

Environment

By recognizing the finite nature of the earth's resources, the Otsuka Group is working to help realize a carbon-neutral society. This includes initiatives to minimize carbon dioxide emissions through energy conservation and better productivity.

Low Carbon Neutral Initiatives



Otsuka Pharmaceutical Factory: Matsushige Factory

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Fuel Conversion to Natural Gas

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We used to use a heavy oil boiler, but the quality of heavy oil fuel was unstable and it caused additional CO₂ emissions and impact on the atmosphere. Plus, a lot of houses were built around the plant, increasing the importance of emissions management. Accordingly, we switched to a natural gas boiler in 2013. This has significantly lowered our emissions of air pollutants, contributed to a reduction of our environmental impact, and is, I feel, playing an important role in our sustainable development.

Initiatives on the Production Floor

In Tokushima Prefecture, where many of the Group's production facilities are located, the Tokushima Factory of Otsuka Chemical has a gas turbine cogeneration system that it uses to supply electricity and steam to Group companies in the area, with the aim of using energy efficiently and reducing environmental impact. The Matsushige Factory of Otsuka Pharmaceutical has a cogeneration system using liquefied natural gas (LNG). By supplying half the power needed by the factory, the system has reduced CO₂ emissions by about 20%. Amerta Indah Otsuka, maker of POCARI SWEAT in Indonesia, has also introduced cogeneration systems at two of its plants in Java, in order to save energy and secure a stable supply of electricity.

At the Kushiro Factory at Otsuka Pharmaceutical Factory, boiler fuel was converted from C heavy oil to LNG, significantly reducing CO₂ and air pollutant emissions. The company plans to convert boiler fuel from A heavy oil to municipal gas at its Toyama Factory in fiscal 2015. China Otsuka Pharmaceutical and Guangdong Otsuka Pharmaceutical, which manufacture I.V. solutions, Otsuka Sims (Guangdong) Beverage, a maker of POCARI SWEAT in China, and Egypt Otsuka Pharmaceutical, which makes I.V. solutions, have reduced their impact on the atmosphere through fuel conversion from coal and heavy oil to natural gas and diesel. Further, the Group is proactively making other improvements, including changing the set pressure in a once-through boiler, installing demand-monitoring devices, and shifting peak demand through production adjustments for products that require energy to manufacture.

Initiatives in the Office

The Otsuka Group's office energy-saving activities are focused on increasing the efficiency of energy use and improving the mileage of sales vehicles. Since fiscal 2014, environmental managers from different Group companies* have been meeting to work on environmental management, including energy-saving measures for office buildings across Japan. Having acquired ISO 14001 certification for its sales sites and research institutes in addition to production departments, Otsuka Pharmaceutical continues to promote environmental initiatives. Group companies that use business vehicles are actively converting them to eco-cars such as hybrid and other fuel-efficient vehicles. The fiscal 2014 eco-car usage rate was 81% at Otsuka Pharmaceutical, 74% at Otsuka Pharmaceutical Factory, 57% at Taiho Pharmaceutical, and 92% at EN Otsuka Pharmaceutical.

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Reducing CO₂ Emissions from Logistics

In order to reduce environmental impact from logistics, the Otsuka Group is focusing on a modal shift from road to rail and ocean transport, which allows shipment of large quantities while generating less CO₂ emissions. For large cargo and long-haul cargo, it is using Eco Liner containers that can be directly transferred from trucks to rail transport in addition to shifting to ocean transport, which has a lower environmental impact. Going forward, the Group plans to switch to rail transport for medium-haul in addition to long-haul transport. The Otsuka Group is also improving efficiency for short-range deliveries by conducting joint distribution of goods with other companies, while expanding delivery vehicle capacity in order to reduce the number of vehicles on the road. Additionally, the Group is converting its fleet of forklifts operated in factories from diesel- and gas-powered models, which are seen as an environmental impact problem, to models that run on electricity and LPG, which have a lower impact on the environment.

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* Otsuka Pharmaceutical, Otsuka Pharmaceutical Factory, Taiho Pharmaceutical, Otsuka Foods, Otsuka Warehouse, Earth Chemical

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Further CO₂ Reductions and Safety Measures

Naoki Furukawa

Facilities Maintenance and Engineering,
Matsushige Factory
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The Matsushige Factory of Otsuka Pharmaceutical Factory started fuel conversion and the installation of a cogeneration system in 2010. Aiming to reduce CO₂ even more, we changed the set pressure in our once-through boiler, in order to make effective use of the accumulator (a heat accumulator that handles changes in steam load) that we have conventionally used. This resulted in an additional reduction of 370 tons per year. In addition, as safety measures we installed a high-speed circuit breaker to avoid power outages caused by lightening strikes and constructed a storm surge barrier to protect the factory from tsunamis caused by earthquakes. Every day we are striving to ensure the stable supply of pharmaceuticals.

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Acquisition of ISO 14001 Certification

Andi Hidayat

HVAC & Building, Engineering Dept
Assistant Supervisor
P.T. Widatra Bhakti

Indonesia is one of the countries most susceptible to the effects of climate change. We fully understand the importance of working to protect the global environment while expanding our business. In 2014, we acquired ISO 14001 certification. We are committed to establishing a system for reducing CO₂ emissions while simultaneously saving energy.



Otsuka Techno: Naruto Head Office



Ridge Vineyards: Lytton Springs



Otsuka Warehouse: Imagire No. 5 Warehouse



EN Otsuka Pharmaceutical: Hanamaki Factory

Clean Energy Use

Through the installation of solar power generation systems and the use of clean energy, the Otsuka Group is working to reduce CO₂ emissions. Ridge Vineyards, a noted American winery, installed 400 solar panels on the roof of a building, covering around 40% of its electricity usage.

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Taiho Pharmaceutical: Green curtain at the Okayama Plant

Green Curtains

Every year offices and factories throughout the Otsuka Group grow vine plants such as bitter melon and morning glory by sunny windows in order to create green curtains that lower the indoor temperature as part of measures to save energy. Bitter melon planted at the end of spring grows thick, softening the strong sunshine in the summertime, lowering the indoor temperature by three degrees Celsius, which helps conserve energy and create a comfortable working environment. Some sites install light-blocking curtains in addition to green curtains and take other steps to increase the shading effect. The Naruto Factory of Otsuka Pharmaceutical not only gets cool air; it has also started a unique effort to raise awareness of energy conservation initiatives by offering the harvested bitter melon as an item on the lunch menu in the employee cafeteria. Meanwhile, Otsuka Chemical plants passion fruit seedlings and conducts energy saving initiatives in other fun ways.

Otsuka Pharmaceutical Factory, Taiho Pharmaceutical, Otsuka Chemical, EN Otsuka