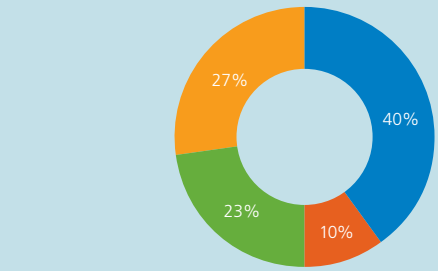
CLP and our Suppliers

A relationship built on shared values, mutual benefit and long-term commitment.

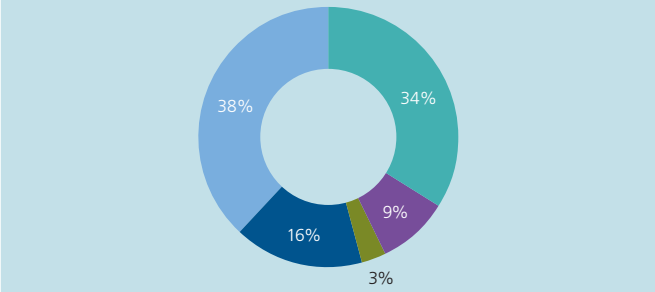
Our reputation and success reflect our ability to provide services to our customers of high quality and reasonable cost. The achievement of these objectives requires quality and cost-effective products and services to be procured from our suppliers and contractors. For this reason, we consider our suppliers to be an integral part of our business. We believe that there are mutual benefits in working co-operatively and collaboratively with our key business partners, using a shared vision and common goals.

The following charts illustrate the scale of CLP's procurement activities and the diversity of our suppliers, in terms of geographical origin and the differing types of products and services which we require for the Hong Kong electricity business alone.

Supply Source (excluding fuel) for our Electricity Business in Hong Kong (by Geographical Location)



Types of Products & Services (excluding fuel) for our Electricity Business in Hong Kong



A key element in our engagement with suppliers is the adoption of a risk-based Supplier Assessment System (SAS) to evaluate our major contractors and suppliers. This process provides a systematic mechanism for two-way feedback on the performance of both CLP and its suppliers. It is also a catalyst to continuous improvement and contributes to achieving our objective of maintaining long-term relationships with suppliers who have performed and delivered results. At the end of 2005 SAS had been rolled out to 36 suppliers representing CLP's top 50% of suppliers by value of buy. SAS supplier management meetings had already been held with 12 of these suppliers, with SAS improvement plans being implemented for both CLP and each supplier. In 2006 the SAS programme will be extended to additional suppliers, representing CLP's top 70% of value of buy, as well as other nominated suppliers.

We value team work, transparency and open and honest communication in doing business with our suppliers and contractors. Through the "CLP Power Procurement Principles & Practices" which apply to the procurement of goods and services by CLP Power Hong Kong, we have made it clear that our preferred suppliers will be those who demonstrate SHEQ (Safety, Health, Environment, Quality) competence, in addition to internationally competitive pricing, and compliance with other performance requirements in the delivery of products and services.

Once the value and effectiveness of these procurement principles and practices have been tested and assessed, and we have incorporated any lessons learned, we envisage taking steps to promote their application in CLP's activities outside Hong Kong.

We will also be pressing on with enhancements of our supply management systems in Hong Kong and procurement processes in Australia in 2006 through:

- seeking opportunities to exploit synergies for procuring goods and services on a country-wide or Group-wide basis;

- better collaboration among internal clients, buyers and suppliers in sourcing best value for goods and services;
- providing a best practice project management workflow for procurement projects, where high quality procurement tools will be incorporated to enable internal team collaboration and capturing of knowledge for future strategic planning;
- reduction of transactional workload and paperwork by increasing use of electronic tendering. This will enable procurement resources to work upstream in influencing and engaging supply markets to higher levels of performance; and
- elimination of any duplication amongst three key TRUenergy sites in Australia (Head Office, Yallourn Power Station and Torrens Island Power Station).

We are committed to upholding a high standard of business ethics in our dealings with suppliers. CLP's Code of Conduct provides the basis for all CLP staff to ensure that business decisions are made openly and honestly. We encourage all of our business partners and associates to abide by the principles of our Code of Conduct and to adopt similar standards of integrity and transparency in doing business with us.

Fuel Supply

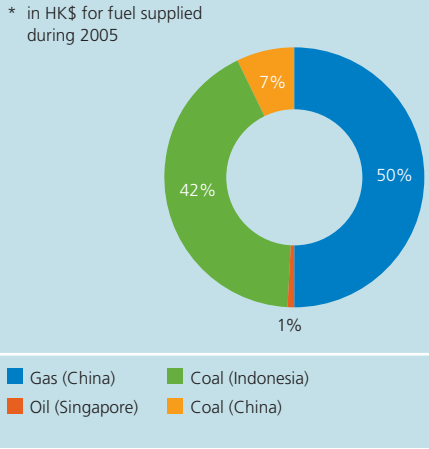
A continuous and adequate supply of fuel to our generating plant is essential to sustain a reliable electricity supply to our off-takers and customers. Fuel also represents the single largest component of the CLP Group's operating expenditure. In Hong Kong alone, CLP spends an average of approximately HK$11.4 million each day in supplying fuel to our generating fleet (excluding nuclear fuel cost at Daya Bay). Fuel for the power plants which CLP operates in Hong Kong represented about 40% of Hong Kong's total energy consumption in 2004.

Given the importance of fuel supply to our business, there are several areas where we place uncompromising focus in establishing and implementing our fuel procurement strategy:

- Security of supply
- Pricing
- Environmental performance
- Planning ahead

Security of Supply

Fuel Sources* for Power Stations in Hong Kong Operated by CLP



In Hong Kong, there are no indigenous fuel sources (other than limited potential for renewable energy). We try to maintain security of supply through:

- operating with a diversified fuel mix of coal, natural gas and nuclear;
- optimising our coal procurement contracting strategy by balancing the use of term and spot contracts;
- placing early contracts for the majority of our short-term coal needs;
- proactive supplier management and development;
- maintaining a strategic coal and oil inventory;
- flexible operations at Castle Peak and Black Point Power Stations (including the potential of plant to operate on dual fuel sources such as coal/gas and gas/oil); and
- maintaining multiple fuel sources, to guard against the risk of reliance on a single supply source or supplier.

For our coal-fired assets outside Hong Kong, such as Ho-Ping and, as from 2006, the new BLCP station in Thailand, we seek to apply a similar approach in fuel supply management.

Yallourn Power Station in the Latrobe Valley in Victoria has a dedicated open cut brown coal mine adjacent to the power station. The coal mine provides a secure, continuous source of fuel for generation, with ample reserves to meet the projected needs of Yallourn until at least 2032.

TRUenergy also maintains a portfolio of gas supply contracts from multiple suppliers and as a result expects to have access to sufficient amounts of gas over the next decade and beyond, with agreements providing for potential increases in contract quantities. In addition, TRUenergy can store up to 12PJs of gas and withdraw about a quarter of Victoria's peak daily gas needs from its underground gas storage facility at the Iona Gas Plant. Iona is the largest gas storage facility in Australia and gives TRUenergy greater flexibility in managing its gas requirements. The SEAGas Pipeline, which links the Victorian gas fields and South Australia, also provides the Torrens Island Power Station with greater gas supply security. TRUenergy is a one-third stakeholder in the pipeline, which commenced operations in January 2004.

In recent years, there have been significant problems in securing coal supplies in the Mainland. We have generally been successful in mitigating the effect of coal supply shortages, although this is a matter which requires continuous management focus and the proactive management of relationships with domestic coal suppliers.

Pricing

The supply of fuel to our nuclear capacity at Daya Bay and to our gas-fired power stations at Black Point, Torrens Island and GPEC has been largely unaffected by the recent rise in global energy prices. However, unprecedented rises in coal prices started in 2003. These reached a peak in mid-2004, by which time coal prices had increased by a factor of two. Prices have since declined gradually, but at the end of 2005 were still 50% higher than historical norms.

Higher coal prices have supported production and infrastructure expansion by suppliers, as well as the start-up of new marginal facilities, thereby providing additional production to meet demand. Demand strength was driven primarily by Asia Pacific economic growth and has since subsided.

Freight costs, which increased by a factor of four starting in 2003, are also declining but still show extreme price volatility, with current levels at about twice the historical norms. Coal freight rates were affected by the strength of the overall dry bulk industry which includes iron or other steel industry-related freight movements.

Q: **Mr. Roy Chung,** JP, *Group Managing Director, Techtronic Industries Company Limited; and Member of The CLP Energy Innovation Fund* (right)

Does the company have a long-term plan to reduce the use of fossil fuels in its generation portfolio? Would CLP use more renewable energy, natural gas and nuclear in the future, and when?

A: **Andrew Brandler** *Chief Executive Officer* (left)

Our generation portfolio already includes a mix of fuels. Counting all plants operating or under development our generating capacity is currently, on an equity basis and excluding rights to use, 62% coal, 31% gas, 1% oil, 4% nuclear and 2% renewable energy (including 1.4% small renewables). Our objective is to maintain a balanced fuel mix at an overall Group level. This balance will change over time, having regard to issues such as fuel availability and price and, of increasing importance, environmental implications. I expect that the percentage of our electricity generated by coal will gradually decline, in favour of fuels with lower greenhouse gas emissions. However, the increasing demand for electricity from the people of our regions, to support social and economic growth, cannot be met without recourse to conventional coal-fired generation – including in the Mainland which has massive and accessible coal reserves, but limited oil and gas resources. Given this context, I expect that, for the foreseeable future, coal-fired generation will remain a sizeable constituent of our generation portfolio, albeit with improving environmental performance as new technologies are retrofitted to existing stations and incorporated in new ones.

Signing ceremony for low sulphur coal supply contract

We expect a downward price correction to continue, but at a lower pace. In the longer term, prices should move back towards the marginal cost of production, as has been the case in the past. However, marginal costs are also increasing as production expansion and the opening of new mines become more costly.

CLP aims to manage coal price risk by:

- entering into firm contracted supplies at stable and reasonable prices where possible;
- maintaining the maximum possible flexibility in the range of coal types and qualities that we can use. We thereby obtain the maximum diversity in sources, although we must recognise there are often technical limits to the extent this strategy can be applied in individual power stations;
- entering into power purchase agreements that enable coal price changes to be reflected in the power off-take prices; and
- maintaining detailed knowledge of the coal supply market and thereby selecting the appropriate times to contract forward.

Environmental Performance SER

CLP places great importance on sourcing environmentally preferred fuels such as ultra low sulphur coal and clean natural gas. In Hong Kong, the average sulphur content of coal delivered dropped significantly from 0.45% in 2004 to 0.34% in 2005.

In line with our general approach to our suppliers, we value long-term relationships with reliable fuel suppliers, who share similar values to our own on safety and environmental performance. Since 1998, we have incorporated environmental performance into our overall supply chain risk management system.

Under the fuel supply programme, existing suppliers are evaluated for their environmental performance by conducting an audit of environmental performance every two years. This includes a questionnaire seeking information such as regulatory standards in the country of their operations, their own standards and their performance against those standards. We also review our suppliers' environmental policy statements, their environmental management systems and other relevant factors.

Site visits are made by CLP managers to review suppliers' performance and to confirm that the supplier is following a responsible environmental management programme.

Planning Ahead

The implementation of an effective fuel supply chain with high supply security, effective cost management and stringent environmental performance is not an easy or one-off task. There are two aspects to this challenge:

- CLP does not operate the supply chain in a vacuum – it must compete for these finite resources with other international fuel users; and
- Procuring certain sources of fuel, such as natural gas, demands long-term planning as well as incurring medium to long-term liability and significant capital investment.

This long-term planning is particularly important with regard to the supply infrastructure for natural gas, which requires significant investments right through the supply chain – upstream exploration, development, liquefaction, transportation and downstream regasification. These investments must be made many years (typically four or five years) in advance of when the fuel is first shipped to the buyer.

The capital-intensive nature of the natural gas supply chain dictates that in our region over 85% of the trade is conducted under contracts of long duration (20-25 years) with matching obligations on the supplier to supply and on the buyer to take agreed volumes of gas during the term of the contract.

Given the long lead time and the need to assume significant obligations to maintain a reliable fuel supply chain into the future, CLP needs to plan well ahead and make early commitments to ensure we continue to have access to fuels. This, amongst the other considerations, requires a stable and predictable regulatory or market environment for our business.