Reduction in Environmental Impact in the Semiconductor and FPD Manufacturing Processes

The Tokyo Electron Group develops and manufactures semiconductor and flat panel display (FPD) production equipment and supplies it to semiconductor and FPD manufacturers around the world. Semiconductor and FPD manufacturers consume substantial amounts of electricity and gas to manufacture their products, and the world demand for semiconductors and FPDs is expected to further increase in the future. The Tokyo Electron Group sees as one of its social missions the provision of equipment that will contribute to reducing the environmental impact caused by semiconductor and FPD manufacturing processes, and is developing such equipment mainly in cooperation with its customers. (For the results of the roundtable meeting held with stakeholders, see “Reducing the Environmental Impact of Semiconductor Production Equipment” on pages 8 to 11.)

Providing Energy-Saving and Efficient Semiconductors

The application of semiconductors and FPDs will be expanded and these products will be used in more diverse products. It is expected that the world’s demand for semiconductors and FPDs will more than double in the future.

Semiconductors and FPDs need electricity to perform their expected functions, such as computing. At present, however, some electricity is wasted as heat. It is therefore important to reduce the consumption of electricity by improving the function and efficiency of semiconductors and FPDs.

The Tokyo Electron Group makes relevant proposals to its customers based on its know-how on semiconductor and FPD manufacturing processes built up over many years as a manufacturer of semiconductor and FPD production equipment, thereby supporting them in developing even more efficient semiconductors and FPDs that have no energy losses.
Connecting the World through Advanced Technology

Today’s world is made up of countries where people are receiving the benefits of advanced technology and countries where people cannot receive these benefits. In view of this situation, we believe that all the people in the world must be able to enjoy the benefits of technology and have equal access to business opportunities, education, and medical services. Semiconductor and FPD manufacturers, who are the Tokyo Electron Group’s customers, produce CPUs, memory chips, and liquid crystal displays. These items are used in a wide spectrum of electronics products to improve the performance and energy efficiency of these products.

By supporting customers in manufacturing their products, the Tokyo Electron Group sees contributing to the creation of a global society in which everyone will have equal access to knowledge and information as its essential social role.