

## Overall Perspective of Environmental Impact

NGK's business activities are based on the Power, Ceramic Products, Engineering, and Electronics business groups. These conduct product development and design, procure components, raw materials, and other items, and manufacture and sell products. At

right is a material flow chart that shows the input of materials and energy in business activities, and the output of emissions into the environment and of manufactured products.

### Overview of Input

Input mainly comprises raw materials and energy used in production activities, with the majority of these materials used in ceramics production. Activities to reduce CO<sub>2</sub> emissions, due to their direct link to global warming, are an important business challenge, and as of 2004, NGK is pressing ahead in its efforts to achieve NGK's medium and long term targets for reductions of greenhouse gases. Additionally, chemical substances comprise a significant ratio of inputs, therefore the Company is carrying out strict and proper management in their handling, and its efforts to reduce the quantities used are achieving results. Furthermore, in the area of fossil fuel usage for logistics, NGK is aiming to reduce the impact on the environment through the employment of efficient operating systems.

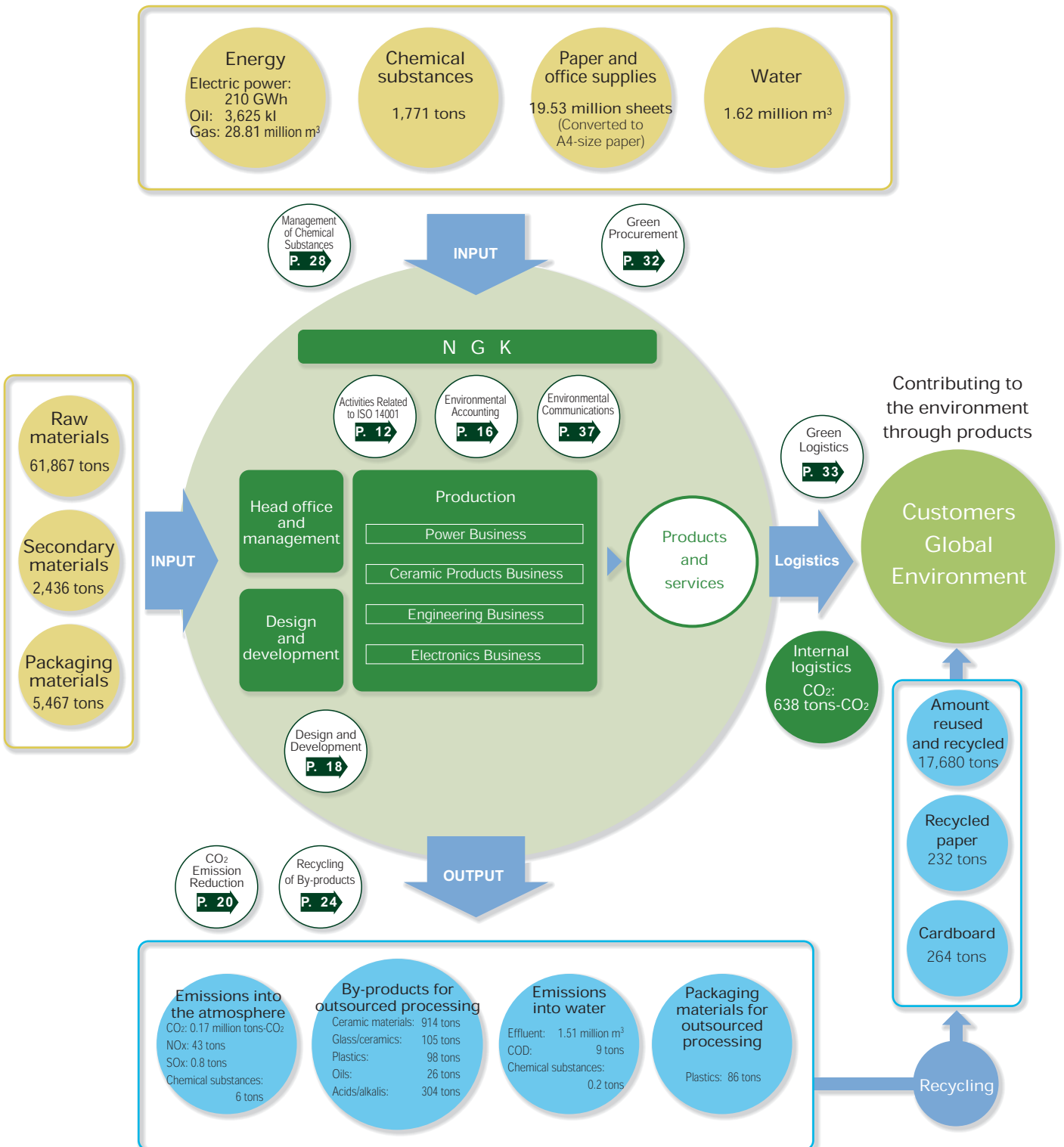
### Overview of Output

Output comprises emissions of CO<sub>2</sub> into the atmosphere, and industrial effluent into public bodies of water, both of which are as a result of production activities, and NGK is making efforts to reduce and curtail both of these. What is more, the reduction and recycling of ceramic materials and other by-products generated in the course of manufacturing are major issues for NGK, therefore, while aiming to reach the 2005 target of zero emissions, the Company is further enhancing its measures towards this end. Many of NGK's products and technologies contribute towards reducing the impact on the environment, and it will continue to be an important mission for us to develop products and technologies that contribute to a better environment.

Moreover, within the Company, it is beholden upon us to implement enhanced environmental conservation activities throughout all of our businesses, including appropriate operation of environmental management systems throughout the whole company.

### Highlights of 2004 Environmental Activities

- 1** **Revision of Environmental Action Guidelines** **P. 8**  
We revised the action guidelines that were established in March 1996, to reflect changes in society, and advances in environmental management.
- 2** **Acquisition of Certification for Environmental Management Systems by 6 Group Companies** **P. 12**  
Four domestic, and two overseas Group companies acquired certification for their environmental management systems.
- 3** **Suppression of Increases in CO<sub>2</sub> Emissions** **P. 20**  
While we have achieved an increase in both the scale of our business and in production, improvements in production technology and higher-efficiency facilities have kept any increases in emissions of CO<sub>2</sub> in check. A 10,000-ton reduction of CO<sub>2</sub> was achieved (equivalent to that generated from the production increases).
- 4** **Zero Emissions at Hand** **P. 24**  
By-products for outsourced processing were down to 1,579 tons, a 63% reduction from 2003, and we expect to largely achieve zero emissions in 2005 (by-products for outsourced processing: 1,000 tons or less).
- 5** **Revision of Green Procurement Guidelines** **P. 32**  
Through the revision of green procurement guidelines, we are raising awareness among suppliers together with putting in place a system that enables us to meet customer needs for avoiding the risks of controlled substances.



(\*) Data on this page from NGK's Nagoya, Chita, and Komaki plants

(\*) Environmental performance values in this report have been rounded up for convenience; therefore they may not match totals when added together.

(\*) 2003 environmental performance values in this report are revised estimates made during 2004, therefore these may differ from the values in the 2004 report.