Commitment by Top Management

Development of Modern Civilization at the Expense of the Global Environment

I am afraid that the global environment is approaching a critical point in recent years. Looking back on our history, human beings have been approaching nature in two different ways. Some pursued sustainable development in harmony with nature while others just fought against nature. Especially in the modern age, people went to extremes to conquer nature and almost destroyed it. Particularly in the advanced countries, modern civilization has been developed at the expense of the global environment, and I am afraid that the earth’s capacity to replenish and repair itself is near its limit.

In turn, the development of modern civilization has, however, forced us to recognize the importance of the environment. For example, as a result of humankind achieving its dream of space flight, it has become possible for us to view the earth from an objective viewpoint outside the planet, and we are now widely aware that the earth is vulnerable even to minor risks.

It is becoming increasingly difficult to maintain the global environment in a stable manner, and so we have no time to waste: we must act rapidly to restore the global environment using the knowledge we have accumulated as our civilization has developed and the wisdom cultivated based on our experience of living in harmony with nature.

Providing Environment-Friendly, Cutting-Edge Manufacturing Process and Semiconductor Production Equipment in Response to the Increasing Role of Semiconductors

As a key to restoring the global environment, it is important to encourage the newly industrializing countries (NICs), who are involved in improving their economies and the living standards of their people, to pursue development in a way that will not further damage the environment. The center of semiconductor production is now shifting from the United States and Japan to the Asian region, and it will then shift to the NICs. When these countries develop the semiconductor industry in their countries, it is essential that they incorporate the concept of EHS (environment, health and safety) into their economic development to protect the environment, and I believe that it is the Tokyo Electron Group’s mission to provide these countries with environment-friendly and highly economical and productive semiconductor production equipment and technology.

It is also important to ensure the safety of our products. We will provide our customers with semiconductor production equipment together with the know-how needed to use the equipment in a safe manner.

We are now entering the era of the ubiquitous network society. In the future, devices utilizing semiconductor technologies will be more widely used in society, which will improve the efficiency of society and contribute to reducing environmental impact in its various aspects.

Semiconductor manufacturers are now attributing more importance to the design and development of software in order to manufacture next-generation semiconductors. Society is increasingly demanding that manufacturers of semiconductor production equipment and materials take charge of developing semiconductor manufacturing process technologies.

Tokyo Electron Group will further contribute to the creation of a society where people live in harmony with the global environment by providing environment-friendly, cutting-edge semiconductor manufacturing process technologies.

“As semiconductors and flat panel displays (FPDs) become part of the social infrastructure, the mission of semiconductor production equipment manufacturers is becoming increasingly important.”

Tetsuro Higashi
Chairman & CEO
Tokyo Electron Limited
The Mission of Tokyo Electron Group Is to Provide the Equipment to Manufacture High-Performance Semiconductors Efficiently

I participated in the Davos meeting\(^1\) in January 2007. Many sessions focusing on global warming were held during the meeting, and I felt strongly that the problem is attracting a great deal of attention on a global scale. To solve the global warming problem, technology will play the most important role: I believe that drastic technological innovation will be necessary in solving the problem.

As for semiconductors, society expects us to supply semiconductor production equipment that enables semiconductor manufacturers to produce high-performance and highly environmentally efficient semiconductors at low cost. The semiconductors thus produced and used in electronic devices and automobiles will contribute to reducing the power consumed globally, and eventually to the solution of the global warming problem.

In the future, we intend to actively cooperate with companies whose efforts are contributing to reducing the power society consumes by providing energy-saving devices such as power semiconductor devices and solar panels.

One of the fundamental requirements in the development of more energy-saving semiconductor production equipment in our core business, and one that our developers are now widely aware of, is that we have to reduce the environmental impact caused by the equipment while it is in use. Based on this recognition, the design for safety is as important as environment.

It is also important to raise the environmental and safety standards of the entire industry. At the Davos meeting, I talked with some top executives of leading semiconductor production equipment manufacturers from overseas and we agreed on the necessity of giving active support to SEMI\(^2\) to share environment- and safety-related technologies across the industry.

Dramatically Improving the Performance of Our Equipment Will Eventually Contribute to the Growth of Developing Countries

Semiconductors will play an important role in the growth of the world’s developing countries. In the IT industry, which focuses on software, you can start up a business with a small investment. Also, a lot of people in developing countries will be able to learn regardless of distance and time if they use communication devices and technologies based on PCs, which use semiconductors. To this end, I believe it vital that we expand the use of semiconductors.

To achieve these objectives, however, semiconductor prices need to be reduced substantially, while semiconductor manufacturers, who are our customers, need to make a profit. In support of this, we will make strenuous efforts to improve the performance of semiconductor production equipment.

I am proud that TEL is part of the semiconductor industry, which can make a great contribution to society at large in the ways I have described here.

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1. **Davos meeting**: Annual meeting of the World Economic Forum held in Davos, Switzerland, where the world’s corporate managers, politicians, and economists gather to discuss global politics and economy
2. **SEMI**: Semiconductor Equipment and Materials International, an international industrial association of semiconductor/FPD production equipment and materials manufacturers

"We will support our customers in developing semiconductors by providing them with more energy-saving equipment."