam boiler. The thermo efficiency of this co-generation power plant is much higher (as much as 53%) as compared to traditional systems.

These efforts have been recognized by the local Government and serve as a reference to other manufacturing facilities in Gaoming. The chimney stack of the power plant has been built to 150 meters high to minimise environmental impacts on surrounding areas, while recycled fluidized bed furnace technology has been implemented to enhance complete fuel combustion and effectively reduce sulphur dioxide (SO<sub>2</sub>), and nitrogen oxides (NO<sub>x</sub>) emissions. Dust removal efficiency operates at 99.5% and coal dust is collected and stored in a designated and enclosed area, with wind protection provided to ensure no fugitive emissions on surrounding sensitive receivers.

The power plant burns roughly 20,000 ton of low-sulphur coal per year. By estimation, it emits 2100 ton of SO<sub>2</sub> and 270 ton of NO<sub>x</sub> per year, while our boilers generate 84 ton of SO<sub>2</sub> per year. The reduction in our reliance on our boilers will remain a gradual reduction in this source of SO<sub>2</sub>. In our efforts to further reduce SO<sub>2</sub> emissions, Calcium Carbonate will be added to our power plant feedstock at a later time.



**Guangdong Esquel Textiles Co., Ltd.  
Thermo-Power Plant (Gaoming)**

# Environmental Sustainability



	2004
SO <sub>2</sub> (Concentration)	1,250 mg / m <sup>3</sup>
NO <sub>x</sub> (Concentration)	160 mg / m <sup>3</sup>
Dust Removal Rate %	99.5%

Emission rate of Power plant

**Vehicle Exhaust:** In the scope of our business operations, we transport a large amount of goods, and every phase of the transportation uses fossil fuel. The burning of fossil fuel increases CO<sub>2</sub> emissions to the atmosphere and thus contributes to the global greenhouse effect. At Esquel, we aim to develop and carry forward more efficient logistical concepts, and continue to consider alternate modes of transportation to reduce fuel consumption.

Car exhausts contain a range of toxic substances that can have a serious impact on health. Potentially dangerous vehicle emissions include carbon monoxide (CO), SO<sub>2</sub>, NO<sub>x</sub> and a range of other substances.

Fuel Source	Consumption Volumes
Coal	419,942
Heavy Fuel Oil	419,942
Gasoline (for Vehicles)	588,715
Diesel (for Vehicles)	1,008,657



	NO <sub>x</sub>	CO <sub>2</sub> / CO	Particular Matter	VOC
Gasoline	633kg	60,218 / 24,359kg	73kg	1,138kg
Diesel	3,698kg	138,376 / 797kg	260kg	302kg

\*Conversion based on the US EPA AP42-Compilation of Air Pollutant Emission Factors

Measures we are currently undertaking to reduce vehicle emissions include reducing frequency of transportation through improved traffic logistic management, regular vehicle maintenance and exploring alternate modes of transport which consume less fuel, and hence generate less emissions.

## Waste and Waste Recovery

Solid wastes are generated through the different phases of our production processes. At Esquel, all of our employees support the company's waste minimization initiatives and we are committed to ensuring that unavoidable waste materials are recycled or disposed of in a safe and environmentally friendly manner.

The typical solid waste generated from our production processes, include chemicals, empty containers, waste filter cloths, discarded fabric, packaging materials and wooden pallets are being collected by solid waste recycler or sent to the government dangerous waste treatment plant in Shenzhen.



**Packaging Material:** In order to arrive in first-class condition, our products must be packaged to protect them from damage. We are working towards striking a balance between minimizing packaging for environmental purposes while maintaining the quality of product presentation for our customers. One of our initiatives to reduce packaging material has been through the changing of the size of fabric rolls.

To make our packaging process more environmentally friendly, we:

- Avoid the use of packaging materials whenever possible;
- Encourage reusable packaging; and
- Replace primary materials with recyclable and biodegradable materials.

**Paper:** The introduction of our Purchasing Management Information System (PMIS) in 2000 has enabled every one of our factories in China and Hong Kong to access data via a dedicated internet browser. The system has significantly improved the purchasing process and reduced paper consumption. Other office waste paper minimization initiatives include the reuse of paper, double side printing and encouraging reduced printing.

# Economic Sustainability ● ● ● ● ●

At Esquel, our five e-culture missions - **E**thics, **E**nvironment, **E**xploration, **E**xcellence and **E**ducation - provide the focus and meaning of a sustainable business. We recognize the importance of providing a healthy and friendly working environment, providing fair employment and opportunities for learning and professional development, which in turn, promotes higher productivity rates from our employees and retains highly qualified staff. Great emphasis is also placed on minimizing impacts to the natural environment as we recognize that for the business to be sustainable, a regular and steady supply of raw materials must also be guaranteed.

## Sales Revenue

We have four main product lines, being garment, fabric, yarn and accessories manufacturing with manufacturing plants distributed throughout China, Hong Kong, Mauritius, Malaysia, Sri Lanka, Vietnam and the Philippines. The following tables show the Group's financial performance from 2002 to 2004 based on product category as well as by market.



### Sales Analysis by Product Category

Sales Revenue	2004 (US\$'000,000)	2003 (US\$'000,000)	2002 (US\$'000,000)
Garment	406	368	386
External Fabric	6	10.6	13.3
External Yarn	15.2	11.8	10.2
Accessories	18.7	13.5	15
<b>Total</b>	<b>446</b>	<b>404</b>	<b>424.5</b>

(Last Update: 15 Jan 2004)



## Sales Analysis by Market (Garment)

Sales Revenue	2004 (US\$"000,000)	2003 (US\$"000,000)	2002 (US\$"000,000)
USA	248	225	244
Japan	45	38	38
Europe	61.6	64	58.8
China	17.7	14.3	15.8
Korea	7.2	7.9	5.3
Others	27	18.8	23.4
<b>Total</b>	<b>406.5</b>	<b>368</b>	<b>385.3</b>

The sustainability of our company is dependent not only on the financial stability and growth of the business but also our social and environmental performance. Throughout the Group, training is provided to employees to raise such awareness of the interconnection of these distinct performance indicators and to encourage employees to continually explore areas of improvement that would further support a sustainable business.

## Improving Efficiency

Seeking to improve the efficiency within the workplace in recent years, we have focused on system optimization loading and the use of electronic-data-interchange systems, both of which enable the company to adjust production automatically based on sales data, improving "time-to-share" and to focus on customer satisfaction. The R&D centres in Gaoming, China and Malaysia have collectively developed an Electronic Quality Data Sharing Online system, to enable the company to closely monitor product quality at each step of the process.



### Case Study: Quality Control Information System (QIS)

In 2002-2003, the R&D Centres of three of our production facilities (in China and Malaysia) worked together to develop a Quality Control Information System, or QIS. This system has been able to provide hourly, daily and weekly information on product quality to our Production Managers so as to maintain a high quality end product and increased customer satisfaction. Moreover, the system has reduced the need for staff overtime through increased work efficiency (30-50% increase).

# Economic Sustainability ● ● ● ● ●

## Investment Opportunities

In recognition of our environmental responsibilities and our influence in cotton production, Esquel has begun to farm organic cotton to reduce the environmental footprint of the company's business activities in the rural areas of Xinjiang.

Since 2001, Esquel has started growing organic cotton in cotton fields in Xinjiang Autonomous Region of China, covering approximately 167 acres (675,827m<sup>2</sup>) of land, which is equivalent to 15% of China's total organic cotton farmland and has an output of approximately 240kg / acre. Organic agriculture aims to maintain the ecosystem at its most natural state and reduces environmental impacts compared with more intensive cultivation methods. The main environmental impacts associated with the intensive cultivation are due to the use of pesticides, while such chemicals are not used in organic farming. Environmental impacts are also minimised through the use of natural fertilizers, such as cotton-seed residual, green manure and cotton stalks, instead of synthetic fertilizers. Biological measures are implemented in the cotton field to eliminate or reduce the use of pesticides. These include crop rotation, winter irrigation, the planting of corn around cotton fields to distract pests, growing aspen traps to prevent pests, and encouraging natural predators to kill pests.



### Case Study: Cotton Farming

In 2004, cotton farming consumed 629,296 m<sup>3</sup> of water. In response to this concern, over the past year we have sponsored pilot studies at two cotton farms in Xinjiang to test the effectiveness of drip irrigation systems versus conventional open field watering. Based on the recent crop yield results, it has been found that drip irrigation can increase crop yields from 0.25kg/m<sup>2</sup> (in 2003) to 0.50kg/m<sup>2</sup> (in 2004), while the yields in conventional open field irrigation plots was only 0.30-0.34kg/m<sup>2</sup> (in 2004). This success has been recognized by the local governments and farmers alike, with the latter looking to apply this technology in their fields.



## Community Donations

At Esquel, we have long recognized the integral relationships between the viability of our business, our surrounding environment and the communities in which we work in. In the words of Esquel's Founder, Mr. YL Yang, "A successful company always gives back to the community".

To this end, we have placed significant focus on improving the education environment of children, particularly those in the Xinjiang Autonomous Region of China where the company has been operating cotton farms and spinning mills since 1998. Recognizing that the children of today will become the leaders of tomorrow, we believe that the provision of a good education and a good learning environment is fundamental to the growth of these children. From the donation of books to the renovation of schools, we have designated the teaching of children on environmental concerns as a focus of education programmes which we bring to school children all over Xinjiang. Since 1997, Esquel has donated over USD1 million to fund such programmes and continually invests in the improvement of the education needs of children in Xinjiang.

Since 1996, the accumulative donation in Xinjiang

Building 12 primary schools
Donating 300,000 books
Students sponsorship 3,000 students
Donating 47,000 pieces of garments to poors
Eco-lab project



SAvE tHe EaRTH!

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