

5 Main Environmental Preservation Measures by Kyushu Electric Power Group

Kitakyushu Liquefied Natural Gas Co., Inc.

Launching LNG sale through coastal services

LNG (liquid natural gas) is an eco-friendly and clean energy source emitting no SOx or particulates when burned because carbonic dioxide and sulfuric compounds that form impurities are removed in a liquefaction process. In addition to the LNG sale through Kitakyushu LNG Lorry, Kitakyushu Liquefied Natural Gas Co., Inc. started the sale through coastal services in August 2003, thus playing an important role to support lives and industrial activities not only in Kitakyushu but in the Okayama and Shikoku areas.



Koyo Denki Kogyo Co., Ltd.

Lead-free soldering of printed wiring board

The 21st century is said to be the environmental century. More than ever, we have seen mounting social interest in global environmental preservation and pollution prevention. Accordingly, more attention is paid to corporate efforts towards environmental preservation. Koyo Denki Kogyo Co., Ltd. has long used tin-lead eutectic solder on printed wiring boards for flashers and streetlights for crime prevention. Since lead in solder is a great obstacle to the disposal and recycling of electronic equipment, lead control is a world-wide trend. Thus as part of its eco-friendly manufacturing effort, Koyo Denki Kogyo Co., Ltd. is engaged in lead-free soldering. After succeeding in its technical verification, the company is making propositions to its clients, power companies, and taking necessary steps following the ideas suggested by each client. It plans to shift to lead-free soldering within Fiscal 2003.



(Product and printed board with soldering)

Nishinippon Environmental Energy Co., Inc.

Assistance to municipalities in forming visions for new energy use and energy conservation

These days, in response to environmental problems, municipalities are aggressively introducing facilities using photovoltaic, wind and other new energy sources as well as taking measures to save energy in public facilities. It is not rare for a municipality to acquire ISO14001 certification. In order to work out basic principles and specific measures for such undertakings, municipalities are drawing up their own local visions for new energy use and conservation by utilizing a state subsidy project. The company provides municipalities with consultation in drawing up a vision by using its know-how accumulated through its energy utilization business such as power generation and air conditioning technologies. In this way, it is actively engaged in indirect reduction of environmental loads in addition to direct environmental load reduction through its conventional heat supply business.



Tabata Co-operative Thermal Power Company, Inc.

Measures against water pollution

Taking advantage of effective use of by-product gas from Yahata Works of Nippon Steel Corporation in power generation, Tobata Co-operative Thermal Power Company, Inc. makes a great contribution to stable power supply in the Kitakyushu area. Cold water several meters below the surface of the sea is taken as the coolant for the power station, minimizing differences in the temperatures between discharged water and seawater near the surface. Furthermore, all water used at the power station is treated to become clean water at its comprehensive wastewater treatment facility.



(Comprehensive wastewater treatment facility)

Kyushu Koatsu Concrete Industries Co., Ltd.

Recycling waste concrete poles

Kyushu Koatsu Concrete Industries Co., Ltd. collects waste concrete poles from Kyushu Electric Power and the NTT Group and brings into its plant. These poles are crushed, sorted, treated, and made into aggregate. The company reuses it to manufacture their concrete products and also sells it as a back-fill material for civil engineering work.



(Site for primary crushing)

Nishimu Electronics Industries Co., Ltd.

Development and sale of power storage systems

Recently, due to the need to control global warming by cutting CO₂ emissions, a wider use for clean energy sources is strongly hoped for. One such example is power generation with natural energy sources. Nishimu Electronics Industries Co., Ltd. developed a power storage system that can cut peak loads in the daytime and thus achieve load leveling. The system has been installed at the Saga Plant. The system consists of stationary energy storage equipment with an LL (load leveler) lead storage battery, bidirectional converter and system interconnection protective board. It can store power at night when loads are low in the power storage equipment, and recharge or discharge it to meet the demand in the daytime when loads are high. Operation of this system brings about the following effects:

1. Contribution to environmental preservation and resources conservation at power generation facilities;
2. Contribution to wider use of clean energy sources by combining it with power generators using natural energy sources;
3. The stationary energy storage equipment can also be used as an emergency power source.
4. Reduction of power rates by cutting contract demand.



(Bidirectional converter and system interconnection protective board)



(LL lead storage battery)

Japan Recycling Light Technology & System

Fluorescent tube recycling business

Japan Recycling Light Technology & System undertakes the recycling of fluorescent tubes and the production and sale of recycled fluorescent tubes.

- Establishment: May 2000
- Start of operation: October 2001



Kyushu Environmental Management Corporation

Confidential document recycling business

Kyushu Environmental Management Corporation is engaged in the recycling of confidential documents, the production and sale of recycled paper, and document storage.

- Establishment: May 2001
- Start of operation: November 2001



Nishinippon Plant Engineering and Construction Co., Ltd.

Scrapping incineration plants in a safe and environmentally friendly way

The provisions set forth by the Ministry of Health, Labor and Welfare require safe and appropriate environmental management in scrapping incineration plants that have gone through their service life. For more systematic, safer and highly efficient dismantling of such incineration plants, Nishinippon Plant Engineering and Construction Co., Ltd. offers comprehensive support from planning to back-up services to local areas.

Concept

- **Best Communication with communities**
To support clients with alliances (business tie-ups) close to communities
Transparent information disclosure to build trust
- **To be considerate of the surrounding environment and to secure safety**
To provide highly advanced skills of execution management accumulated at thermal and nuclear power stations
- **To offer optimal technology reasonably**
To propose recycling methods for the future global environment



(Dismantling works of the former Tobu Clean Center in Sasebo City)