

Sept. 10, 2007

**TNSC receives an award by METI for contributions  
to the protection of the ozone layer and a fight  
against global warming**

Taiyo Nippon Sanso Corporation jointly – with Tokai Rika Co., Ltd. – received the 10th Annual Ozone Layer Protection and Global Warming Prevention awarded Presented by the Ministry of Economy, Trade and Industry to companies judged to have made significant contribution to the protection of the ozone layer and a fight against global warming.

The awards ceremony for the 10th annual Ozone Layer Protection and Global Warming Prevention was sponsored by the Nikkan Kogyo Shimbun, Ltd. This award started in 1988 as a prize for protection of the ozone layer only. Taking effect from the 6th Annual awards ceremony, in 2003, the scope (and name) of the award was expanded to cover companies that have taken active steps to fight against global warming by means of protecting the ozone layer.

The Ministry of Economy, Trade and Industry awarded the 10th annual award for Ozone Layer Protection and Global Warming Prevention to both TNSC and Tokai Rika for their recent joint development of commercially feasible system for the supply of an alternative gas to sulfur hexafluoride (SF<sub>6</sub>), which is currently used as a cover gas in magnesium die-casting.

The melting of magnesium alloys in air, sulfur hexafluoride which has a global warming potential (GWP) of 23,900 has been used because of its propensity to burn ferociously upon reaction with oxygen. For this reason, the industry has long been searching for an alternative cover gas and a suitable supply system, in order to protect the environment. At Tokai Rika's Otowa Plant, tests were conducted using a breakthrough alternative gas called MG Shield, with a GWP of 1, and a supply system – both developed by TNSC. The tests, using a full-scale system model, proved the

commercial viability of this new approach, enabling mass production of an alternative cover gas for magnesium die-casting. The use of this new system greatly reduced the volume of the greenhouse gas sulfur hexafluoride released into the atmosphere at the Otowa Plant. The two companies were awarded the prize by the ministry in recognition of their significant contribution to the fight against global warming.

At the prize-giving ceremony, held on September 6, Senior Vice Minister of Economy, Trade and Industry Yoshitaka Shindo presented the prize to the representatives of Taiyo Nippon Sanso and Tokai Rika.



The photo shows TNSC staff at the awards ceremony. Executive Vice President Keiji Futamatsu is seen at center right, and Senior Managing Director Yutaka Kurosawa at center left.