

Effective Utilization of Resources and Reduction of Waste

We are continually striving to reduce waste in every area of the workplace, from the factory floor to offices and employee cafeterias, and are also working to improve recycling so as to help create a recycling-based society.

Promoting Waste Reduction Activities

We implement initiatives aimed at eliminating garbage rather than disposing of it as waste in an effort to contribute to the creation of a recycling-based society.

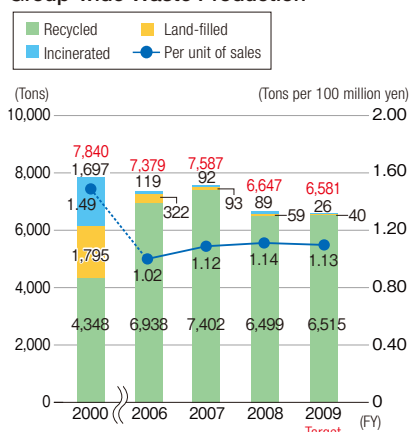
During fiscal 2008 we worked towards the twin goals of reducing the volume of waste per unit of sales by 1% compared to fiscal 2007 and achieving a 98% recycling rate.

As a result, we were able to achieve a Group-wide recycling rate of 98% and completely eliminate garbage at 13 domestic premises (recycling rate of 99% or higher).

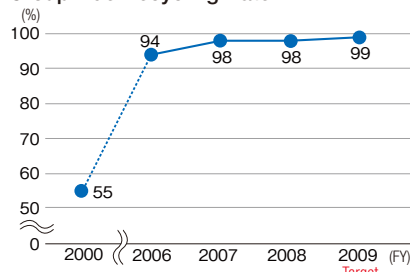
In terms of waste reduction, the volume of waste*¹ fell by 750 tons due to current economic conditions. Waste per unit of sales on the other hand rose by 3%.

We will continue to implement such activities in fiscal 2009 with the aim of increasing the Group-wide recycling rate to at least 99%, thereby completely eliminating garbage, and reducing the volume of waste by 1% per unit of sales.

Group-wide Waste Production*²



Groupwide Recycling Rate



*¹ Volume of waste = industrial waste + general waste
*² Waste production = industrial waste + general waste + valuable resources

Example Initiative

Citizen Machinery

Switching to forged materials

As part of the turning process used to manufacture components for our Cincom NC automatic lathes, we have started to forge processed materials (heating and press casting metal) in an effort to shorten processing times and reduce chips.

As we previously used round steel bars, half of the total weight was wasted in the form of chips. The introduction of forged materials however has enabled us to process materials that are closer in shape to the finished product. As a result, we have managed to reduce the weight of materials purchased from 6.3kg to 3.7kg (a reduction of 41%) and cut processing times by four minutes per item.

Although we had previously envisioned using forged materials, the processing costs involved always meant that it was unfeasible. As material costs have soared recently however, it is now possible to forge materials for roughly the same cost as using steel bars. With 400 items being used per month, due in part to the crossover of components with different models, we have effectively reduced chips by approximately one ton and processing times by 26 hours a month.

Reducing chips by forging materials



Example Initiative

Citizen Sayama

Achieving a 100% recycling rate

We are starting to see the effects of our recycling initiatives aimed at completely eliminating garbage and efforts to cut waste handling costs at Citizen Sayama Co., Ltd.

We have provided repeated explanations in individual workplaces and have successfully refined the process of separating plastic waste. Having called on all workplaces to help out wherever possible by dismantling composite products containing a mixture of metals, substrates, plastics, electric wiring and other materials, which have previously been disposed of at landfill sites, we have managed to put in place an effective material recycling system. We have also reappraised waste handling contractors based on information provided by the Subcommittee on Waste Reduction, enabling us to sell waste from 35 of our 90 products at a profit. As a result, we successfully achieved a 100% recycling rate in fiscal 2008 and reduced waste handling costs by 30% compared to fiscal 2004 (an annual reduction of approximately 800,000 yen). We will continue to focus on selling waste at a profit instead of paying for it to be collected in the future.



A selection of composite products containing different materials

Distribution-based initiatives

We continue to work on improving the efficiency of distribution and reducing the volume of materials distributed by the Citizen Group as a whole.



Distribution-based initiatives

<http://www.citizen.co.jp/english/csr/environment/distribution.html>