RESEARCH AND DEVELOPMENT

The objectives of Tokyo Electron's group-wide R&D efforts are to further enhance the Company's competitiveness in the core businesses of semiconductor and FPD production equipment, and to develop the new products and businesses that will support the Company's further growth in years to come.

Broad research themes for semiconductor production equipment

Semiconductor manufacturers, our customers, require production equipment that allows them to achieve finer geometries, higher speed, lower power consumption and higher productivity. SPE manufacturers are playing an increasingly important role in supporting semiconductor manufacturers in this regard. We believe Tokyo Electron's competitiveness is based on our capability to provide production equipment that can realize the process performance customers require. Thus, Tokyo Electron collaborates closely with customers in developing new production equipment.

Accelerating R&D efforts to develop new businesses that can support future growth

In addition to efforts to enhance existing products, Tokyo Electron is also developing new products and businesses that can contribute to future growth from a medium- to long-term perspective.

One example is the Company's work on a new type of plasma source known as Radial Line Slot Antenna (RLSA) for use in film deposition and etching processes of semiconductor manufacturing. In June 2007, the Company established Tokyo Electron Technology Development Institute, Inc., in order to accelerate efforts to commercialize this technology. In December 2006, Tokyo Electron acquired U.S.-based company Epion Corporation (now TEL Epion, Inc.), which boasts a unique low-energy ion control technology known as Gas Cluster Ion Beam. Tokyo Electron plans to cultivate these as the Company's core technologies, and expects them to foster new innovation in semiconductor production.

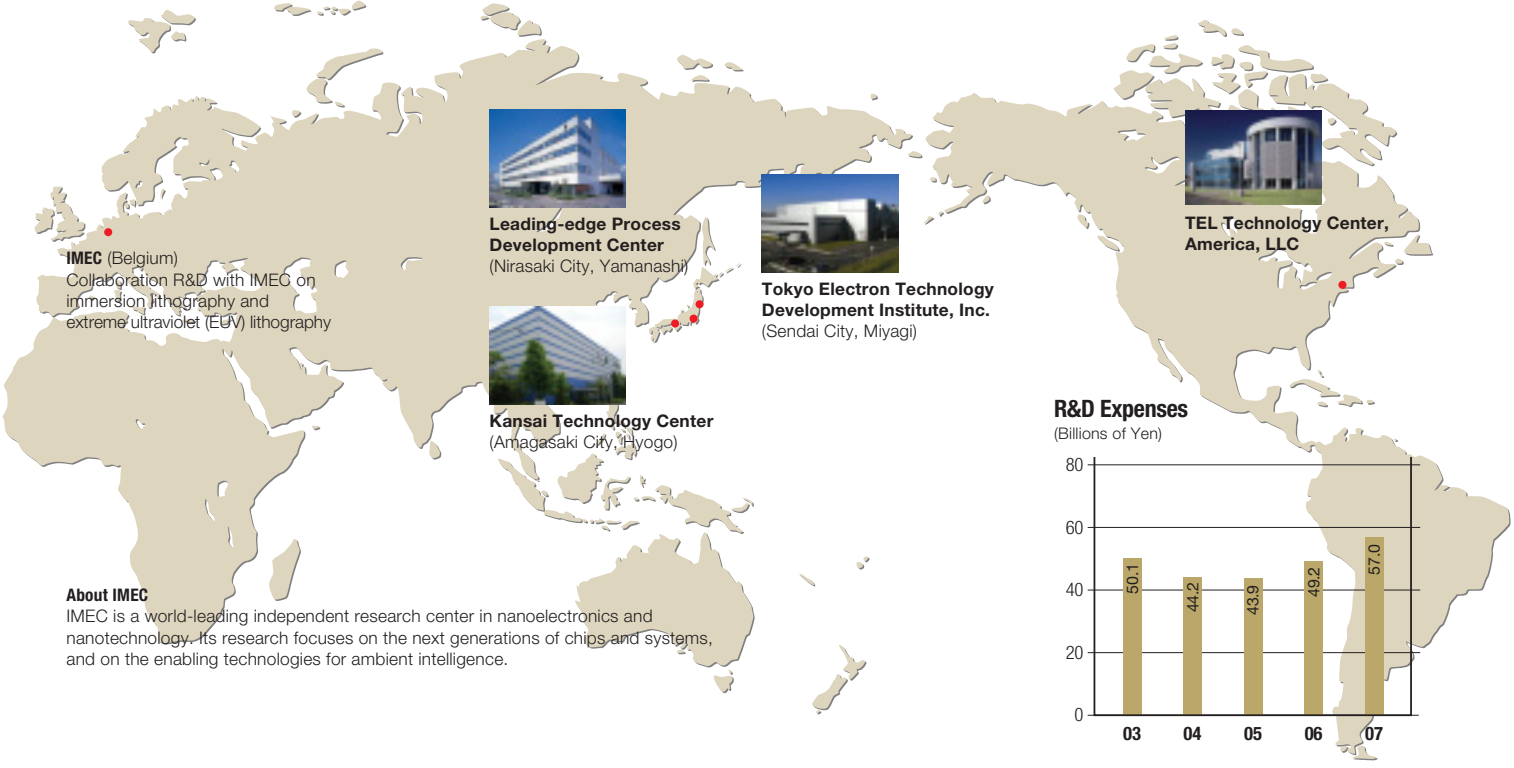
In addition, the Company is continuing to make advances in the field of Micro Electro-Mechanical Systems (MEMS), as part of its efforts to develop future technologies.

Promoting more effective R&D via consortia and ties with industry and academia

The scope of research and development that Tokyo Electron needs to address is expanding.

In order to make these research efforts more effective, Tokyo Electron has been working in collaboration with universities, and making active efforts in industry consortia as well as projects that include manufacturers and academic institutions.

Accelerating R&D to Drive Growth



In Japan, one example is the semiconductor industry's MIRAI project (Millennium Research for Advanced Information Technology). Overseas, Tokyo Electron is participating in the International SEMATECH project, in the United States; the Albany NanoTech project, promoted by the New York State Government; as well as collaborating with IMEC in Belgium. In February 2007, the Company became a new member of the Semiconductor Research Corporation (SRC), a semiconductor research consortium which unites leading semiconductor-related manufacturers with world-class universities.

Unearthing the world's most promising technologies

Tokyo Electron's growth strategy, over the longer term, calls for the Company to "pursue new innovations" and "create and develop new businesses." The Company is supplementing its own in-house research activities with efforts to identify, evaluate and utilize promising technologies developed outside the Company. In July 2006, Tokyo Electron established TEL Venture Capital, Inc. to identify, evaluate and utilize promising new technologies on a global scale. TEL Venture Capital is based in California's Silicon Valley, which is home to many start-ups and venture capital firms.

Tokyo Electron's R&D Framework (As of June 2007)

Product development in existing SPE and FPD business units

Tokyo Electron AT Limited	Etch system, CVD system, FPD Etch/ash system
Tokyo Electron Kyushu Limited	Coater/developer, Cleaning system, FPD Coater/developer
Tokyo Electron Tohoku Limited	Thermal processing system
Tokyo Electron TS Limited	Wafer prober

R&D for new and advanced technologies

Tokyo Electron Technology Development Center	Research and development
Tokyo Electron Leading-edge Process Development Center	Process development
Tokyo Electron Software Technologies Limited	Software technology
Tokyo Electron Technology Development Institute, Inc.	RLSA plasma technology
TEL Technology Center, America, LLC.	Process development
Timbre Technologies, Inc.	Integrated Metrology
TEL Epion, Inc.	Gas Cluster Ion Beam technology

Identification of promising technologies

TEL Venture Capital, Inc.	