Commitment by Top Management

The social mission of the Tokyo Electron Group is to recognize the severity of global environmental issues and make positive contributions toward solving them through our business operations

Tetsuro Higashi
Chairman & CEO
Tokyo Electron Limited

Contributing to the global community through technological breakthroughs that enable a substantial reduction of our environmental impact—this is the Group's mission

Sixty-one years have passed since the first transistor was invented in 1947 in the aftermath of World War II. During this period, semiconductors have replaced vacuum tubes to become the technological mainstay, helping achieve significant improvements in productivity and making society more prosperous. Considering how much energy would have been required to achieve the current productivity level without semiconductors, we realize how big a role semiconductors have been playing in order to sustain the affluent and convenient lifestyles we enjoy today. However, because of this high productivity and convenience, our energy consumption has also risen significantly and the global environment is now heading toward the limit of its sustainability.

Given the fact that semiconductors serve as a basis for many, if not all, modern industries, it is imperative that our environmental impact be reduced at every stage of the product lifecycle, from manufacturing to consumer use, by improving energy efficiency and taking other necessary measures. Well aware of this pressing social situation, we are committed to becoming a part of environmental solutions. This is one of the key elements of the TEL Missions (see pages 6 and 7).

Promoting the photovoltaic (PV) cell production equipment business, together with an ongoing focus on increasing the energy efficiency of semiconductor and FPD production equipment

To achieve lower electricity consumption worldwide, alternative energy technologies need to be developed and commercialized for widespread use as soon as possible. To make this happen, the Group has established a joint venture with Sharp Corporation to launch a PV cell production equipment business.

We held extensive discussions on which direction the Group should go in light of the technological and economic obstacles the world is now facing. Our conclusion was that we should not limit ourselves to existing semiconductor and FPD fields but make further direct contributions to the environment.

Developing natural energy technologies is not only a responsibility but an opportunity

In the hope of closing the gap with developed nations, emerging countries are now looking to alternative energy sources that can be supplied efficiently, safely and in sufficient amounts. Solar power and other natural energies must be at the core of such alternative sources. In order to encourage widespread use of PV cells as the standard, we need to improve the efficiency of their light energy conversion and offer related equipment at a lower cost. Making this happen is our responsibility, but we can also see a great number of business opportunities in this area.

At the Tokyo Electron Group, we have a culture that welcomes active and open discussion among employees. Our employees are passionate about conserving the environment and a mind-set of motivating and inspiring colleagues permeates the entire Group. Our contributions to global communities continue to expand across wider areas. Our efforts to develop and commercialize PV cells have only just begun; metaphorically, we have only accomplished the first 50 meters of a full marathon.

This year will be marked as the starting point of more substantial contributions to the global environment through innovation and growth.

Development and adoption of natural energy products to help solve energy issues and achieve world peace

Steadily accumulating technological capabilities has given rise to a new PV cell production business

The Tokyo Electron Group has decided to enter the clean technology development market in full force. Such a bold decision would have been impossible without the production equipment technologies we have developed and manufactuerd over many years.

Semiconductors have been of tremendous assistance in making our lives more convenient and affluent. However, when we step back and think about what we truly mean by "affluence," considering today's societal problems such as international economic disparities, we realize that solving energy issues is more urgent than pursuing further convenience.

It is not surprising that society's expectations of the Group change over time as contemporary social concerns also change. We anticipate that the PV cell production equipment business will help meet present-day societal needs. This new initiative will be developed based on the solid foundation we have built up over many years, including a variety of improvements and technological solutions we have provided for our customers to help improve the productivity of their factories, and semiconductor and FPD production equipment manufactured at those sites.

We will aim to reduce our environmental imact by half by 2015

About 80% of the total environmental impact of semiconductor production equipment across its lifecycle is generated when the equipment is in use at customers' factories. Thus, we will focus on proposing and implementing measures to improve energy efficiency of our products. In fiscal 2008, we successfully reduced electricity consumption of a certain product by about 50% under a technological partnership set up with client facilities. This accomplishment was recognized as an excellent example of environmentally conscious initiatives, for which we received a customer award.

As the next step, we aim to develop equipment that enables a 50% reduction of the total environmental impact of new customer factories scheduled for completion in 2015. This goal is specified in our latest mid-term plan (see page 18).

The Group will continue taking aggressive actions to reduce the environmental impact of our products and business.

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 the economy.

Kiyoshi Sato
President & COO
Tokyo Electron Limited

Development of clean technologies is the most important task in solving energy issues

The sheer gravity of global energy issues encouraged us to start a PV cell production equipment business in earnest—as an initial step to tap into the clean technology market—in parallel with reducing the environmental impact of existing products.

Discussions at the Davos meeting[1], which I have attended for the past two years, acutely reminded me that the current energy situation has reached a point where unavailability of new energy resources to replace oil reasonably soon could lead to international conflict.

I believe that our initiative to achieve a stable supply of high-performance yet affordable PV cells in the near future will ultimately help close the economic gap and maintain peace throughout the world.

Maintaining a global perspective is important today as a wide range of issues need to be addressed. At the Davos meeting, I was able to gain a number of fresh perspectives, which I now share with our employees on various occasions.

Recognizing the value of our business in society, we at the Tokyo Electron Group will continue striving to establish outstanding technologies that contribute to the global community.