Tokyo Electron and Society

TEL is working to establish a foundation that will facilitate information sharing on trends in the global environment and society.



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TEL supplies semiconductor production equipment to semiconductor manufacturers, helping them to achieve a higher degree of circuit integration and production of high-performance semiconductors, thereby contributing to the worldwide advancement of information and communication technologies.

So how does the advancement of information and communication technologies affect the environment? To give one example, the advancement of semiconductors has greatly reduced the amount of electricity consumed by previously energy-hungry machine tools and consumer electronics. In addition, the effective use of information and communication technologies has made it easier for trucks, to carry full loads on both their departing and returning trips, thus reducing waste. The further enhancement of communication services could also make working at home a more common practice, thus cutting down on unnecessary commuting. With PCs and the Internet reaching more people and reducing communication cost, it is becoming possible for people around the world to share advanced information.

Hereafter, protection of the global environment will require that all of us share accurate information about trends in the environment and society. No element in creating the foundation for this is more important than information and communication technologies. It is TEL's desire to make a major contribution toward preparing this foundation for environmental protection.

Nevertheless, TEL's plants do have considerable environmental impact during the process of creating products. Therefore, we have taken it upon ourselves to reduce the impact through a thorough program of resource saving, energy saving, recycling and assurance of employee and customer safety.

Cleaning systems: machines that clean dust and particles off wafers. These use pure water, acid, etc.

Oxidation/diffusion LPCVD systems: machines that bind oxygen (O_2) or nitrogen (N_2) on the surface of wafers and create oxide films, nitride films, etc., at high temperatures.

Metal CVD systems: machines that form metal wiring on wafers. CVD is a process of making deposits on the surface of wafers by causing chemical reactions with vapor and gas.



TEL contributes to reducing society's environmental impact through advancing information systemization.



TEL's Flow of Materials

Coater/developer: A machine that applies an even coat of photosensitive material (photoresist) on wafers, dries them, and then develops the exposed wafers.

Plasma etching system: A machine that uses plasma to etch away (or chemically corrode) only certain portions of the surface of wafers. Wafer prober: A machine that inspects each circuit formed on finished wafers.