

# Japan's Kyoto Protocol Targets Cleared Three Years Running

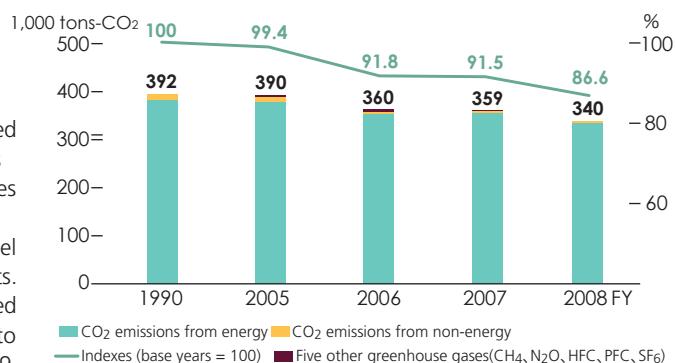
## 13.4% reduction in greenhouse gas emissions in FY2008

The greenhouse gas emissions of the Yokohama Rubber Group's operations in Japan were 13.4% lower in FY2008 than in the base year,\*<sup>1</sup> marking the third year in succession that we have cleared the target reduction in emissions set for Japan under the Kyoto Protocol. We have also succeeded in meeting our own voluntary target of a 12% reduction compared with the base year by 2010 two years ahead of schedule. This was achieved thanks to a number of factors, including activities to improve energy conservation and an in-house "black illumination"\*<sup>2</sup> campaign, as well as changing the types of fuel used and installing cogeneration systems at our core tire plants. The decline in output due to the economic recession also played a part. Taking into account the impact of lower output, we aim to achieve an 18% reduction compared with the base year in FY2009.

\*1. The base year is 1990 for all substances except HFCs, PFCs, and SF<sub>6</sub>, for which 1995 is used as the base year in line with the Kyoto Protocol.

\*2. A campaign to switch off all lighting outside certain working hours that began at head office in summer 2008.

Total greenhouse gas emissions and index of emissions (1990 = 100)



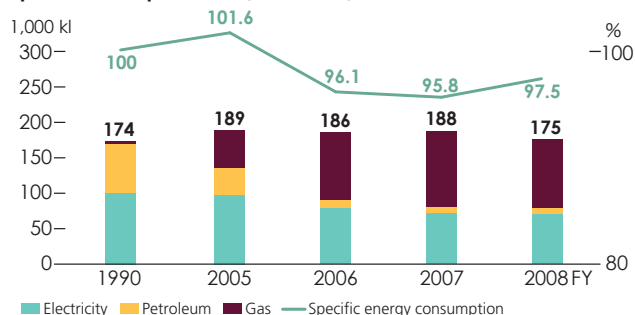
\*Scope: Japan operations of the Yokohama Rubber Group.  
\*Greenhouse gas emissions were calculated based on the Calculation and Reporting Manual for Greenhouse Gas Emissions published jointly by the Ministry of the Environment and the Ministry of Economy, Trade and Industry (METI)

## Pursuing further improvements to specific energy consumption through energy conservation

The specific energy consumption (e/t)\*<sup>3</sup> of all production operations in Japan in FY2008 worsened 1.8% compared with the previous year due to lower output (which functions as the denominator) due to the rapidly deteriorating state of the global economy. This was the first year-on-year deterioration in three years. In FY2009, our strategy is to pursue drastic improvements by, among other things, adopting renewable energies, as well as further enhancing energy conservation activities in order to achieve improvements despite anticipated lower output.

\*3. e/t: Specific energy consumption, where "e" stands for energy use and "t" for the volume of production (quantity of rubber kept in warehouses in the case of Yokohama Rubber).

Energy use and specific energy consumption in domestic production operations (FY1990 = 100)



**Naoki Ueshige**  
Manager of Maintenance Dept., Shinshiro Plant (Member of the Global Warming Countermeasures Committee and Tire Energy Conservation Sub-committee)

### Energy conservation is an integral part of Yokohama Rubber's manufacturing tradition

Energy conservation by Japanese enterprises took off following the oil crises in the 1970s, since when solid progress has continued to be made. One new means now being used to help achieve energy savings is the "blue sheet." The purpose of this is to enable employees to better visualize and share information on energy-saving activities by entering details of any minor improvements that can be made, such as the possibility of reducing energy consumption by using inverter motors, so that energy conservation officers can share these ideas via the company intranet. Blue sheets were first adopted at the

Mishima Plant in 2005, and their use quickly spread to other plants in Japan and abroad. Under plans for FY2009, strict caps are imposed to limit energy use. Further to examination of various categories of energy conservation before the start of the fiscal year, improvements exceeded 30% compared with the previous fiscal year. The majority of suggested improvements come from the factory floor. Energy-saving activities form part of our tradition of manufacturing, and we will not waver in our enthusiastic and innovative pursuit of further savings.

## 100% Recycling of Industrial Waste Achieved at Five Plants in Japan

In January 2008, five Yokohama Rubber plants in Japan—(in Hiratsuka, Mie, Ibaraki, Hiratsuka-East, and Nagano) achieved 100% recycling\*<sup>1</sup> of industrial waste two years ahead of schedule. Yokohama Rubber has maintained its complete zero

emission\*<sup>2</sup> record at all eight production operations since March 2006. In order to ratchet activities up a level, however, we aim to achieve 100% recycling of industrial waste by the end of FY2010.

\*1 "100% recycling" is defined as zero final disposal (final disposal = direct landfill disposal + incinerated waste unproductive of effective use)

\*2 "Complete zero emission" is defined as zero emission of direct landfill disposal of industrial waste