

# CUC's Environmental Programme



*CUC's mission is to be a leader in the growth of our community by delivering safe and reliable energy services at competitive costs and with respect to the environment while being a model corporate citizen and providing a fair return to our shareholders. In keeping with its mission, CUC considers both the environmental and economic impact of any business decision and the company is committed to meeting all applicable environmental requirements and exceeding them where it is economically feasible to do so.*

*Over the past 10 years CUC has invested over CI\$15 million and over 10,000 man-hours in environmental initiatives in the areas of air emissions, metal recycling, used oil recycling, noise reduction systems, energy efficiency, chemicals management and environmental educational programmes within the community.*

## » CUC's fuel choice

CUC's fuel specification meets or exceeds applicable Grand Cayman, United States (US) Environmental Protection Agency (EPA) and World Bank standards for island power plants.

Over the past 12 years CUC has specified diesel fuel with a maximum of 0.5% (5,000 parts per million (ppm) sulphur. Over the last two years, the actual sulphur content in its fuel has been between 500 ppm which is 0.05% and a maximum of 5,000 ppm or 0.5% sulphur content.

CUC is an environmental leader among utilities in the region in fuel selection. The majority of the island-based power plants such as those in Bermuda, Bahamas, Barbados, Jamaica and the Dominican Republic utilise fuel with higher sulphur contents ranging from 13,000 ppm to 22,000 ppm sulphur known as Heavy Fuel Oil (HFO).

HFO is not suitable for automotive consumption. In countries where it is used for power generation, there are separate fuel supply infrastructures which result in additional costs for the power and transport industries. As CUC's fuel specification has met or exceeded automobile quality standards in the past, the auto industry in Grand Cayman has been able to take advantage of the same fuel infrastructure.

Ultra-Low Sulphur Diesel (ULSD) standards for automobiles (10 ppm to 30 ppm) have emanated from Europe and in large cities where high quantities of exhaust gases at ground level have proven to have harmful effects on human health. These standards are also currently being introduced on a phased in basis in North America. ULSD is **NOT** required by either the US EPA or the World Bank Standards for applicable power plants such as those at CUC.

Throughout the power generation industry, companies such as CUC ensure that emissions are mixed within the air and dispersed in such a way that they do not harm people. The Company uses high exhaust stacks which are up to 140 feet.

CUC believes that its present fuel choice is the most suitable when balancing the economic and environmental impact of generating electricity. With the full implementation of ULSD fuel in the US for transportation purposes, it may become economically viable for power generation and at that point CUC will consider converting to ULSD fuel based on the improved economics or sooner if required to meet regulatory standards

## » CUC's ISO 14001 certification

Given the limited number of industrial facilities and associated regulations within the Cayman Islands, and in an effort to demonstrate its environmental stewardship, the Company proactively worked to achieve the international environmental standard ISO 14001 in 2004.

CUC was the first ISO 14001 registered company in the Cayman Islands and within the Caribbean Electric Utility Service Corporation (CARILEC).

ISO (International Organization for Standardization) is the world's largest developer and publisher of International Standards and is a network of the national standards institutes of 159 countries.

The ISO 14001 standard certifies that CUC has identified the aspects of its operations which impact the environment and can demonstrate that it has an effective environmental management system which monitors and controls the impact on the environment.

Under the ISO 14001 standard, CUC is also required to provide proof of monitoring and continual improvement in fuel efficiency

## » Our energy future

Energy in all its forms is critical to the economic growth, development and the social welfare of Grand Cayman and globally.

CUC's view is that diesel is currently the most viable technology and energy source for power generation in Grand Cayman taking into consideration the reliability, economic and environmental factors.

Should alternative fuels such as natural gas or bio-diesel become available and economically feasible for Grand Cayman in the future, CUC's latest and future planned diesel generating units have the ability to be adapted to these fuels.

CUC feels that the renewable energy alternatives with the most potential for Grand Cayman are ocean thermal energy conversion (OTEC), which is still in commercial development, and commercial wind energy. Other emerging technologies that are being monitored by CUC are solar thermal concentrators and micro-nuclear batteries.

In July 2008, CUC issued a request for interest in wind energy capacity for up to 10 megaWatts (MW) and is about to commence a competitive solicitation process to award a contract(s) to an independent power producer for development of up to a combined total capacity of 10 MW.

Although wind energy would reduce Grand Cayman's dependence on fossil fuels and reduce greenhouse gas emissions, it would still need to be backed up by firm capacity such as diesel, OTEC generation or other firm sources, during low wind periods.

## » Customers can get involved

CUC's consumer-owned renewable energy (CORE) programme allows customers to deliver renewable generated energy into the grid and benefit from CUC's generation as a reliable backup, by connecting solar, wind and any other renewable energy generating equipment.

Often forgotten is a powerful source of energy called efficiency. The International Energy Agency (IEA) states that "improved energy efficiency is often the most economic and readily available means of improving energy security and reducing greenhouse-gas emissions." Customers can help themselves and the environment by selecting high efficiency appliances and building materials.

CUC's Energy Smart programme was introduced 15 years ago and it continues to provide practical solutions for its customers to reduce their energy consumption and protect the environment.

## » CUC's sponsored Education Programmes

CUC believes that environmental education and awareness is extremely important in preserving our natural environment and is an active sponsor of the following programmes.

- » Primary School Environmental Education Programme
- » Chamber of Commerce Earth Day Clean-up
- » Central Caribbean Marine Institute's (CCMI) Ocean Aware School Programme
- » The Cayman Turtle Farm's "Conserving our National Treasure" Programme
- » Energy Smart Conservation Programme
- » UCCI Guest Lecture Series - Environmental Management Systems Programme
- » Employee Recycling Programme

*To learn more about how CUC is protecting the environment and how you can play your part in reducing your electricity consumption and protecting the environment, please visit our website at [www.cuc-cayman.com](http://www.cuc-cayman.com).*

