



Environmental Protection Agency Honors Applied Materials With 1999 Climate Protection Award

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Remote Clean Technology Cited for Leadership and Technical Innovation

in Protecting the Global Climate

Applied Materials, Inc. today announced that the U.S. Environmental Protection Agency (EPA) has honored it with a 1999 Climate Protection Award at a ceremony held in Washington D.C. This year's award recognizes only ten individuals and organizations worldwide that have made exemplary efforts and achievements to protect the global climate. These contributions support the goals of the Framework Convention on Climate Change and the Kyoto Climate Protection Protocol.

The EPA honors Applied Materials' Remote Clean(TM) technology, which virtually eliminates emissions of global warming PFC (perfluorocompound) gases from the chamber cleaning process of its CVD (chemical vapor deposition) systems. Originally developed by technologists at Applied Komatsu Technology, Inc. (AKT), an Applied Materials and Komatsu Ltd. joint venture company, Remote Clean technology was further commercialized at Applied Materials and is a standard process for all the company's CVD products.

"We're pleased the EPA recognizes our Remote Clean technology as an important step forward for the industry," said Sebastien Raoux, one of the developers of the Remote Clean technology who is manager of the Process Environmental Characterization Group at Applied Materials. "The Remote Clean is the industry's first mainstream product to virtually eliminate PFC emissions and at the same time enhance chamber life and system throughput. As a successful implementation of sustainable development practices, this achievement will help revolutionize semiconductor manufacturing, creating a new paradigm that can significantly reduce environmental impact now and for future generations. Applied Materials will continue to help the semiconductor industry meet future environmental commitments and applauds similar efforts being made throughout other industries."

During CVD deposition, residues from the process accumulate on the reactive chamber's walls. To prevent buildup and potential contamination to the wafer, these chambers must be periodically cleaned. Conventional chamber cleaning methods use harsh, corrosive long-lived global warming PFCs (including CF4 and C2F6) to remove deposits from the chamber. These molecules are very stable, and their utilization efficiencies are limited.

The Remote Clean method employs a milder NF3 gas. A Remote Plasma breaks up the reactive molecules with an efficiency of typically 99 percent and only neutral fluorine atoms are introduced to the chambers. The Remote Clean technology reduces the emission of global warming gases by over two orders of magnitude, compared to conventional clean processes. The Remote Clean provides a very efficient clean and is not damaging to chamber parts. The process also contributes to increased uptime, resulting in higher system output and a significant increase in overall tool productivity.

Candidates for the Climate Protection Awards are evaluated on leadership, personal dedication and technical achievements in protecting the climate through pollution prevention, recycling and engineering innovation. An international panel co-chaired by Dr. Stephen O. Andersen (U.S. EPA, Atmospheric Pollution Prevention Division) and Professor Jose Goldberg (Universidade de Sao Paulo, Brazil), representing industry, government and non-governmental organizations from Brazil, France, India, Japan, Mauritius, Mexico, the Netherlands and the United States judged this year's winners. The EPA makes the final selection of award winners.

Applied Materials, Inc. is a Fortune 500 global growth company and the world's largest supplier of wafer fabrication systems and services to the global semiconductor industry. Applied Materials is traded on the Nasdaq National Market System under the symbol, "AMAT." Applied Materials' web site is <http://www.appliedmaterials.com>.