



UMC

2008

CORPORATE SOCIAL RESPONSIBILITY REPORT

2008 Corporate Social Responsibility Report

About this Report

About the 2008 Corporate Social Responsibility Report

UMC issues its annual Corporate Social Responsibility Report to the public to disclose corporate social responsibility practices and results, while outlining related strategies and goals. "UMC 2008 Corporate Social Responsibility Report", published in June 2009, covers the company's policies, practices and performance of economic, environmental and social aspects between January 1, 2008 and December 31, 2008. Selected performance data from 2004 - 2007 is also included (UMC merged with SiS Microelectronics Corp. in 2004; its data has been included since April 2004. UMCi was acquired in December 2004, and its data has been included since January 2005). The report covers manufacturing sites in Taiwan and Singapore, the Taipei office, and UMC's subsidiary in Japan. Offices in Europe and the United States are excluded. Exceptions will be annotated within the articles when applicable.

UMC issued its first environmental report in 2001 and its first corporate social responsibility report in 2006. This is the fourth corporate social responsibility report that UMC has issued, and also the ninth non-financial sustainability report. The report for 2008, which follows the structure of UMC's 2007 CSR Report published in August 2008, is aligned with the Global Reporting Initiative (GRI) G3 Sustainability Reporting Guidelines released in October 2006.

DNV has verified that the report conforms to GRI G3 application level A+ and fulfills requirements of AA1000AS framework.

This paperless report is published on UMC's website to support environmental protection.

Contact Information:

If you have any suggestion or comments regarding our CSR report, please send comments along with your contact information to:

GRM&ESH Division

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Cover photo courtesy of UMC's Walter Tsai.

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From the Chairman

Dear Friends,

I am pleased to announce that UMC's Corporate Social Responsibility (CSR) Report for 2008 has been published. This is the 9th time that UMC has published a non-financial public report, which is aligned with GRI G3 guidelines. Moreover, it is the first year that the report has been independently verified. This verification demonstrates that the content, information and data for economic, environmental protection and social aspects are true and accurate. In addition, this confirmation signifies UMC's discreetness, emphasis and progressiveness in information disclosure.

UMC practices social responsibility based on LOHAS (Lifestyle of Health and Sustainability), which includes caring for minorities, building a healthy workplace, sustainable environment, and maintaining a solid financial structure. UMC's CSR Committee was established to implement corporate social responsibility practices in five categories: corporate governance, green production, energy conservation, ESH (environmental protection, safety & health), and public interest.

2008 was a fruitful year for UMC's corporate social responsibility efforts. UMC was named as a Global Index Component for Dow Jones Sustainability World Indexes, indicating that UMC's accomplishments in sustainability and social responsibility are on par with global



leaders and recognized by international assessment organizations. In addition, UMC was also awarded with several domestic awards, including the "CSR Award" from Global Views Magazine, "Happy & Healthy Company Award" from Common Health Magazine, and the "the Environmental honor trophy" due to the third consecutive year of receiving "Enterprise Environmental Protection Award" from Environmental Protection Administration of Executive Yuan. UMC's CSR report also received honors, as it was awarded the "Taiwan Corporate Sustainability Report Award" by Taiwan Institute of Sustainable Energy.

Looking back to 2008, the global economic downturn caused significant impact to the world economy and the industrial sector. UMC responded to these challenges with flexibility, consistency, and dynamic adjustments to our operating scale. Economic uncertainty is a constant reality, and UMC has prepared itself to

be continuously ready to meet any challenges or opportunities that these uncertainties may bring. Since the management team and I assumed our leadership positions last July, we have always taken into consideration the well being of our employees during our decision making process. We have taken several measures since the second half of 2008 to adjust to the ever changing industry situation, such as streamlining human resource allocation, improving production efficiency to lower capital expenditure, salary cuts for executives and unpaid leaves. However, we also provide timely incentives to our employees to show our appreciation for their hard work. This is what a responsible enterprise should do.

Looking forward, UMC will continue to implement programs through its CSR Committee to enhance corporate governance and green innovation. At a UMC Board Meeting earlier this year, a proposal to add another independent director (raising the number from 3 to 4) was approved, along with bringing in an additional outside director and establishing an Audit Committee to improve corporate governance structure. In the future, since the number of independent and outside directors will account for more than half of the 9 board seats, this action will significantly help to

increase operating transparency as well as maintain interaction and balance between the board and management team. By continuing to enhance the board and corporate governance structure, UMC hopes to further increase the board's efficiency and supervision to protect shareholders' interests. As for green innovation, with the focus on responding to climate change and reducing carbon emission and energy consumption, UMC will aggressively promote projects such as Green Building and carbon footprint management to help build a sustainable environment.

Social problems and labor rights become highlighted during economic downturns; however, environmental deterioration does not slow during these times. Green innovation will become the key factor for an enterprise to differentiate itself, and I am well aware of the importance of CSR competitiveness as an indicator of sustainable growth. During economic downturns, CSR is what leads enterprises through the challenging times. UMC will embrace the new opportunities that CSR brings, in order to create a brighter future with sustainable growth.

Stan Hung



UMC's CSR Commitment

UMC maintains a business philosophy of pursuing sustainable operations while building long-term partnerships with customers and the society. Fulfilling its responsibilities as a corporate citizen and maintaining advanced health, safety and environmental standards have been important policies and commitments for UMC. UMC has been promoting social responsibility for a long time, based on the concept of "caring employees, environment first and working for the best interest of the public" with the attitude of "giving back to the community". In addition to improving corporate and social sustainable competitiveness, UMC also expects to drive society towards the direction of goodwill.

UMC's CSR roadmap covers three aspects, including corporate governance, environmental protection and social interests. UMC is committed to continually improving the performance of corporate governance, becoming a green manufacturing foundry and fulfilling its responsibility as a corporate citizen.

- **Improving the performance of corporate governance**

The purpose of commerce is to realize profitability. An enterprise's basic responsibility to the society is be profitable, but in a proper way. Enterprises should take care of its employees and be accountable to its shareholders, while viewing itself as a corporate citizen that gives back to society. UMC will

conduct its operations according to this belief.

- **Green foundry manufacturing**

UMC follows all government environmental protection laws with the aim of exceeding the requirements for these laws. Related international standards on environmental protection are also considered. Furthermore, UMC expects to remain as a green enterprise by exerting greater efforts into cleaner production, industrial waste reduction, pollutant prevention and risk management.

- **Fulfilling its responsibility as a corporate citizen**

When the Company was founded, its long-term policy stated that the company should make contributions to society as well as focusing on its business.

Therefore, launching a series of public services revolved around issues close to today's social issue has become part of UMC's goals. The breadth covered by UMC's public service scope includes the Company itself, its employees, employees' families, the community, and various other social entities. UMC's public service aspects cover education, environmental protection, cultural activities and childcare.

UMC's public services can be categorized into two parts: the UMC Candlelight Charity Club, which purpose is to assist disadvantaged minorities, and the UMC Science and Culture

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Foundation, which purpose is to support affairs regarding education, culture, sports, public interest, and environmental protection.

UMC CSR Map



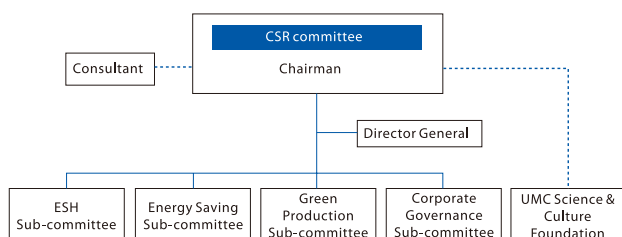


UMC's CSR Organization

Corporate Social Responsibility (CSR) committee

The CSR committee was established in April 2008 to coordinate all affairs relevant to CSR, corporate citizenship and sustainable development, and to regularly review the progress of CSR projects. There are four sub-committees under the CSR committee: ESH (Environment, Safety & Health), Energy Saving, Corporate Governance and Green Production Committees. The UMC Science and Culture Foundation will co-work with UMC CSR committee to implement public welfare projects, aid minority groups, donate to charity and provide community care.

The organization of UMC's CSR committee is as below: and will be revised as required.



• The Corporate Governance sub-committee:

Responsible for promoting corporate governance related tasks such as internal control systems and SOX 404 regulations and to coordinate related regulations and systems regarding corporate governance. Its purpose

is to practice UMC's core values, uphold shareholders' rights and implement information transparency and internal control.

• The ESH sub-committee:

To coordinate company-wide tasks in environmental protection and safety and health management. The committee also sets environmental performance indexes and promotes projects such as waste reduction, resource recycling and greenhouse gas reduction. It also promotes several activities in green manufacturing and supply chain management by working with the Green Production sub-committee.

• The Energy Saving sub-committee:

Externally, to cooperate with government agency teams in Hsinchu Science Park for water, electricity and gas efforts; internally, to promote, supervise and implement activities in water conservation and energy saving.

• The Green Production sub-Committees:

To promote all related tasks in green manufacturing and green products, including maintaining and managing QC080000 IECQ HSPM hazardous substance management system, conserving materials and implementing hazardous substance substitution programs.

- **The UMC Science and Culture Foundation:**

UMC established the UMC Science and Culture Foundation in 1996 to sponsor and participate in numerous community activities in technology development, education, academic research, childcare, environmental protection, culture, art, public interest, and sports.

To effectively realize UMC's commitments in corporate social responsibility and sustainable growth and achieve the goal of Green Foundry, UMC CSR committee will adjust its structure as it sees fits.

Company Overview

About UMC

United Microelectronics Corporation (UMC) was established in May 1980 and is based in Taiwan's Hsinchu Science Park. Since its establishment, UMC has played a significant role in Taiwan's semiconductor industry for nearly thirty years. UMC became a pure-play foundry in 1995, and today it has become a global leader in its industry.

About UMC

Name	United Microelectronics Corporation, UMC
Founded	May 1980
Headquarters	No.3, Li-Hsin 2 nd Road, Hsinchu Science Park, Hsinchu, Taiwan, ROC
Total Capital	NTD 260 billion
Paid-in Capital	NTD 129,877,710,000
Number of Employees	11,704 (as of 12.31.2008)
Major Business	Full service semiconductor wafer foundry
Current Products and Services	UMC provides a variety of services to fit individual customer's needs, including silicon intellectual property (IP), IC design support, design verification, mask tooling, wafer fabrication and testing. Future Products and Services: Advanced process technologies ranging down to 28nm.
Major Sales Regions	Currently the majority of UMC's customers are located in North America and Asia, with Europe following closely behind. Japanese customers' orders primarily go to UMC's subsidiary in Japan, UMCJ.



Service Locations

Headquarters No.3 Li-Hsin 2nd Rd., Hsinchu SciencePark, Hsinchu, Taiwan 30078, R.O.C. 886 (3) 578 2258	Fab 8C No.6 Li-Hsin 3rd Rd., Hsinchu Science Park, Hsinchu, Taiwan 30078, R.O.C.	Fab 8S No.16 Creation 1st Rd., Hsinchu Science Park, Hsinchu, Taiwan 30077, R.O.C. 886 (3) 578 2258
Taipei Office 3F, No.76, Sec. 2, Tunhwa S. Rd., Taipei, Taiwan 10683, R.O.C. 886 (2) 2700 6999	Fab 8D No.8 Li-Hsin 3rd Rd., Hsinchu Science Park, Hsinchu, Taiwan 30078, R.O.C.	Fab 12A No.18 Nan-Ke 2nd Rd., Tainan Science Park, Sinshih, Tainan, Taiwan 74147, R.O.C. 886 (6) 505 4888
Fab 6A No.10 Innovation 1st Rd., Hsinchu Science Park, Hsinchu, Taiwan 30076, R.O.C.	Fab 8E No.17 Li-Hsin Rd., Hsinchu Science Park, Hsinchu, Taiwan 30078, R.O.C.	Singapore Branch Fab 12i No.3 Pasir Ris Drive12, Singapore 519528 65 6213 0018
Fab 8A No.3, 5 Li-Hsin 2nd Rd., Hsinchu Science Park, Hsinchu, Taiwan 30078, R.O.C.	Fab 8F No.3 Li-Hsin 6th Rd., Hsinchu Science Park, Hsinchu, Taiwan 30078, R.O.C. 30078	

Service Scope and Technologies

UMC is a world-leading semiconductor foundry that manufactures advanced process ICs for applications spanning every major sector of the semiconductor industry. The Company's leading-edge foundry technologies enable the creation of faster and more powerful System-on-Chip ICs for today's demanding applications. UMC's technology includes a wide range of advanced processes, such as 65-nanometer, 45/40-nanometer, embedded memories, and mixed-signal/RFCMOS. As an industry pioneer, UMC was the first foundry to manufacture wafer using copper materials, produce chips on 300mm wafers, deliver functional 65-nanometer ICs to its customers, and produce chips using 28-nanometer process technology.

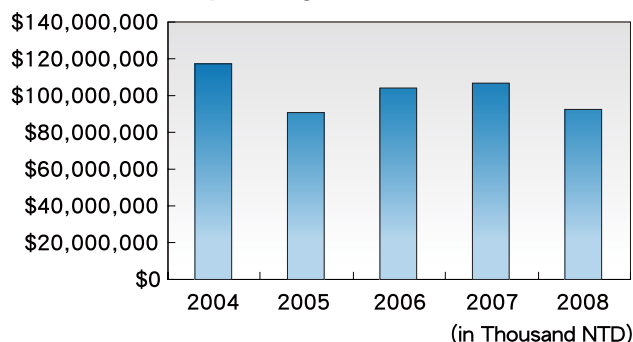
With sales and customer service offices in Taiwan, Japan, Singapore, Europe, and the United States, UMC has an extensive service network to meet the needs of its global clientele. Going forward, UMC will continue to offer world leading production processes and the most comprehensive customer-driven foundry solutions to strengthen customers' competitive advantages in a rapidly changing industry.

Business Results

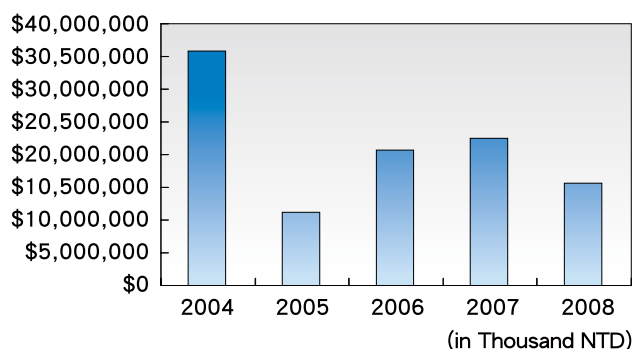
In 3Q 2008, the global semiconductor market experienced a sharp decline as a result of the global economic recession. This situation directly impacted Taiwan's stock market, UMC's financial performance, and ultimately UMC's share price. UMC's revenue dropped from NTD 106.77 billion in 2007 to NTD 92.53 billion in 2008. Operating income dropped to NTD 2.3 billion with operating profit margin at 2.5%. During the second half of 2008, UMC

recognized net non-operating losses of NTD 23.7 billion, resulting in a net loss of NTD 22.32 billion, and net loss per share of NTD 1.70. However, UMC had net cash inflow of NT\$10.93 billion during 4Q, since all of the aforementioned non-operating losses were non-cash charges. Cash and cash equivalents increased to NT\$ 36.12 billion at the end of 2008.

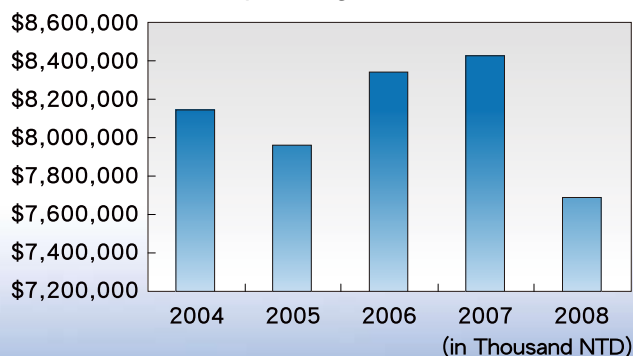
Operating Revenues



Gross Profit

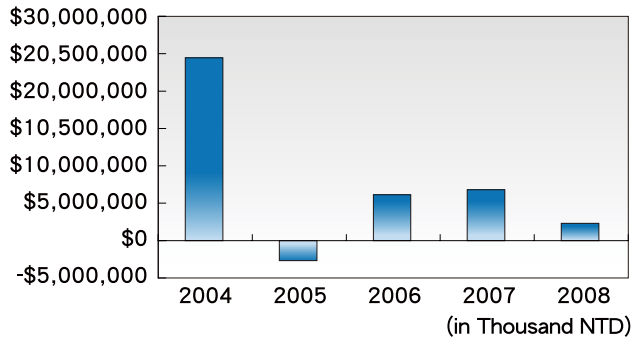


Operating Cost

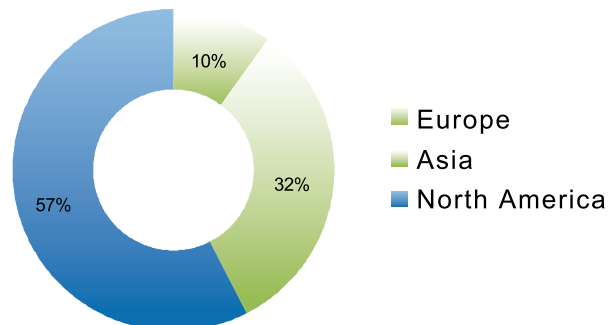


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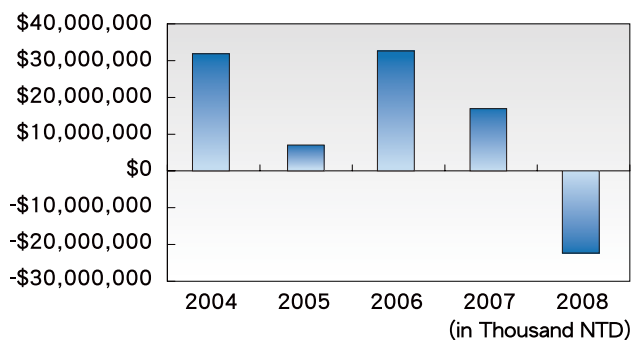
Operating Income



Export Sales Ratio



Net Income



For more information regarding Operating performance and financial status please refer to company website at <http://www.umc.com/english/investors/index.asp>

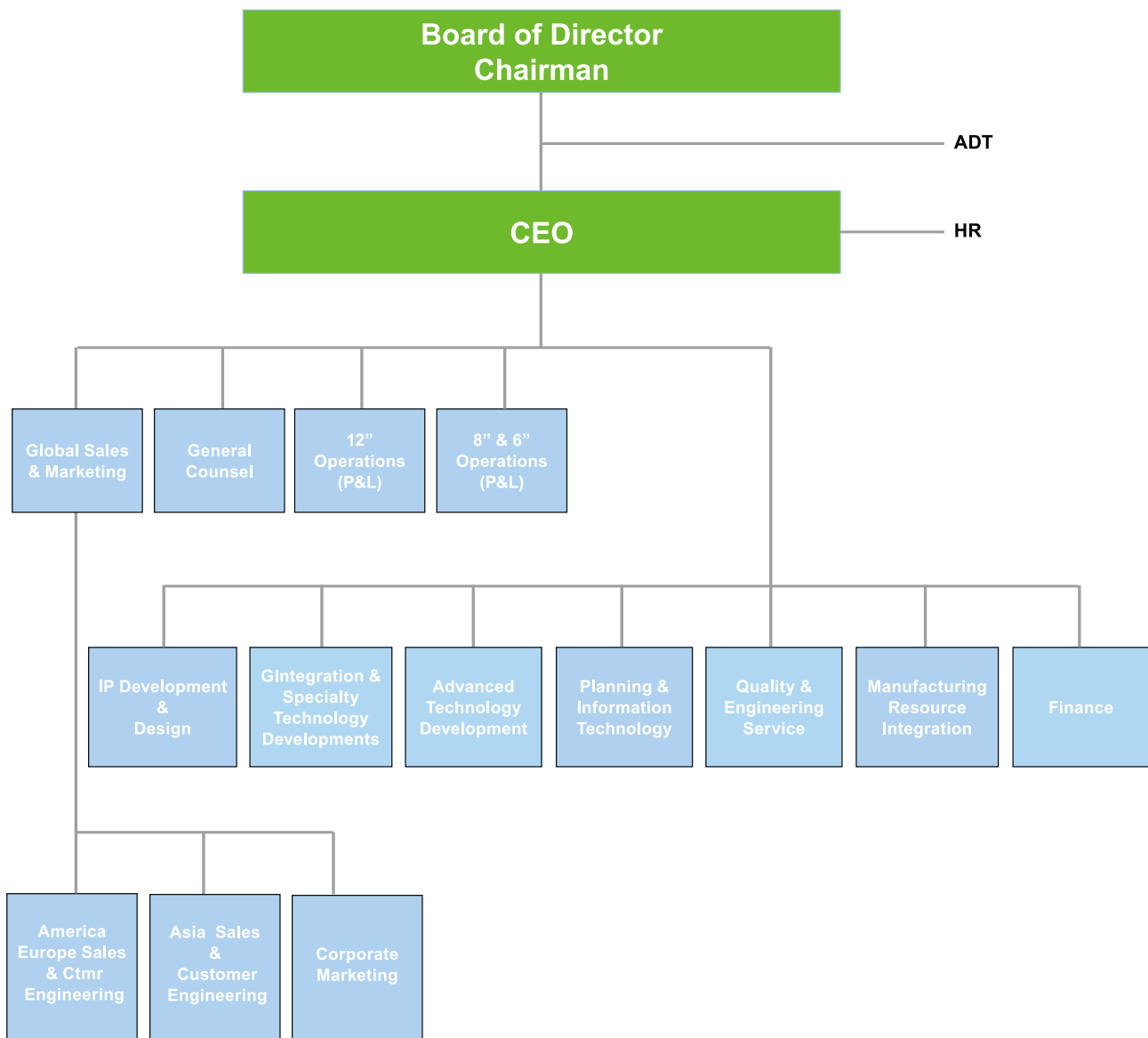
UMC is a world-leading semiconductor foundry; its sales for 2008 reached USD 2,824,000,000. Industry estimates show UMC having a 15% market share in pure-play foundry. UMC's customers include major companies from around the world, many of which who have recognized UMC for its service. UMC's major sales areas are North America and Asia Pacific, and sales in these two areas account for 51% and 32% of total sales, respectively. Sales in Europe account for 10%. UMC will continue to enhance its partnerships with its global customer base and make efforts in advanced product development for our customers to ensure UMC's steady growth over the mid to long-term.

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Milestones

1980	May	UMC established
1985	July	Becomes the first IC company to list on the Taiwan Stock Exchange
1995	July	Begins transformation into a pure-play foundry
	July-September	Three joint venture foundry companies established
	September	200mm fab begins production
1996	January	0.35-micron volume production
1997	October	0.25-micron volume production
1998	April	Acquires Holtek Semiconductor
	December	Acquires Nippon Steel Semiconductor Corp.; renamed Fab UMCJ in 2001
1999	March	0.18-micron volume production
	November	Begins construction of 300mm fab in Taiwan's Tainan Science Park, Fab 12A
2000	January	Completes consolidation of five companies: UMC, USC, UTEK, USIC and UICC.
	March	Ships first foundry chips using copper process.
	May	Produces foundry industry's first 0.13-micron integrated circuits.
	September	Makes its debut on the New York Stock Exchange.
	December	Announces plan to establish advanced 300mm foundry in Singapore (UMCi)
2003	January	Announces equipment move-in at UMCi.
	March	Delivers foundry's first customer ICs built on 90-nanometer.
2004	March	UMCi moves to full-scale 300mm production.
	May	90-nanometer full qualification and volume production.
	July	Completes acquisition of SiS Microelectronics Corp.
	December	Fully acquires its subsidiary UMCi; renamed UMC Fab 12i.
2005	January	Delivered the foundry industry's first 65-nanometer customer products.
	August	Achieves record milestone of over 100,000 90-nanometer wafer shipments
2006	June	Becomes first IC company to achieve QC 080000 IECQ HSPM qualification for all fabs.
	November	Produces working 45-nanometer ICs.
2007	January	Expands advanced technology complex in Tainan Science Park.
2008	September	Named as a Global Index Component for Dow Jones Sustainability Indexes. (DJSI)

Organization



Company Overview

Corporate Governance

Global expectations have risen with regard to corporate governance and sustainable operations, largely due to the string of unethical business practices and bankruptcies among international corporations that led to the economic instability behind the current global financial crisis. The extent that an enterprise will go to follow corporate governance standards has gradually become one of the key factors for investors to consider when making investment decisions. UMC has continued to strengthen its corporate governance and expects to improve its performance further through comprehensive management systems.

UMC's corporate governance structure and practices are based on Taiwan's Company Law, Securities and Exchange Laws, and their related rules and regulations. Furthermore, as an ROC company listed on the New York Stock Exchange ("NYSE"), UMC is also subject to the U.S. corporate governance rules to the extent that these rules are applicable to foreign issuers. UMC Corporate Governance Statement, Articles of Incorporation of UMC, Audit Committee Charter, Code of Ethics for Directors, Supervisors and Officers and Employee Code of Conduct can be found at company website at http://www.umc.com/english/investors/Corp_gov.asp.

UMC's corporate governance organizational model is a two-tier structure that consists of a Board of Directors and Supervisors, both of which are elected by shareholders.

Generally speaking, the Board of Directors is responsible for ensuring compliance with laws and regulations, avoiding conflicts of interest, and overall management of a company's business. Supervisors are responsible for the effective monitoring of a company's board and management, and generally functions in a capacity equivalent to the Audit Committee in the U.S.

UMC has always valued sound corporate governance systems and creating shareholders' benefits. UMC also believes that self-governance and a solid Board of Directors is the foundation for corporate governance. Below the Board of Directors are a Disclosure Committee and an Audit Committee, whose purpose is to meet the requirement of SOX404. These committees also assist the Board of Directors in fulfilling its responsibility relating to the Company's accounting and reporting practices and the quality and integrity of financial reporting. In the process of promoting SOX404, UMC significantly values implementing regulations of anti-corruption and anti-bribery, and upholding the Employee Code of Conduct. On the other hand, for labor relations, UMC places great importance on employee salaries and benefits, employee development, the enforcement of all labor laws and the protection of employee rights. UMC hopes to avoid any dispute between employees and employers through effective administrative practices.

Management Team

Chairman	Mr. Stan Hung
CEO	Dr. Shih-wei Sun
Senior Vice President	W Y Chen
Senior Vice President	P W Yen
Senior Vice President, and General Counsel	Peter Courture

Board of Directors

UMC's Board of Directors consists of 9 directors possessing professional background and experience in technology, including three independent directors. They are accountable for the company's operation and supervision. The Board directors are:

Chairman	Mr. Stan Hung
Director	Dr. Shih-wei Sun
Director	W Y Chen
Director	Henry Liu
Director	P W Yen
Director	Chitung Liu
Independent Director	Chun-Yen Chang
Independent Director	Chung Laung Liu
Independent Director	Paul S.C. Hsu

Audit Committee

The Committee shall have the responsibilities of overseeing independent auditors and reviewing internal audits, the annual external audit, and the financial statements. According to the Audit committee Charter, the Committee is authorized to conduct or authorize investigations or special audits into any matters within the scope of the Committee's responsibilities. The Committee shall communicate directly with the management, independent auditors

and internal auditors respectively, and receive anonymous submissions by employees of the company regarding concerns related to questionable accounting or auditing matters. As of January 2009, there were three members in the Committee, all of which were independent directors of UMC. The Board of Directors finds no issues that will influence their independent judgment and the independency complies with Article 10A-3 of US's Stock Exchange Law. The Committee shall meet and determine the future meeting frequency and intervals needed to carry out its duties and responsibilities.

Disclosure Committee

The primary purpose of the Disclosure Committee is to assist the company in establishing and maintaining "disclosure controls and procedures" designed to ensure the quality of filing reports on a timely basis.

Internal Audit

UMC's Auditing Division responds directly to the Board of Directors. The purpose of an internal audit is to examine and evaluate the effectiveness of internal control systems, the efficiency of business operations, the reliability of financial reports and the adherence to government laws, while providing suggestions for improvement to ensure the consistent implementation of various systems. To be specific, internal audits help the Board of Directors and management to achieve their goals by evaluating and improving the effectiveness of risk management, internal control and process monitoring.

Anti-corruption, Anti-bribery and Employee Code of Conduct

Due to the issuance of ADRs (American Depositary Receipt) in the United States, UMC was required by US Securities and Exchange Commission to follow SOX404 (Section 404 of the Sarbanes-Oxley Act of 2002) regulations that required undergoing internal control audits conducted by independent auditors. The company believes in being an integrated organization and that the action of every employee affects the entire organization and reputation. The company expects all employees to abide by this Code in carrying out their duties and functions so as to preserve public trust and to ensure the company's sustainable growth and development. In the process of promoting internal control, the company has always emphasized employees' morality and integrity. Therefore, Employee Code of Conduct is established to set a standard for ethics, honesty and professionalism. At the same time, the company encourages its employees to abide by the Code in their duties and functions through practical training and online self-examinations.

• Practical Training

New employees must complete practical training, which helps them understand the purpose, content and related information of UMC's Employee Code of Conduct. The training also allows them to understand that each employee is obligated to strive for the company's best interests within legal limits, and is responsible for preventing damage or losses to the company. In 2008, the practical training completion rate for new employees was 100%.

• On-line Self-examination

The purpose of online self-examination is to maintain employees' ethics and honesty when working toward the company's growth and development. To meet the requirement of SOX404, UMC also promotes Employee Code of Conduct and other regulations online. 13,288 employees are required to take the online self-examination, and so far 99.4% of those employees have completed the exam (employee count included Taiwan and Singapore).

UMC's Employee Code of Conduct includes morality and integrity, respect for individuals and customers, avoidance of conflict of interest, gratuity and business reception, and full, fair, accurate and understandable disclosure. All fraudulent cases reported will be handled directly by the Audit Committee, and all whistleblowers are carefully protected. No significant fraud was reported through the whistleblower program in past years.

Company Overview

Stakeholder Engagement

By the definitions from GRI, stakeholders are defined as entities or individuals that can reasonably be expected to be significantly affected by the organization's activities, products, and/or services; and whose actions can reasonably be expected to affect the ability of the organization to successfully implement its strategies and achieve its objectives. For UMC, stakeholders include: employees, customers, investors, suppliers, contractors, the community, the government, NGOs such as environmental protection groups, industry professionals, media, etc.

UMC has established diverse and functional communication channels according to different stakeholder groups and the corresponding attributes of company business units. These effective communication methods enable UMC to collect and understand the concerns of stakeholders. Feedback from stakeholders helps decide the contents of this report and provides important reference material for UMC to develop CSR strategies and goals in future.

Communication Channels

UMC has established two specific e-mail addresses to handle stakeholders concerns. One is for investors (ir@umc.com), while the other is for CSR issues (csr@umc.

com). Besides e-mail, each business unit is responsible for maintaining two-way or one-way communication channels with corresponding stakeholders. Moreover, UMC publishes its Annual Report, Annual Financial Statements, and F-20 report yearly, which are published on the company's website. For corporate social responsibility and environmental protection issues, UMC also publishes its CSR report annually online.

Materiality

All feedback from different stakeholders collected through various communication channels are consolidated and summarized with the cooperation of different departments. UMC conducts further analysis using this data to determine effect on stakeholders, decision-making and the impact on UMC's sustainability. This report also lists "Profit Status", "Greenhouse Gas Reduction", "Energy and Resource Usage Management and Reduction", "Countermeasures to RoHS Directive", "CSR Requirements on the Supply Chain" and "Public Interest Participation" as key concerns and how it relates to stakeholders. UMC's measures and performance regarding those key issues will be illustrated in the following chapters.

Stakeholder Engagement:

Stakeholders	Tools and Processes										
Employees	<ol style="list-style-type: none"> 1.Face to face communication: (1) Board to directors/managers (quarterly); (2) Board to all employees (semi-annually); (3) secretary meetings, DL meetings, employee welfare committee meetings, etc. (periodically) 2.E-communication: eUMC, BBS message board, sexual harassment direct line, whistleblower line, etc. 3. UMC Magazine and UMC CSR Newsletter 4.Other surveys to employees. 										
Customers	<ol style="list-style-type: none"> 1. Online service platform: MyUMC 2. Customer audit 3. Online complaint platform: Voice of Customer (VOC) 4. Customer satisfaction survey 										
Shareholders	<p>General shareholders:</p> <ol style="list-style-type: none"> 1. Annual General Meeting 2. Quarterly Conference Calls 3. Announce annual Financial Statements <p>Institutional shareholders:</p> <ol style="list-style-type: none"> 1. Quarterly Earnings Release & Investor Conference. (Live Webcast available of teleconference) 2. Presentations at Financial Institution Conferences globally, 										
Suppliers	<ol style="list-style-type: none"> 1. Through face-to-face reports or meeting, to convey company's strategy and objectives, review quality performance and progress of cooperative projects, share market information, etc. 2. Communication meeting when needed; for example, UMC's HSPM management policies announcement. 3. Cooperate with suppliers on specific topics. 										
Contractors	<ol style="list-style-type: none"> 1. All contractors have to sign an "Environmental, safety and hygiene notice for contractors" document. 2. Monthly council meeting 3. Random inspections 										
Community	<ol style="list-style-type: none"> 1. Dedicated department and personnel responsible for communication with community residents 2. Participation in community assembly to hear suggestions. 3. Invite nearby residents to join company's Annual Family Day. 										
Government	<ol style="list-style-type: none"> 1. Keep good interaction and communication with government authorities. 2. Participation in laws and regulations meetings, seminars and conferences held by government authorities. 3. Participate actively in Association of Industries in Science Parks (ASIP) 										
Industry experts	<ol style="list-style-type: none"> 1. Cooperate with Industrial Technology Research Institute (ITRI), colleges, universities, and research institutes on many research projects. Examples of collaboration projects from 2007 to 2008 are: <table> <tr> <td>Project Name</td><td>Collaboration Institut</td></tr> <tr> <td>Greenhouse Gas Inventory and verification</td><td>ITRI</td></tr> <tr> <td>Product Life Cycle Assessment</td><td>ITRI</td></tr> <tr> <td>Local Scrubber Efficiency Measurement</td><td>ITRI</td></tr> <tr> <td>Industry and Health Feasibility Study in Hsinchu Area</td><td>National Science Council/ National Taiwan University</td></tr> </table> 2. Opinions exchange with scholars and experts. 	Project Name	Collaboration Institut	Greenhouse Gas Inventory and verification	ITRI	Product Life Cycle Assessment	ITRI	Local Scrubber Efficiency Measurement	ITRI	Industry and Health Feasibility Study in Hsinchu Area	National Science Council/ National Taiwan University
Project Name	Collaboration Institut										
Greenhouse Gas Inventory and verification	ITRI										
Product Life Cycle Assessment	ITRI										
Local Scrubber Efficiency Measurement	ITRI										
Industry and Health Feasibility Study in Hsinchu Area	National Science Council/ National Taiwan University										
Environmental NGOs	<ol style="list-style-type: none"> 1. UMC holds ecological and environmental protection summer camps for disadvantaged children with Environmental NGOs every year. 2. Environmental NGO is invited to deliver company-wide speeches regarding ecology and environmental protection during UMC ESH month. 3. Participate in meetings, seminars and conferences held by environmental NGOs. 										
Others	<p>Associations that UMC Has Participated in</p> <ul style="list-style-type: none"> • The Business Council for Sustainable Development, BCSD Taiwan • The Environmental Protection Society • Taiwan Semiconductor Industry Association • Association of Industries in the Hsinchu Science Park (ASIP) <p>As a member of ASIP, UMC is actively involved in the operations of the committees in ASIP, including those of planning and public affairs, human resources, employee welfare, information and communication, bonding, environmental protection and public utilities supply.</p>										

Company Overview

Risk Assessment and Incident Management

To ensure the long-term success of the company and to further the corporate goal of building long-term partnerships with customers and the community, UMC holds shareholder meetings and investor conferences regularly to maintain a high-level of financial transparency. The company consistently meets its obligation as an exemplary corporate citizen by participating in a wide range of public activities that benefit the community and society as a whole. Moreover, the company closely monitors the changes of policies and laws and makes proper adjustments in internal systems and business activities accordingly to ensure the smooth operation of the company. In addition, the company has established a comprehensive and robust set of response procedures aimed at addressing the needs of a highly diverse range of emergency conditions, thus reducing management uncertainty to the lowest achievable level.

Financial Risk Management and Evaluation

Further information regarding financial risk management and evaluation please refer to the company annual report (2008 Form20-F), found online at <http://www.umc.com/english/investors/h.asp>.

Hazard and Risk Policy

As a global manufacturing leader, UMC is well aware of the numerous natural and other

risks posed to its operations. UMC's approach to risk management is based on preventing loss of life or property. Thus, UMC follows strict engineering safety procedures, regularly enforces safety codes and standards, and follows detailed industry safety guidelines. UMC is very proactive in managing risk.

• Fire Safety

In addition to adhering to international standards such as FM, UL, NFPA and SEMI S2 in property protection, equipment safety, risk control and evaluation, UMC follows its own corporate safety guidelines to further enhance upon these safety standards.

• Earthquake Safety

UMC is fully aware of the threats posed by natural disasters, in particular its exposure to seismic activity in Taiwan, and has been extremely proactive in establishing best-in-class risk management procedures. UMC has engaged the services of EQE and VEC, an engineering consulting firm specializing in structural engineering services aimed at addressing risks posed by earthquakes, to help UMC evaluate and reduce seismic exposure for buildings, facility equipment, piping and process tools.

AIU Triple-Star Audit

UMC has been using Triple-star Audit program since 1998 to monitor the performance of its

achievements both in the human element and physical protection areas. Since 1999, AIU, a global leader in risk management and insurance, has been asked by UMC perform and annual evaluation. All fabs

have been ranked as top-class following AIU's risk evaluation and risk improvement recommendations. Below is a summary of the Triple-Star Rating for all UMC Fabs.

AIU triple star rating

	Fab6A	Fab8AB	Fab8C	Fab8D	Fab8E	Fab8F	Fab8S	Fab12A	Fab12i
Human Element									
Risk management	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Housekeeping & Fire Safety Inspections	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Inspection & Maintenance of Fire Fighting Eqmt.	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Hot Works	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Emergency Organization	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Business Continuity Planning	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Smoking Control	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Impairment of Fire Fighting Equipment	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Inspection of Electrical Installation	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Watchman & Security	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Physical Protection									
Automatic Sprinklers	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Protection of Important Equipment	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Fire Detection	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Outside Hydrant	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
First Aid Fighting Equipment	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Water Supply	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Flammable Liquid Hazard	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Flammable Gas Hazard	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Tools & Equipment	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Clean Room/Smoke Control	★★	★★	★★	★★★★	★★	★★★★	★★★★	★★★★	★★★★

Company Overview

Honors and Awards (2006~2008)

Sustainable Development/Corporate Social Responsibility

2008

- **Global Index Component for 2008 Dow Jones Sustainability Indexes(DJSI)**

UMC Selected as a Global Index Component for Dow Jones Sustainability Indexes. UMC scored high marks for several criteria across multiple fields, including top scores in the areas of innovation management and standards for suppliers. UMC's listing underscores the company's strength in sustainability and commitment to long-term business performance.



- **"Corporate Social Responsibility Award" by Global Views Magazine**

Global Views Magazine awarded UMC with the corporate social responsibility (CSR) Model Award in the hi-tech category. Global Views Magazine has issued this award since 2005, and grades companies according to Oekom Research standards that evaluate social performance, environmental performance and financial information disclosure. UMC was the only semiconductor foundry among the 13 overall winners, demonstrating the company's widely recognized achievements in environmental protection, corporate governance and social participation.

- **"Operational Excellence Award, MAXA 2008" by Economic Development Board, Singapore (Feb 12i)**

MAXA represents the highest global standards in manufacturing innovation and excellence. It is a celebration of manufacturing and the outstanding operations in Singapore. The Award partners are the Economic Development Board (EDB), McKinsey & Company and the Singapore-MIT Alliance (SMA).

- **"Taiwan Corporate Sustainability Report Honors" by Taiwan Institute for Sustainable Energy (TISE)**

UMC's 2007 CSR report was listed as an outstanding performer by TISE in its Taiwan Corporate Sustainability Report Award. UMC's CSR report was recognized for its thoroughness and transparency. The accomplishment illustrates UMC's emphasis on communication with stakeholders and availability of information.

2007

- **"C G Watch 2007 : The third in Taiwan for corporate governance" by ACGA and CLSA**

UMC was ranked third in Taiwan in the Corporate Governance (C G) Watch 2007 report conducted by the Asian Corporate Governance Association (ACGA) and CLSA Limited.

UMC also ranked as the top semiconductor company in Taiwan in the Clean & Green (C&G) survey within CG scoring.

Environmental Protection Awards

2008

- **"17th Enterprises Environmental Award of the Republic of China" by the Environmental Protection Administration of Executive Yuan (EPA) (Fab8F)**

Fab 8F has been awarded with this honor from 15th to 17th award, and received Environmental honor trophy for awarded three consecutive years.

Fab 8E has been awarded with this honor from 12th to 14th award, and received Environmental honor trophy for awarded three consecutive years.

UMC was chosen for the 8th time since 2001

- **"Excellent Performance in Waste Management and Resource Reduction, Recycle and Reuse" by EPA (Fab8S)**

UMC was chosen for the 5th time in the past 6 years.

- **"Greenhouse Gases Voluntary Reduction Award" by Industrial Development Bureau (IDB), Ministry of Economic Affairs (MOEA).**

- **"2008 Science Park Carbon Reduction Award" by Hsinchu Science Park Administration (SPA). (Fab8E)**

- **"2008 Science Park's Environmental' Competition Award" by Hsinchu SPA.**

All fabs in Hsinchu Science Park joined the park-sponsored competition on environmental maintenance. The Li-Hsin Factory Area, Fab 6A, Fab 8F and Fab 8E were considered Best achievers, while Fab 8S also received Excellent recognition for its accomplishments.

2007

- **"The Best Participation of Green Procurement for Enterprises in 2007" by EPA.**

- **"The Second company in Taiwan in Clean & Green (C&G) survey" by ACGA and CLSA**

- **"16th Enterprises Environmental Award of the Republic of China" by EPA (Fab8F)**

- **"Greenhouse Gases Voluntary Reduction Award" by (IDB), (MOEA).**

- **"Excellent Performance in Waste Management and Resource Reduction, Recycle and Reuse" by EPA (Fab8D)**

- **"The Award of Outstanding Leadership in Environmental Management in Southern Taiwan Science Park" by Southern Taiwan Science Park Administration (STSPA) (Fab12A)**

- **"Top Honors in Hsinchu Science Park's 'Protection of the Environment' Competition" by Hsinchu SPA**

All fabs in Hsinchu Science Park joined the park-sponsored competition on environmental maintenance. The Li-Hsin Factory Area, Fab 6A, Fab 8F and Fab 8E were considered outstanding achievers, while Fab 8S also received recognition for its accomplishments.

2006

- **"15th Enterprises Environmental Award of the Republic of China" by EPA (Fab8F)**
- **"Excellent Performance in Waste Management and Resource Reduction, Recycle and Reuse" by EPA (Fab12A)**
- **"Water Conservation Award" by Water Resources Agency, MOEA (Fab8S)**
UMC has been awarded this honor for five consecutive years since 2002.
- **"The Award of Outstanding Leadership in Environmental Management in Southern Taiwan Science Park" by STSPA (Fab12A)**
- **"Top Honors in Hsinchu Science Park's 'Protection of the Environment' Competition" by Hsinchu SPA**

All fabs in Hsinchu Science Park joined the park-sponsored competition on environmental maintenance. The Li-Hsin Factory Area, Fab 6A and Fab 8F were considered outstanding achievers, while Fab 8S and Fab 8E also received recognition for its accomplishments.

Safety and Health Awards

2008

- **"WSO Concerned Company/Corporation Award" by World Safety Organization**
- **"Excellent Industrial Safety and Health Executive Organization" by Council of Labor Affairs of Executive Yuan (CLA) (Fab8S, Fab12A)**
- **"Labor safety and health alliance and cooperating group" by CLA (Fab8S)**
- **"Excellent Industrial Safety and Health Executive Organization of Hsinchu Science Park" by Hsinchu SPA (Fab 8C)**
- **"Excellent Industrial Safety and Health Executive Organization of Southern Taiwan Science Park" by STSPA (Fab12A)**
- **"Workplace Safety & Health Performance Award (Silver award)" by Ministry of Manpower Singapore. (Fab12i)**

2007

- **"First National Industrial safety& health Award" by CLA**
- **"Excellent Industrial Safety and Health Executive Organization" by CLA (Fab12A)**

- "Excellent Industrial Safety and Health Executive Organization of Hsinchu Science Park" by Hsinchu SPA (Fab 8S)
- "Excellent Industrial Safety and Health Executive Organization of Southern Taiwan Science Park" by STSPA (Fab12A)
- "Annual Safety and Health Performance Gold Award" by Office of Safety, Health & Environment, Singapore (Fab12i)

2006

- "Outstanding Risk Management Performance Award" by AIG
- "Honored VPP Executive Organization" by CLA (Fab 8AB and Fab 12A)
- "Excellent Industrial Safety and Health Executive Organization of Hsinchu Science Park" by HSPA (Fab 8F)

Labor Relation/Public Interests

2008

- "2008 National Grade Friendly Workplace Enterprises" by CLA.
- "2008 Happy & Healthy Company Award" by Common Health Magazine.

2007

- "National HRD InnoPrize" by C LA.
- "Excellence of Labor Relations Executive Organization" by Tainan county Government.
- "Innovation Service Award" by Hsinchu SPA

2006

- "Public Interest Partner Award for the "Guidance Program for Children of Laborers"" CLA
- "Wen Xin Award" by Council of Cultural Affairs, Executive Yuan

Environmental Sustainable Development

Disclosure on Management Approach for Environmental Protection

As a member of the global community and a semiconductor industry leader, UMC has embraced measures to reverse global climate change. However, various regional and international protocols on environmental protection, as well as the interaction needed for international trade, have made dealing with global environmental problems more complex. Facing such international trends, UMC has been diligent in satisfying environmental protection regulations at the local and international level and has shown positive performance in environmental protection when pursuing corporate sustainability.

Management's Approach for Environmental Protection

UMC follows all government environmental protection laws in an ultimate goal of being a Sustainable Green Foundry. To become a Sustainable Green Foundry, UMC not only complies with environmental protection regulations but also strives to exceed international standards and all applicable environmental and safety regulations. UMC introduces green concepts in every aspect of operation, including green commitment, management, procurement, production, products, recycling, office, education and marketing.



To be a sustainable Green Foundry

UMC's environmental protection policy is outlined below:

- Our goal is pollution-free production. UMC not only complies with, but also strives to exceed international standards and all applicable environmental and safety regulations. We want to be an environmentally friendly enterprise characterized by continual improvement.
- Incorporate our environmental management system into the overall organizational management system.
- Take the initiative to reduce waste production and prevent pollution by introducing and developing environmentally friendly technology into design, production, and operation.
- Conserve energy and recycle natural resources in order to be a model of environmental protection for the international community.
- To meet our Corporate Social Responsibilities, we play an active role with government and community in improving and protecting our natural habitat.
- Educate employees about environmentally sound ethics and practices.

Environmental Sustainable Development

Climate Change and Global Warming

Environmental pollution resulting from activities such as population increase and technology advance has been accelerating since the industrial revolution. A large quantity of greenhouse gases resulting from industrial activities is discharged into the atmosphere, contributing to global warming. The temperature rise has resulted in icebergs melting in polar areas and rising sea level. Moreover, ocean currents and rainfall patterns have been altered, increasing the frequency and intensity of floods, droughts and storms. Climate changes resulting from global warming have had a direct or indirect impact on the ecosystem, such as faster reduction or the extinction of many species, reduced crop production, and rise in diseases and natural disasters. For the welfare of mankind, actions against global warming caused by human factors must take place immediately. UMC has been responding aggressively towards the potential impact on business operations caused by climate related natural disasters, while also preparing for increasingly stringent carbon emission controls and regulations.

Challenges and Opportunity

Facing the potential impact on business operations caused by climate related natural disasters; UMC adopts SRA (Strategic Risk Assessment) to assess all possible impact. Furthermore, UMC will continue to consider all possible risks and plan countermeasures while

conducting company-wide Business Continuity Management (BCM). UMC realizes that impact resulting from climate changes may lead to price increases or even supply interruption of resources and raw materials. Therefore, UMC performs periodical analysis for various operating costs, evaluates results and drafts related management plans. Currently UMC has diversified its production base and supply chain around the world to lower the risk of concentrating in one single area. UMC also considers opportunities to expand its business through financial investment.

Taiwan is neither a member of the United Nations nor a contracting party of the Kyoto Protocol; therefore each UMC fab is not currently obligated to comply with the Kyoto Protocol. However, UMC expects strict government regulations in the future, such as compelling reduction goals for greenhouse gas emissions, with tight implementation schedules to follow. The issue may result in a green trade barrier. UMC understands that global warming and climate changes have attracted the public's attention and raised environmental consciousness. High energy-consuming and less eco-efficient products will be eliminated because of changing consumer demands. Maintaining low levels of Greenhouse Gas emissions helps UMC to provide green products, which enable UMC to build an environmentally friendly corporate image while expanding business operations. UMC has

already voluntarily carried out the reduction programs since 1999. UMC will continue to invest in equipment that reduces Greenhouse Gas emissions and implement energy-saving projects to reduce such emissions. In addition, UMC is also actively promoting green supply chain. UMC expects to reduce operating costs and develop green processes through collaboration with its suppliers.

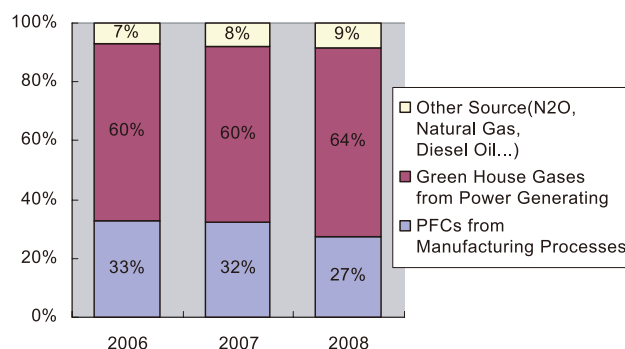
Carbon Emission Disclosure

Global climate change has been a major consideration for investors and corporations; therefore, disclosure of carbon emissions is garnering more and more attention. In addition to joining inventory and verification projects for greenhouse gas emission, UMC also discloses the information publicly through its CSR report, the company website and participation in Carbon Disclosure Project (CDP).

• Inventory and Verification of Greenhouse Gas Emissions

UMC has established greenhouse gas emission inventory system following the requirement of ISO 14064-1 and Greenhouse Gas Protocol. The UMC GHG inventory includes qualitative and quantitative analysis for Scope 1: direct GHG Emissions and Scope 2: Indirect GHG Emissions, and quantitative analysis for Scope 3: Other Indirect GHG Emissions. According to the data in past years, the major sources of UMC's greenhouse gas emissions are CO₂ from power generating processes and PFCs from semiconductor manufacturing processes such as CF₄, C₂F₆, SF₆, NF₃, CHF₃, C₃F₈ and C₄F₈. These two resources account for 90% of UMC's overall emission of greenhouse gases.

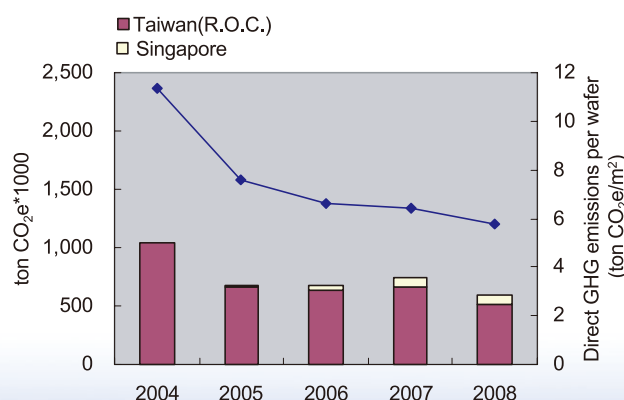
Source of UMC's Greenhouse Gases



Note: The PFCs emission is calculated using Intergovernmental Panel on Climate Change (IPCC) tier2 method. The GWP value is based on the proposed Fourth Assessment Report (FAR) of the IPCC.

UMC joined the GHG emissions and reductions inventory plan conducted by TSIA (Taiwan Semiconductor Industrial Association) in 2006. Following the ISO 14064-1 principle, a greenhouse gas emission inventory system has been established and the GHG emission amount of all UMC fabs since 2000 has been inventoried. Currently, UMC has already passed third party verification for 2000 to 2008 GHG emission amounts in Taiwan. UMC will continue to require annual greenhouse gas emission inventory checks conducted by a third party to ensure that UMC completely adheres to the current status of greenhouse gas usage.

Direct GHG emissions in UMC



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Certificate for Passing GHGEV (Greenhouse Gas Emissions Verification) for All UMC Taiwan Fabs in 2006



Note: The verification statements for 2000 to 2008 are in progress.

As for Scope 3: Other Indirect GHG Emissions, which come from supply chain, employee business travel, product use and disposal, and external waste distribution/logistics, etc. Since UMC is not an end product manufacturer, the major contributors of scope 3 GHG emissions come from the supply chain. The carbon emission from consumption of energy and raw materials, and pollutants from silica, wafer production, wafer processing, waste treatment and the major chemicals needed have already been assessed by the data gathered from the life cycle assessment (LCA). In the future, UMC will use PAS2050 standard for further inventory and calculation of scope 3 emissions.

• Participation in Carbon Disclosure Project (CDP)

Since 2006, UMC has participated in Carbon Disclosure Project (CDP) initiated by major global institutional investors to disclose information such as greenhouse gas emissions, along with investment risks and opportunities in dealing with climate change. This is to

demonstrate UMC's efforts and determination to respond to climate change.

CDP currently owns the world's largest climate change related information database, which issues a yearly survey to evaluate the risks and opportunities in response to climate change and GHG emissions reduction for enterprises. The evaluation result is a key indicator for institutional investors to decide whether to continue to invest in a certain enterprise in the future. CDP was originally led by Carbon Trust, an independent organization funded by the British government. Since the initial report was published in 2003, the number of its members (investors) has increased from 35 to 385 in 2008, and total assets under management increased from 4 trillion U.S. dollars to 57 trillion dollars. The enterprises being investigated were the 500 large multinational companies (FT500) listed by the Financial Times to the extension of the global well-known 2,400 enterprises.

Greenhouse Gas Reduction

• Reduction Target and Plan

UMC established its "PFCs Emission Reduction Team" in 1999 to implement the reduction plan. Currently, UMC has targeted PFC emission reduction by "10% in 2010 compared to 1998 (the emission of 1998 is the MMTCE average of 1997 and 1999) levels". PFCs are Perfluorinated Compounds that are used in semiconductor processes. Major elements of the PFC emission reduction plan include:

- Use C_3F_8 to replace C_2F_6 in semiconductor thin film process to lower the emission volume of greenhouse gases.
- Measure the utilization rate of machines that

use PFCs and the reduction rate of the treatment equipment to master the efficiency of machines and hence conduct improvement measures toward inefficient machines.

- Conduct individual usage evaluation for each machine that uses PFCs to better understand greenhouse gas emissions for each machine.
- Continue researching and testing substitute gases, and lowering the use of gases with a high potential for contributing to the greenhouse effect by reducing the source emission.
- Meanwhile, in order to lower the PFC emissions year by year, UMC plans to install high efficiency PFC abatement systems after fully evaluating all new models.

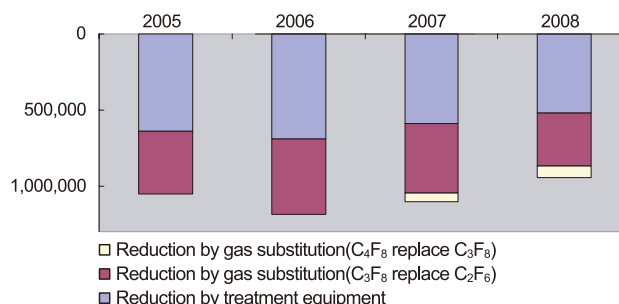
• Result of PFCs Reduction

UMC led the industry in replacing the high GWP (Global Warming Potential) gas C_2F_6 with low GWP gas C_3F_8 in CVD chamber cleaning. In 2004, UMC's Fab 8AB was the first foundry fab to complete gas substitution. UMC finally completed the gas replacement from C_2F_6 to C_3F_8 in all fabs in 2007. This can effectively reduce the emission of greenhouse gases and lower the impact on global warming. In 2008, by the allowance of process conditions, UMC continues to introduce C_4F_8 to further reduce overall PFC emissions. The result of PFC reduction by gas substitution is estimated to be 30% in 2008.

UMC continually evaluates and adopts new equipment. For machines and equipment that measure and control PFC gases, UMC measures the utilization rate of machines that use PFCs and the reduction rate of the

treatment equipment to master the efficient use of these machines and hence conduct improvement measures or optimization towards inefficient machines. Estimated results of PFC reduction by treatment equipment in 2008 were about 37%.

Result of PFCs Reduction (ton CO_2e)

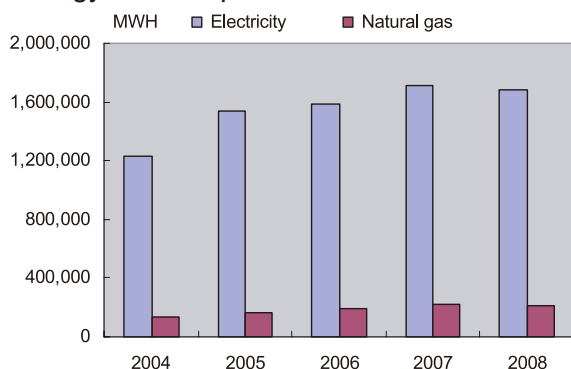


Energy Saving and Management

Energy utilization consumes the earth's resources and results in the greenhouse effect. UMC's energy consumption mainly relies on purchased electricity, followed by a small amount of natural gas, and indirect energy is not used. The largest source of UMC's greenhouse gas emissions is from purchased electricity. Therefore, reducing the energy consumption is the effective key to alleviate the environmental impact caused by the greenhouse effect. UMC sets annual goals and plans to lower the emissions of greenhouse gases. In addition to continual assessment and introduction of various energy saving technologies, UMC also implements energy saving plans to directly reduce the company's energy consumption. Furthermore, UMC promotes energy saving programs in the office and public areas accompanied with promotion activities and training to enhance employees' ideas and habits in energy saving and greenhouse gas reduction.

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Energy Consumption



Note: Heating value conversion factor of natural gas for Hisnchu fabs (6A, 8ACD, 8E, 8F, 8S) equals to 0.0103535 MWH/m³
 Heating value conversion factor of natural gas for 12A equals to 0.0115168MWH/m³
 Heating value conversion factor of LPG for 12i equals to 0.01269546MWH/kg
 Heating value conversion factor of town gas equals to 0.001 MWH/KWH

• UMC's Completed and Ongoing Energy-saving Projects

Energy Saving Measures	Implementation Fabs
Chilled-water system COP energy-saving project	8A/8C/8D/8E/8F/8S/12A/12i
CDA Out-heating type Dryer energy-saving project	All fabs
Heat pump energy-saving project.	8S
Additional chilled-water pipes for PCW/PCDW heat exchanger project	8F
Changing TPC rate-schedule to 3 from 2-period project	All fabs in Taiwan
Improve factor compensation project of TPC Power-factor improvement project	All fabs in Taiwan
Reducing excess-contract charge project	All fabs in Taiwan
Changing high-efficiency lighting fixtures from T8 to T5 type	8A

• UMC's Future Energy-saving project

Energy Saving Measures
Fab and office areas lighting improvement
Re-checking UPS load
Reducing contract capacity
Reducing Bulk Gas supply pressure
Reducing CDA/HCD A supply pressure
Raising Dew-point temperature of CDA Dryer
Low Vacuum Off
Recycling Scanner Heat Exhaust
Cleanroom temperature/Relative humidity uniformity
Raising chilled-water supply temperature
Reducing HOT DIW circulation and temperature

Environmental Sustainable Development

Green Production

In order to achieve the goal of zero-pollution, UMC maximizes the efficiency of raw materials and resources usage. In addition, UMC reduces toxicity of waste emissions by avoiding or reducing the use of hazardous materials. For the product level aspect, UMC meets international standards for green products and invests in the development of process technologies for customers' low power-consumption products. Moreover, UMC adopts LCA (Life Cycle Assessment) to review the impact on the environment for further improvement. As for Pollution discharge, UMC appropriately operates various pollution control facilities and completely monitors every aspect of pollution discharge. All produced waste conforms with regulations and is recycled or reused as a first option so that waste can be converted into a usable resource with zero waste.

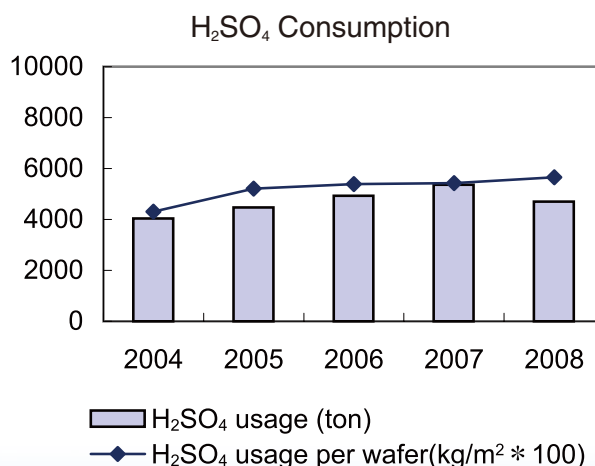
Green Process

Numerous types of materials are used in semiconductor manufacturing processes. The required purity of the materials results in significant operating costs for raw materials. UMC aggressively promotes cleaner production for the purpose of sustainable operation and development. In addition to building comprehensive databases to manage the procurement and utilization of materials, UMC also implements projects for source improvement and process improvement through ad hoc project management. Those projects

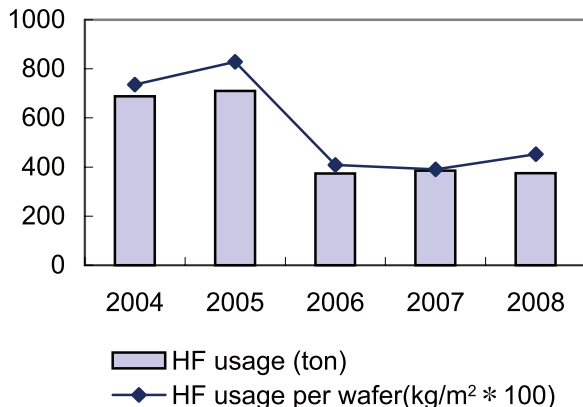
are aimed at reducing materials and waste to enhance UMC's competitiveness, including the adoption of new technologies and the improvement and optimization of processes.

• Material Resources Management and Reduction

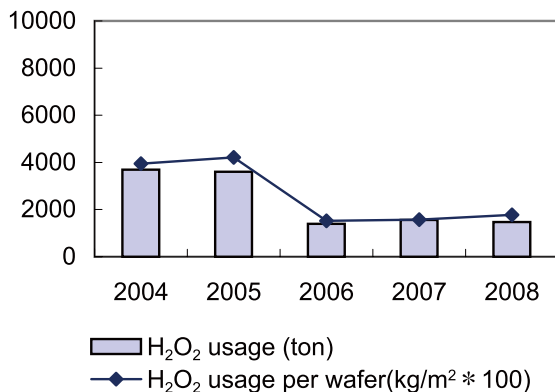
With a raw material management e-system and regular analysis of optimum consumption by dedicated units and personnel, UMC ensures the rational procurement and utilization of material resources. For key raw materials, UMC analyzes the correlation of production capacity and waste output with material consumption, and also implements various Material Resources reduction projects. Through optimizing production processes, workflow improvement and target management, UMC can reduce the consumption from source.



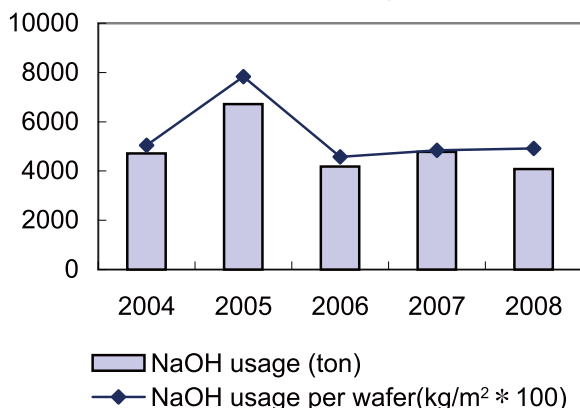
HF Consumption



H₂O₂ Consumption



NaOH Consumption



Note: All consumption volume mentioned above only includes fabs in Taiwan

Furthermore, management and reduction of material resources for 2008 is officially controlled by the Green Production sub-committee within UMC's CSR committee. In implementing materials reduction, UMC

first selects its target from raw materials that produce major waste and more greenhouse gases by referring to international trends and government-controlled chemicals. Related departments will then conduct small-scale experiments to evaluate technology feasibility while reducing this target in conformity to the company's cost-down policy and internal benchmark method. If it proves to be feasible, the reduction method will be applied in each fab.

• New Materials Evaluation

UMC establishes a comprehensive process to evaluate new materials, which meets the requirements from environmental, safety and health as well as price and quality. This process is to effectively manage the introduction of new materials in new process development and to ensure the quality of raw materials from suppliers can meet future volume production requirements. UMC must confirm if the raw materials are listed on the hazardous substance control list and understand its impact to the environment. Moreover, UMC must have effective countermeasures for storage, supply and disposal and ensure all these measures conform to government regulations and the company's safety and health policies.

• Hazardous Material Replacement Program

This program targets internationally concerned and government controlled chemicals, as well as customers' requirements for replacing hazardous materials. The Stockholm Convention listing PFOS (Perfluorooctane sulfonates) in the control list can be used as an example. Since few traces of PFOS

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are used in the semiconductor development process as photo resists and additives for ARC, UMC has already set its target date for PFOS replacement for 2010 to achieve PFOS free operation.

Green Products

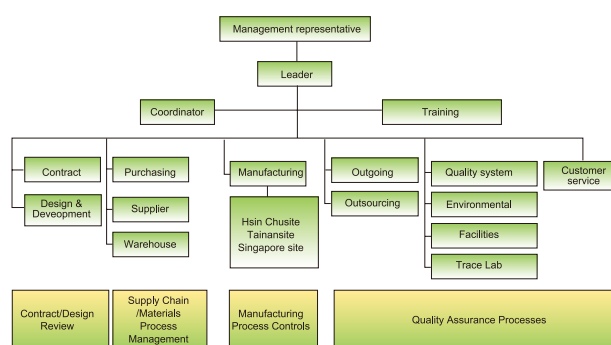
• Hazardous Substances Control and Management

The RoHS (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment) Directive has been in effect since July 1st, 2006. The RoHS Directive will ban electronic products that contain certain levels of six listed hazardous substances (lead, cadmium, mercury, Chromium VI, PBB and PBDE) from entering European markets, effectively creating a green trade barrier. Therefore, how to react to this international trend for environmental protection and improve UMC's green competitiveness have become new challenges for business operation.

UMC has been aware of the green production trend from the international community and its customers since 2003. Since then, UMC has promoted green supply chain management and established an SOP for green procurement through supplier, processes and materials evaluations. UMC also regularly requires a third-party organization to examine the customer products manufactured at UMC to ensure they meet environmental laws and regulations. UMC became a Sony Green Partner in 2003, and passed qualification again in 2005 and 2007. These actions demonstrate that UMC's progress in hazardous substance management has gained recognition from our Customers.

To improve the efficiency of green product management, UMC established a cross-division HSPM (Hazardous Substances Process Management) committee to manage all implementation and promotion of related work. HSPM committee meets regularly to enforce execution through communication of project targets. UMC completed the final system audit for QC 080000 IECQ HSPM qualification on June 9th, 2006 to become the first semiconductor manufacturer worldwide to achieve HSPM certification for all fabs. The completion of QC 080000 IECQ HSPM qualification audit demonstrates UMC's capabilities in managing hazardous substances and meeting RoHS Directives. This qualification can ensure that UMC provides cutting-edge and environmental-friendly IC manufacturing services to help bolster the competitiveness its customers.

UMC HSPM Committee Organization Chart



UMC QC080000 IECQ HSPM Certificates



• Product Life Cycle Assessment

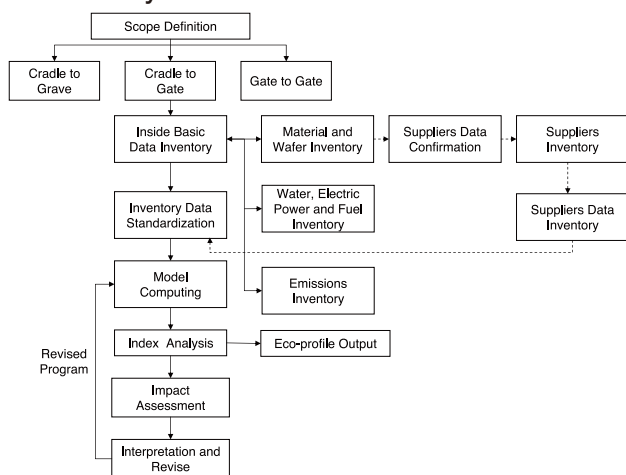
In 2005, UMC authorized Industrial Technology Research Institute (ITRI) to implement Life Cycle Assessment in each fab. The results of such an assessment would help UMC to meet possible future requirements for international regulations on environmental protection and to understand the impact on the environment caused by customer products manufactured at UMC, and develop improvement plans. From raw silicon to chips, investigations were conducted targeting energy consumption, materials and pollutants of each customer product. Through the evaluation of environmental impact on the entire supply chain and manufacturing processes, the impact on the environment resulting from products is clarified and the result of evaluations is used as a reference for the environmental management system. The assessment results are open to the public and can be provided for reference upon customer request.

Life Cycle Assessment system for UMC. Eco-Profiles in 300mm fabs were established and Eco-Profiles in 150mm and 200mm fabs were renewed within this project. According to the evaluations, the major materials used in manufacturing processes were water, followed by air, coal and crude oil. However, air is deemed as a renewable resource that cannot be depleted. Water consumption causes the most impact to the environment, followed by energy consumption.

• Low Power Process Design

As a foundry industry technology leader, UMC continues to decrease the impact it has on the environment during the manufacturing process and ensures that it meets customers' non-toxic requirements. In addition, UMC continues to develop various high performances, low power design flows. UMC's reliable IPs and expertise in process technologies provide customers with leading-edge technologies and innovative design solutions. As the era of green power arrives, UMC provides several foundry platform technologies targeting power management, including analog, high voltage and ultra high voltage technologies for broad applications such as LED, power management chips, and energy-saving lighting for customers.

Life-Cycle Assessment Flow at UMC



UMC has already completed an "Eco-Profile" in its 150mm fab and all 200mm fabs. In 2008, UMC authorized ITRI again to implement a

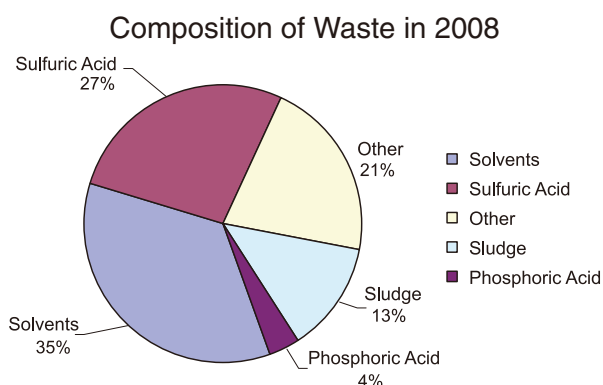
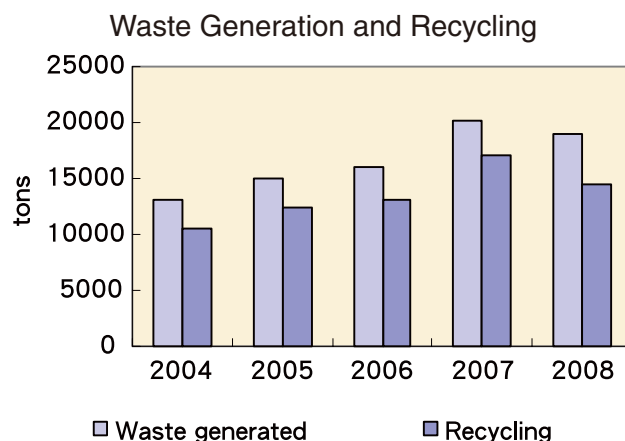
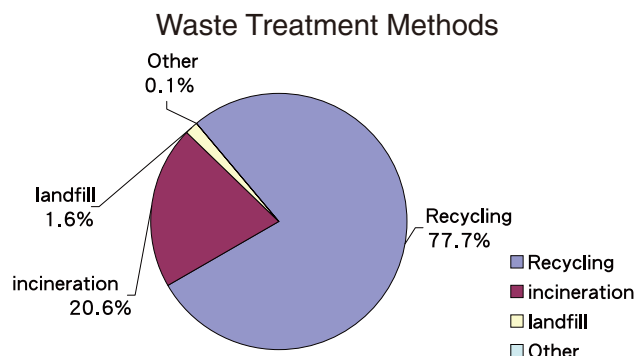
Green Recycling

• Waste Management and Resource Recycling

Zero waste is the ultimate goal for UMC waste management. Strategies include waste reduction and resource recycling. UMC promotes waste and resource recycling based on the concept of green production. UMC

hopes to achieve the goal of waste reduction through source management measures such as process improvement and materials reduction. Moreover, UMC aggressively promotes waste recycling and reuse to replace current end pipe treatment measures to transform garbage into useful resources. This not only lowers the resources and costs to handle the waste but also helps to achieve resource recycling. In addition, UMC regularly checks waste treatment vendors, strictly controls the flow of the waste and implements optimized measures to handle the waste.

In 2008, UMC produced a total of 18,976 metric tons of waste. Most of the produced wastes are solvents, sulfuric acid and sludge, account for 75% of total waste, and all were recycled and reused. Total waste that was recycled and reused was 14,523 metric tons, resulting in a recycling rate of 77%.



• Waste recycle and reuse study

UMC adopts recycling as the first option to handle waste, and continues to evaluate and introduce various recycling technologies. UMC also works with qualified vendors on several recycling projects and implements on-site improvement (such as modifying discharge pipes and collecting fluid in separate pipes) to include more types of reusable waste.

UMC Completed Water Recycling Programs

Recycling Items	Description	Fabs
Recycling waste	Waste paper, glass, iron, aluminum, styrofoam, aluminum foil containers, PET and plastic were recycled by resource recycling factories	All fabs
Wood	Outsourcing to wood factories to manufacture pallets and cable reels.	All fabs in Taiwan
Calcium fluoride sludge	Recycled as cement additive.	All fabs in Taiwan
Waste sulfuric acid	Recycled as industrial diluted sulfuric acid or remanufactured as copper sulphate.	All fabs
Toner cartridges	Using the reprocessed toner cartridges and recycling the empty cartridges.	All fabs in Taiwan
Activated carbon	Outsourced to the supplier to recycle waste activated carbon.	All fabs in Taiwan
Waste chemical drums	Outsourced to vendors to clean the waste drums for reuse or for plastic material.	All fabs
EBR	Outsourced to factories to be manufactured as industrial material.	All fabs in Taiwan
Waste phosphoric acid	Outsourced to factories to be manufactured as industrial material.	All fabs
IPA	Outsourced to factories to be manufactured as industrial material.	6A/ 8A/ 8C/ 8D/ 8E/ 12A
NMP	Outsourced to factories to be manufactured as the industrial material.	8A/ 8C/ 8D/ 8E/ 8F/ 12A
Waste ion-exchange resin	Recycled as inferior ion-exchange resin after being cleaned and sorted.	6A/ 8A/ 8C/ 8D/ 8E/ 8F/ 8S
Residue slurry	Recycled as silica sol material.	8A/ 8C/ 8D/ 8E/ 8F/ 8S
Waste wafers	Recycled as solar energy chip material.	All fabs in Taiwan

The future implementation programs and plans are as below:

1. Waste solvent: recycled as paint thinner (currently being applied for independent recycling permit)
2. Waste copper sulphate: Electrolyzed to make recycled copper (currently being applied for independent recycling permit)
3. Waste masks: Recycled or used as optics material after cleaning patterns.
4. Waste stripper: Recycled as industrial material
5. Waste anti-static bag: Recycling the useful metal and plastic

Water Conservation and Management

Taiwan's wide range of weather fluctuations from rainy to dry seasons make water conservation challenging. Every industry in Taiwan faces water shortages during extended dry weather periods. Currently, Fongshan River, Toucian River and groundwater cannot provide sufficient water for the Hsinchu area, especially when water for industrial purposes accounts for a large portion of all water used. Since expanding the Hsinchu Science Park is a primary goal for national development, stable water supply will remain as an urgent issue for this area. The water resource deployment plan primarily relies on Lung-en Weir, Pao-shan Reservoir and Pao-shan Second Reservoir. Lung-en Weir will be the first source, followed by the others. If the water supply is still insufficient, other local water resources will be deployed from sources such as Yung-Ho-Shan Reservoir and other agriculture water sources.

UMC does monitor the water utilization status in each fab due to occasional water shortages. As demand for water has risen due to fab expansion in recent years, UMC expects to lower the demand pressure for water by further expanding water recycling and reuse. This is to make the best use of limited water resources.

Water scarcity and restrictions have always been tough issues since the semiconductor industry is highly water-dependent. How to reduce water consumption and increase the efficiency of water usage has become a tough challenge especially in Taiwan where water resources are limited. UMC's water conservation team, which manages across all fabs and departments, is responsible for planning strategies and promoting its projects:

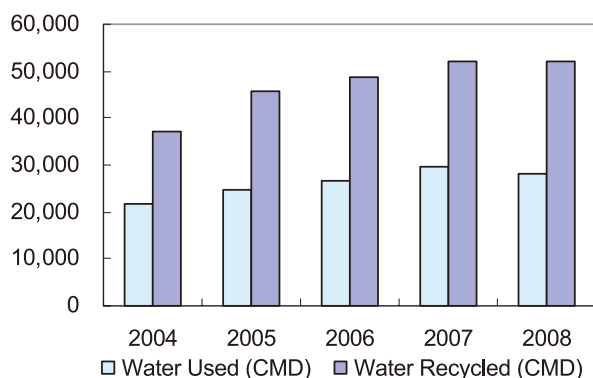
1. Establishing working principles to create water-saving results.
2. To broaden ways of water recycling and to reduce water consumption.
3. PDCA with the integration of environmental protection goals.
4. Achieve end-pipe management through day-to-day management approach.
5. Establish a wastewater treatment system and develop multiple recycling processes to maximize efficiency.
6. Establish UMC's water resources management system and check water balance in all fabs to confirm rationality of water usage.
7. Integrated-technology committee held by Facility Department is responsible for experience integration and sharing.

• Water consumption and recycling

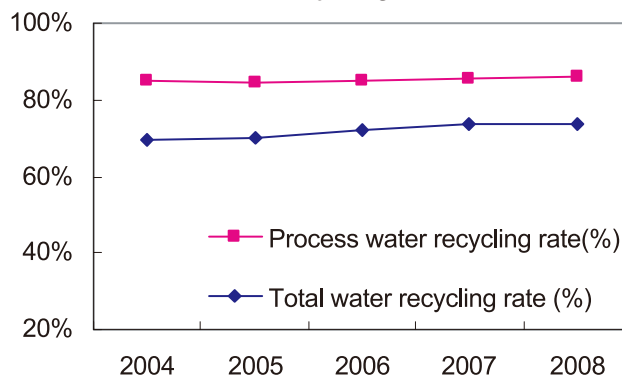
All of UMC's fabs adopt an on-site wastewater reclamation system for processing wastewater reuse. The applications of recycling water after treatment include production process, pollution control equipment, cooling tower, etc. Furthermore, rainwater is gathered as an auxiliary gardening water source. Although water consumption in the past five years has been rising, the recycling capacity and recycling rate has also been increasing accordingly. In 2008, the recycling capacity of process water in UMC was 19,133,992 m³/year. The recycling rate was about 85.6 % in all UMC' fabs.

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Water Consumption and Recycled Volume



Water Recycling Rate



Note: 1. Using water balance calculation version provided by HSPA

Note: 2. Using arithmetic mean in each fab to calculate the sum of all UMC fabs

• UMC's Water Conservation Measures

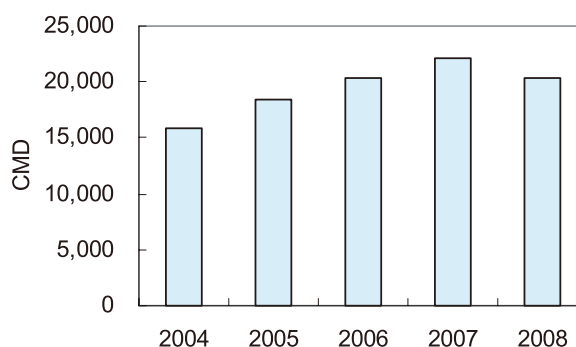
Water Conservation Measures	Implementation Fabs
Adjust the manufacturing process recipe to lower water consumption for each piece of equipment	8A/8C/8D/8E/8F/8S/12A/12i
Adopt CMP recycled water as cooling and cleansing water for wastewater treatment systems.	All fabs in Taiwan
Local Scrubber Reclaim system (LSR)	All fabs in Taiwan
CMP Reclaim system	8A/8C/8D/12A
Use ozone to disinfect within the DI system pipes to reduce water consumption during flush.	All fabs in Taiwan
Set up the most appropriate water consumption needed in each restroom	All fabs in Taiwan
Rainwater Recycling system	8A/8C/8D/8E/8F/8S/12A/12i
Extend SF,AC and Resin service time	All fabs in Taiwan
Increase SF AC and resin water reuse	All fabs in Taiwan

Pollutant Emission and Control

In pollution control, UMC develops technologies to meet new laws or standards in environmental protection, while continuing to introduce highly efficient technologies and equipment for self-management that takes the overall environment into consideration. UMC's pollution control facilities include facilities processing waste gases, wastewater, waste, toxic chemical substances, noises, soil and groundwater. All pollution control equipment is operated and maintained by professional teams. The operation of all equipment is included in the central monitoring system and is monitored 24 hours a day to ensure emission quality. In

addition, each fab will conduct examinations at wastewater and waste gas end pipes. The results for each year are in compliance with government standards. All examination results in 2008 are listed as below.

Wastewater Discharge



Results of Wastewater Examination at each fab in 2008 2008Q1

Items	6A	8E	8F	8S	Li-Hsin Fabs	HSPA Standard	12A	STSPA Standard	Unit
pH	6.7	7.3	8.1	6.7	9.1	5~10	6.0	5~10	—
Water Temperature	25.8	26.1	21.5	24.2	23.8	35	26.0	35	°C
Suspended Solids (S.S)	3.3	74.0	135.0	28.0	132.0	300	85.0	250	mg/L
Biological Oxygen Demand (BOD)	38.0	7.6	18.0	14.9	44.9	300	50.6	250	mg/L
Fluorides	10.5	7.0	12.4	0.5	10.5	15	5.9	15	mg/L
Chemical Oxygen Demand (COD)	120.0	17.7	56.4	48.6	150.0	500	164.0	450	mg/L

2008Q2

Items	6A	8E	8F	8S	Li-Hsin Fabs	HSPA Standard	12A	STSPA Standard	Unit
pH	6.8	7.1	8.0	6.8	8.6	5~10	6.4	5~10	—
Water Temperature	26.3	28.2	25.3	24.8	26.2	35	29.0	35	°C
Suspended Solids (S.S)	8.4	63.5	32.3	14.8	90.0	300	56.7	250	mg/L
Biological Oxygen Demand (BOD)	14.1	16.1	16.6	13.6	28.7	300	37.1	250	mg/L
Fluorides	10.1	9.7	8.3	0.8	11.3	15	6.3	15	mg/L
Chemical Oxygen Demand (COD)	61.5	82.3	59.5	57.5	150.0	500	97.7	450	mg/L

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2008Q3

Items	6A	8E	8F	8S	Li-Hsin Fabs	HSPA Standard	12A	STSPA Standard	Unit
pH	6.4	7.2	7.5	6.6	6.8	5~10	6.4	5~10	—
Water Temperature	27.6	28.8	26.4	25.1	27.0	35	29.0	35	°C
Suspended Solids (S.S)	3.2	75.0	56.5	7.3	68.7	300	185.0	250	mg/L
Biological Oxygen Demand (BOD)	41.9	43.7	26.6	44.8	31.6	300	34.4	250	mg/L
Fluorides	3.0	8.0	10.0	3.4	9.3	15	4.8	15	mg/L
Chemical Oxygen Demand (COD)	192.0	210.0	133.0	196.0	160.0	500	158.0	450	mg/L

2008Q4

Items	6A	8E	8F	8S	Li-Hsin Fabs	HSPA Standard	12A	STSPA Standard	Unit
pH	6.8	6.6	6.8	6.7	8.9	5~10	6.4	5~10	—
Water Temperature	27.4	27.5	25.3	24.3	28.7	35	28.2	35	°C
Suspended Solids (S.S)	5.2	82.0	58.5	28.4	244.0	300	69.6	250	mg/L
Biological Oxygen Demand (BOD)	*	16.3	12.4	*	22.9	300	*	250	mg/L
Fluorides	7.2	7.0	9.3	0.9	10.8	15	*	15	mg/L
Chemical Oxygen Demand (COD)	87.4	56.1	41.5	20.3	54.2	500	22.6	450	mg/L

Examination Results of UMC Fabs' Smoke Pipes in 2008

Fab 6A

Items	NH3	H2SO4	HCl	HF	HNO3	H3PO4	Cl2	VOCs	Reduction Rate of VOCs	NOx
Unit	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	%	kg/hr
Pipe No.	P001	0.00132					0.00549			
	P004	0.00337					0.00931			
	P007	0.00223	0.00049	0.00039	0.00008		0.00002			
	P009							0.03	98	
	P012	0.00117		0.00034	0.00001					
	P014	0.02721	0.00024	0.00010	0.00008	0.00034	0.00001			
	P015	0.00175		0.00024	0.00009					

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Fab 8A

Items	NH3	H2SO4	HCl	HF	HNO3	H3PO4	Cl2	VOCs	Reduction Rate of VOCs	NOx
Unit	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	%	kg/hr
Pipe No.	P001		0.00222	0.02760	0.08440	0.00373	0.00004	0.00763		
	P005		0.00005	0.00329	0.00234	0.00137	0.00003	0.00449		
	P007		0.00099	0.00047	0.00190	0.00225	0.00001	0.00212		
	P009	0.00696								
	P011							0.08	97.3	
	P012	0.00471	0.00007		0.00001	0.00381	0.00003			
	P301		0.00120	0.00116	0.00112	0.00040	0.00080	0.00690		
	P305		0.00003	0.00025	0.00002	0.00013	0.00003	0.00270		
	P312	0.00231								
	P322							0.08	97.6	
	P201									0.18

Fab 8C

Items	NH3	H2SO4	HCl	HF	HNO3	H3PO4	Cl2	VOCs	Reduction Rate of VOCs	NOx
Unit	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	%	kg/hr
Pipe No.	P003		0.00114	0.01832	0.01942	0.00137	0.00007	0.00545		
	P008	0.00359								
	P009							0.18	93.1	
	P013		0.00065	0.00266	0.01782	0.00118	0.00006	0.01009		
	P201		0.00001	0.00017	0.00104	0.00006	0.00000	0.00037		
	P302									0.29

Fab 8D

Items	NH3	H2SO4	HCl	HF	HNO3	H3PO4	Cl2	VOCs	Reduction Rate of VOCs	NOx
Unit	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	%	kg/hr
Pipe No.	P002		0.00075	0.00772	0.00472	0.00064	0.00004	0.02432		
	P005		0.00031	0.00658	0.00700	0.00031	0.00007	0.02217		
	P007	0.02006								
	P009							0.24	94.7	
	P010		0.00027	0.00055	0.00297	0.00026	0.00002	0.00776		
	P012	0.00078								

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Fab 8E

Items	NH3	H2SO4	HCl	HF	HNO3	H3PO4	Cl2	VOCs	Reduction Rate of VOCs	NOx
Unit	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	%	kg/hr
Pipe No.	P001		0.00099	0.00149	0.00104	0.00045	0.00009	0.02864		
	P002							0.15	96.6	
	P005	0.00347								
	P006		0.00032	0.00044	0.00027	0.00010	0.00005	0.01570		
	P009	0.00132								
	P011		0.00146	0.00126	0.00071	0.00061	0.00007	0.02146		
	P201									1.06

Fab 8F

Items	NH3	H2SO4	HCl	HF	HNO3	H3PO4	Cl2	VOCs	Reduction Rate of VOCs	NOx
Unit	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	%	kg/hr
Pipe No.	P003		0.00132	0.00083	0.00083	0.00034	0.00005	0.04321		
	P006		0.00016	0.00037	0.01585	0.00148	0.00003	0.00991		
	P008	0.00259								
	P009							0.26	91.5	
	P010		0.00029	0.00040	0.00106	0.00032	0.00005	0.01710		
	P012	0.01116								
	P202									0.18

Fab 8S

Items	NH3	H2SO4	HCl	HF	HNO3	H3PO4	Cl2	VOCs	Reduction Rate of VOCs	NOx
Unit	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	%	kg/hr
Pipe No.	P005		0.00125	0.00159	0.00902	0.00084	0.00003	0.02118		
	P008	0.01680								
	P009		0.00002	0.00003	0.00003	0.00000	0.00000	0.00082		
	P0010							0.07	96.7	

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Fab 12A

2006								2008		
Items	NH3	H2SO4	HCl	HF	HNO3	H3PO4	Cl2	VOCs	Reduction Rate of VOCs	NOx
Unit	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	%	kg/hr
Pipe No.	P001		0.00029	0.00063	0.00037	0.00144	0.00005	ND		
	P005		0.00002	0.00041	0.00006	0.00018	0.00001	ND		
	P010	0.00200								
	P015		0.00021	0.00050	0.00044	0.00029	0.00005	ND		
	P020		0.00017	0.00115	0.00035	0.00028	0.00006	ND		
	P024		0.00035	0.00178	0.00110	0.00036	0.00163	ND		
	P028	0.00726								
	P016							0.56	91.4	
	P029							0.4	92.6	
	P201									0.33

Environmental Sustainable Development

Environmental Management

The rise of environmental protection awareness benefits those companies who have outstanding performance in environmental protection work while competing in the international market. Therefore, UMC has continued to put efforts into environmental protection work over the years. Environmental management tools have been introduced within UMC, such as an environmental management system, product life cycle assessment, environmental accounting system and others. UMC expects to continually and spontaneously make improvements by adopting environmental management measures to achieve the practical goal of improving and lowering the impact on the environment.

Environmental, Safety and Health Management Structure

As issues in environmental, safety and health become diverse and significant, GRM& ESH Division was established in 1998 to be responsible for planning the company's policy and strategies for risk management, as well as monitoring international information in environmental, safety and health. Moreover, GRM&ESH Division introduces effective systems and provides safety and health expertise to build a safe, healthy and nature-friendly environment.

In addition to GRM&ESH, UMC ESH Committee was established to plan and decide

company-wide strategies in environmental, safety and health issues. Several functional teams were also established under the Committee to promote integrated projects dealing with company-wide issues such as wastewater and waste gas treatment, waste and chemical reduction and recycling, greenhouse gas reduction, energy saving and water conservation. Furthermore, a company-wide industrial safety meeting is held quarterly by ESH Committee and attended by high-level executives. This quarterly meeting is held to discuss issues that include environmental safety and health operation, international environmental, safety and health trends and execution suggestions. This meeting also is held to periodically review the results and performance of the company's environmental safety and health operations. With the participation and support of high-level executives, UMC builds a top-down, communication-effective environmental, safety and health system.

Environmental, Safety and Health Management System

UMC built its environmental management system based on ISO14001. In 2001, UMC led the industry in certification as the whole company received ISO14001 and OHSAS18001 certifications. Certifications over the years are charted as below:

UMC 2008 Corporate Social Responsibility Report

ISO & OHSAS Certifications

Year	Certifications
1997	Fab 6A & 8A received ISO 14001 certifications.
2000	Fab 8C received ISO 14001&OHSAS 18001 certifications.
2000	Fab 6A & 8A were re-certified by ISO 14001&OHSAS 18001.
2001	UMC (headquarter and all fabs at the time) received ISO 14001&OHSAS 18001 certifications.
2002	Newly-built Fab12A received ISO 14001&OHSAS 18001 certifications.
2004	UMC passed re-audit, conducted every three years after certification.
2005	Fab12i received ISO 14001&OHSAS 18001 certifications. ISO14001:1996 evolved to ISO14001:2004
2007	UMC passed re-audit, conducted every three years after certification.

The implementation of UMC's environmental management system is to combine day-to-day management with TQM management. Based on the ideas of PDCA, UMC systematically conducts various risk estimates and evaluation in environmental, safety and health issues, such as the evaluation, replacement and reduction of raw materials, control and reduction of process pollution source, end-pipe treatment and by-product recycling.

ISO and OHSAS Certifications



Environmental Accounting System

UMC implemented its environmental accounting system in 2001 and became the first high-tech corporation to use such a comprehensive accounting method. UMC's environmental accounting system is based on the classifications of Japan's Ministry of the Environment. In addition to an environmental finance system, UMC established a financial information system for safety and health. The UMC environmental accounting system combines current accounting systems and uses pattern comparison and an internal coding method to calculate UMC's invested costs and expenditures on environmental protection. This helps UMC conduct overall environmental benefit evaluations and conduct decision-making analyses. UMC also established an e-database for information collection, sorting out related expenditure and expenses and conducting calculations and analyses every month for management. Based on the information, management draws up cost-efficient environmental management measures to cover both business operations and environmental protection. ◦

• Environmental Protection Expenditure Report

UMC's determination in environmental protection can be demonstrated by its significant expenditure annually in environmental protection. In 2008, UMC's total expenditure for environmental protection was NT\$ 594 million, accounting for 0.88% of UMC's overall expenditures. Total capital expenditure for environmental protection equipment was NT\$ 59 million, accounting for 0.52% of UMC's overall capital expenditure. Total expenses for environmental protection was NT\$534 million, accounting for 0.96% of UMC's overall expenses. The main portion of this expenditure, 71%, was used for fees associated with the annual maintenance of various pollution prevention and control equipment.

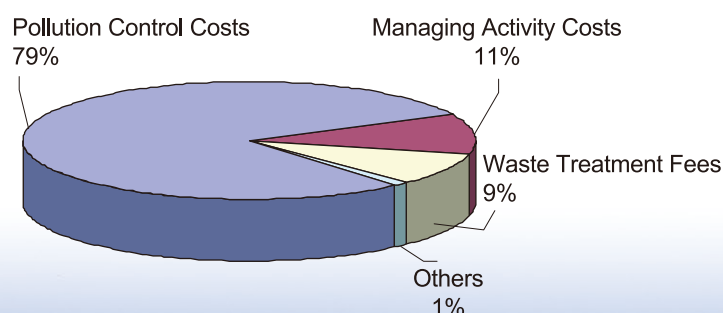
In 2006, UMC incorporated the QC 080000 IECQHSPM (Hazardous Substance Process Management) system to align itself with the RoHS Directive announced by the EU. This demonstrates UMC's capabilities in managing hazardous substances and meeting RoHS Directives. The qualification also assures UMC's continual access to European markets to help its customers expand their market share. The annual certification costs for the QC 080000 IECQ HSPM system, product testing, and relative education total approximately NTD 0.48 million.

Estimated expenditures in the future will include: 1. Modernization and upgrade of current pollution control facilities, 2. Operational fees of NTD 35 million per month for pollution control facilities, 3. Handling fees related to waste treatment of NTD 4 million per month and 4. Environmental monitoring fees of NTD 4 million.

UMC 2008 Corporate Social Responsibility Report

Environmental Protection Expenditure Report in 2008 (in thousands NTD)			
Classifications and Illustration			Expenses
Capital Expenditure	Pollution control facilities		59,124
Expenses	1. Operating costs	1-1 Pollution control costs (including: air pollution control, water pollution control, other pollution control)	422,308
		1-2 Expenses in global environmental protection (Climate change and global warming protection, ozonosphere depletion prevention)	584
		1-3 Derivative fees for improving water resource's efficiency	3,105
		1-4 Handling fees for waste treatment	47,014
		1-5. Derivative fees for waste reduction and recycling	296
	2. Supply chain costs	2-1 Derivative fees for Green purchase	0
		2-2 Derivative fees for recycling, reproduction and reusing of product /packing	0
		2-3 Derivative packing fees for deducing environmental impact	67
		2-4 Environmental protection costs relative to supplier/ customer	327
	3. Managing activity costs	3-1 Environmental training fees	25
		3-2 Management systems implementation fees and verification fees	333
		3-3 Environmental monitoring fees	4,428
		3-4 Environmental personnel expenses	54,620
	4. R&D costs	4-1 R&D fees in environmental protection	1,040
	5. Social activity costs	5-1 Sponsorship for community for public welfare for environmental protection activities	125
		5-2 Sponsorship for environmental groups	433
		5-3 Fees for declaration and promotion of environmental information	202
	6. Loss and compensation costs	6-1 Soil rebuild and environment renovation fees	0
		6-2 Penalties and lawsuit fees for environmental problems	0
	Amount		594,032

Environmental Protection Expenditure Ratio in 2008



Environmental Sustainable Development

Environmental Protection Activities

UMC implemented a series of energy-saving activities and measures in 2008, including environmental protection month, energy-saving activities in office areas, environmental protection declaration for UMC employees and their family members and others. UMC expects its employees to put environmental protection practices into their daily lives such as water conservation, energy saving and resource recycling to reduce carbon emissions and global warming.

• Energy Saving and Environmental Protection Measures in Office Areas

UMC actively promoted several energy saving measures such as paper saving, water conservation, energy saving and garbage sorting.



Poster for Environmental Protection Activities in Office Areas

• UMC's Company Anniversary & Environmental Protection Month

In response to the theme "climate change and global warming" of 2008 "World Earth Day", UMC held many environmental protection activities related to energy saving and carbon reduction in its 28th anniversary and Environmental Protection Month. There are a series of environmentally friendly activities for UMC employees and their family members to participate in, such as Green Fingers, Green Film Festival, coastal cleanup, tree planting, environmental protection photography competition, environmental protection painting contests for children, secondhand clothes donation and item exchanges.

• Green Fingers:

This activity is one of the most popular among employees. Green fingers has been held for many years and more than 500 people participate annually. Green Fingers are instructions on using recycled plastic containers for potted plants to beautify office areas.





Green Fingers



The Winner of the Painting Contest

- **Green Film Festival:**

「The 11th Hour」 and 「Arctic Tale」 were played in the 2008 Green Film Festival. These two films were the best examples to discuss environmental issues such as climate change, global warming, carbon dioxide reduction and resource recycling at the time.

- **Environmental Protection Photography Competition:**

This competition was to promote and raise the awareness of environmental protection. The beauty of the environment was shown through camera images so that more people would be aware of the importance of environmental protection.

- **Environmental Protection Painting Contest for Children:**

This contest was aligned with the theme of UMC Family Day: "Happy Family". It not only brought family members together but also taught children about environmental protection at an early age.

- **524 UMC Coastal Cleanup Day:**

UMC held a Coastal Cleanup activity at Nan-Liao Sea Park with The Society of Wilderness on May 24th, participated by thousands of UMC employees, their family members and community residents. This event was also recorded by the International Coastal Cleanup (ICC).



Coastal Cleanup

- **"Love the Earth, we can make it"**

- Donation.**

UMC set up a "Love the Earth, we can make it" fundraising website and donated 10 NTD for each subscriber who signed the Love the Earth declaration. UMC donated 120,000 NTD in total to the Bureau of Environmental Protection, HsinChu. The donation was used as part of the activity fees for 2008 World Environment Day.

- **Tree planting activity to reduce CO₂**

On May 31st 2008, UMC held a tree planting activity in collaboration with Hsinchu County Government. UMC executives, Head of Hsinchu County, Officers of Environmental Protection Administration, Executive Yuan and numerous UMC employees, community residents and voluntary groups all participated in this meaningful activity to plant trees by hand. More than 2,000 trees were planted, with the potential to absorb about 1,500 metric tons of CO₂ emissions over the course of 100 years (bases on

assumption that one tree can absorb 760 kilogram of CO₂ in 100 years as the calculation). The secretary-general of World Business Council of Sustainable Development -Taiwan (WBCSD-Taiwan), Mr. Niven Huang, was also present as a witness.



Tree Planting Activity

Corporate Social Responsibility

Disclosure on Management Approach for Society

• Labor

UMC believes that employees are the most important assets of a corporation. The continued development and growth of a company is based on the efforts of its employees. Therefore, UMC is committed to building a favorable workplace while continuing to improve on the working environment. UMC provides a competitive compensation and bonus, a full range of education and training programs, a variety of employee benefits and a safe and healthy working environment. By looking after employees' needs in every aspect of life and creating a quality environment, UMC hopes every employee can enjoy their life at work.

• Workplace Health and Safety Management

UMC targets zero-incident as the ultimate goal. In addition to complying with and exceeding industrial safety laws, UMC also adopts advanced techniques in safety and health, risk management and rescue to improve overall safety. Furthermore, UMC continues to encourage all employees to participate actively in safety and health training, and engage in promotional activities.

UMC's Safety Policy:

- It is our goal to achieve zero accidents and comply with all applicable safety and regulatory requirements to ensure safety is the top priority for UMC's sustainable development.
- Continually reinforce best safety and health management practice to reach international ESH and risk management standards.

- Applying total risk control, advanced ESH management and rescue technologies to enhance company's standards.
- Providing safe work environment and operation through preventive management and audit.
- Eliminating hazard factors and preventing incidents through each and every ownership of responsibilities in safety and health.
- Encourage all employees to participate actively in safety and health training, and promotional activities.

• Employee Health and Activities

Corporations require physically and mentally healthy employees to achieve efficient, high-quality performance. As such, UMC strives to create a working environment that facilitates employees' physical, mental and spiritual health. UMC also makes efforts to enhance the well being of employees' family members. The working environment within UMC creates results by increasing morale and improving quality of life for company employees.

• Training and Education

Quality talent is the foundation for UMC's competitiveness, and comprehensive development and training of talents are crucial factors for improving the quality of human resources. UMC's talent fostering policy tailors to training programs that employees may need based on each one's rank and job function, including newcomer, specialty enhancement, management skills, language capability and other training programs. Moreover, UMC provides a variety of e-learning programs, off-job training programs and on-the-job training

programs to provide a working environment for employees to continue to grow.

- **Human Rights**

Emphasis on labor rights protection contributes to talent retention and improved productivity. At UMC, all regulations concerning human rights conform to local labor laws and regulations, and are consistent with the "Electronic Industry Code of Conduct" (EICC).

- **Society**

Since its establishment, UMC has specified in its long-term operation guidelines that the company will make every effort to contribute back to society in addition to focusing on its business growth. In 1996, UMC established the UMC Science and Culture Foundation to systematically sponsor and participate in numerous activities in education, art and culture, sports, public interest, and environmental protection.

- **Spreading Hope Program-Supporting Education for Children from Mid-to-Low Income Families**

UMC Science and Culture Foundation decided to provide education and care for these children from mid to low-income families by offering mid to long-term sponsorships and calling for support from others in the hi-tech industry. By work together, UMC hopes to provide better education for these children to increase their future competitiveness and help them rise above the poverty line.

- **Fostering Talent for the Hi-Tech Industry**

UMC understands that quality talent drives sustainable growth, and therefore supplements its art and public interest activities with academic collaboration and other long-term development programs with several leading Taiwan universities.

- **Encouragement of Healthy Pastimes**

To encourage the younger generation to engage in healthy pastimes and athletic activities, in addition to sponsoring various sports competitions, UMC Science and Culture Foundation has held its UMC Cup Basketball Open Tournament since 1999.

- **Public Interest and Volunteer Work**

Education and aid to minority groups are important considerations at UMC and the company regularly commits to long-term sponsorships. UMC hopes to help society in multiple ways by encouraging its employees to participate in voluntary community work.

- **Community Development**

UMC recognizes and appreciates fine art through the sponsorship of large-scale performances and also focuses on the promotion of community art activities.

- **Service Responsibility**

UMC considers customer satisfaction as fundamental to its mission, and an ultimate goal. Such philosophy has expanded as the company's core value: customer-driven, as the top priority of the company. UMC takes a customer point of view to offer total solutions for fulfilling customers requests. UMC's respect for customers also reflects on protecting customers' privacy and intellectual property. UMC has no direct potential threats to its customers or the general public since UMC does not have its own end products. However, to ensure the products provided to customers meet international standards and customer requirements, UMC checks government updates on environmental protection laws and regulations regularly and sets up examination plans for products containing hazardous substances. Yearly examination results will be announced on www.umc.com to keep information transparent.

Corporate Social Responsibility

Employee Development and Labor Relations

Human resources are the cornerstone of the hi-tech industry and the society, and are an indispensable asset at UMC. UMC is dedicated to fostering the growth of each employee. Current programs include UMC scholarship, funds for outstanding technical talent, overseas advanced education for outstanding engineers and collaboration plans with universities. UMC's goal is to aggressively foster exceptional talent for the company and the society in advance in order to contribute to the society and the hi-tech industry.

UMC's roots in Taiwan continue to expand over the years; therefore the number of employees continues to increase. Since its establishment in 1980 in Hsinchu Science Park, UMC has grown to 7 fabs within the park. In addition to its Hsinchu Science Park base, UMC invested USD 3 billion in Taiwan's Southern Science Park in 1999 and built the first 300mm fab in Taiwan, Fab 12A. UMC moved its R&D team to Southern Science Park to accelerate the migration and volume production for product manufacturing, a move that enables UMC to become the ideal partner for developing new products. UMC's R&D center is the only one of its kind in Southern Taiwan. Completed in 2007, UMC R&D center is the only nanotechnology development center in Southern Taiwan, providing customers with cutting-edge process technologies and comprehensive services. Moreover, it expects to become the crucial center for fostering semiconductor talent in

Southern Taiwan. Capital, talent and manpower investment in Southern Science Park fully demonstrates UMC's determination to achieve the goal of "Rooted in Taiwan and expanding around the world".

To attract more outstanding employees, UMC has established talent fostering programs. Moreover, UMC provides diversified facilities to enhance employees' well being by building a quality work environment, dormitories and recreation centers. The UMC Recreation Center in Hsinchu Science Park and Sports Park in Southern Science Park offer UMC employees places to relax and exercise.

Recruiting

New employee hiring is not biased in age, gender, race or religion. There is absolutely no hiring of child labor. The employment contract is signed when the employer and the employee have mutual consensus. Turnover rates have decreased gradually in the past three years to below 12% at the end of 2008. The structure of human resource for the past three years is as below:

Number of Employees

Year	2008	2007	2006
Engineers	6,461	7,046	6,774
Administrators	475	556	550
Clerks	34	51	60
Technicians	4,734	6,067	5,881
Total	11,704	13,720	13,265

Average Age

Year	2008	2007	2006
Average Age	32.0	31.0	30.6

Average Years of Employment

Year	2008	2007	2006
Average numbers of years	6.8	5.9	5.4

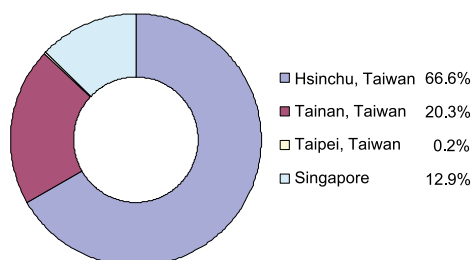
Level of Education(%)

Year	2008	2007	2006
Ph.D.	1.3	1.2	1.2
Masters degree	24.0	22.1	21.8
Bachelors/ Associate degree	49.9	48.8	48.7
Secondary school and others	24.8	27.9	28.3

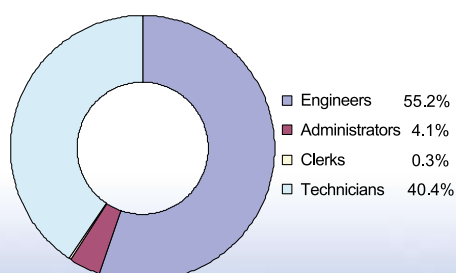
Note: the number above includes Taiwan and Singapore fabs and Taipei office.

Up to the end of year 2008, the number of UMC's employees was 11,704. The allocation of geographic working area, job type, age and gender are as below:

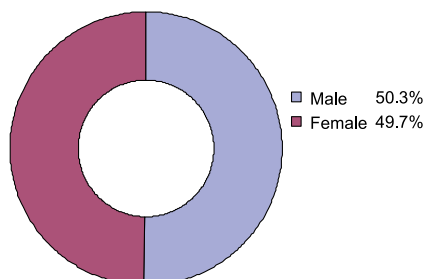
Employees by Geography



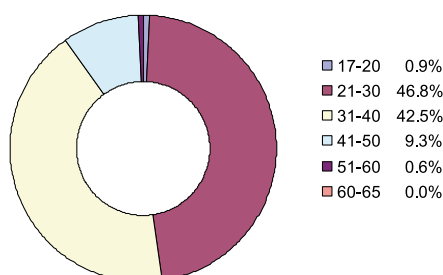
Employee Job Category



Employee Gender



Employee Age Distribution



Note: the number above includes Taiwan and Singapore fabs and Taipei office.

UMC is facing employee loss due to changes in the industry and environment. To achieve the operating goals through human resource competitiveness and employee recruiting, retaining and development, UMC continues to employ various retention measures such as management systems, morale inspiration and new employee care to raise the retention rate and lower the resignation rate.

The continued development and growth of a company is based on the efforts of its employees. UMC is dedicated to fostering the growth of each employee and attracts its talent through fair and impartial measures that target job seekers compatible with UMC's corporate culture and who are willing to grow along with the company. Hence, UMC hopes to achieve outstanding accomplishments for both the company and for its individuals.

Labor Relations

People provide the foundation for UMC. Employees' salary and benefits are important considerations. UMC was the first company to introduce Taiwan's employee share bonus system, which has helped improve the effectiveness of management and operations. The employee share bonus system converts employees into shareholders so that part ownership of the company belongs to the people that work here. UMC values the rights and interests of employees. Though no labor relation committee has been established, employees can still communicate with their superiors through many channels, including departmental meetings, colleague symposiums and opinion boxes. In addition, the company encourages the establishment of various societies and clubs to maintain the well being of employees' mental and physical health. The company subsidizes all of these social activities. The company also established hotlines for reporting sexual harassment and fraud.

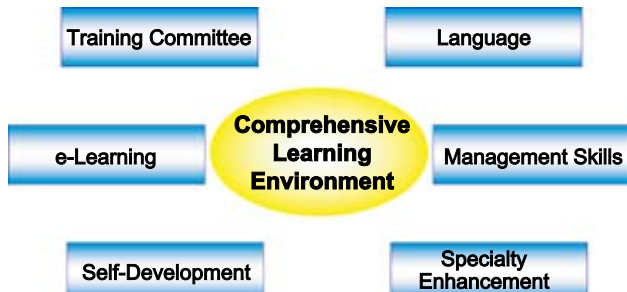
The Council of Labor Affairs and other organizations have recognized UMC's efforts in developing good labor relations. These organizations awarded UMC the honors of National HRD InnoPrize, Model Institution for the Promotion of Labor Welfare, Model Enterprise for the Promotion of Labor Education and the Model Enterprise for Industrial Relations distinctions, and 2008 National Friendly Working Environment Prize Award. UMC will continue its policy of prioritizing its employees while contributing to society and targeting the sustainable growth of the company.

Diversified Training

UMC's training programs are not limited in lectures in the classroom; in contrast, UMC strives to offer employees a comprehensive learning environment through the integration of UMC's learning resources. UMC provides specialized enhancement, management skill, language capability and self-development trainings. UMC also offers a complete specialized technical training program for its engineers to acquire necessary skills. As to management skill trainings, various training programs are delivered based on the levels of management and the competency requirements as defined by UMC. Language proficiency requirements are specified according to the needs of job functions and UMC offers language certification exams and courses to meet this demand. For cross-divisional and on-the-job trainings, UMC Training Committee incorporates corporate missions into divisional training plans. Training committees from each division assume the role of planning and delivering the training programs and then evaluate the effectiveness of courses. Besides the training programs, UMC provides eLearning channels for employees' self-development to shape the company into a learning organization. In 2008, 6,812 training classes were held, total training hours were 442,365 hours and total participants for training programs were 185,247.

UMC 2008 Corporate Social Responsibility Report

Comprehensive Learning Environment



UMC clearly realizes that outstanding technology talent is the key to continuous technology improvement and sustainable growth of the corporation. Therefore, UMC plans professional engineering fostering programs based on the engineering

departments' needs and defined competencies. UMC hopes to help engineers develop their overall expertise and manufacturing quality through solid training.

Engineering Expertise Training Program

Time	Level	Function		
		PE	EQ	PEI
20 Mths	4	Process Development & New Tech.	Improvement	Professionalized Technical
	3	Lesson learning	Lesson learning	Advanced Technical
3 Mths	2	Product Maintain & Abnormality Mgmt	Daily Maintenance	Basic Technical & Shift Skills
	1	Intro to Theories & EQs	Intro to Theories & EQs	Basic Skills
1 Mth	0	Introduction to Semiconductor Production Process		

One Stop Service Learning Portal

The image displays four screenshots of UMC's learning portals. The top-left screenshot shows the 'Training Information System - TIS' with various menu options like 'File Application', 'Material Search', and 'History Search'. The top-right screenshot shows the 'Leadership Development Web' with sections for 'Competency Dictionary', 'Manager's e-Assistant', and 'Manager's Training Roadmap'. The bottom-left screenshot shows the 'Learning Portal' with a sidebar for 'Class Available' and 'External Training'. The bottom-right screenshot shows the '聯電e大學' (UMC e-University) homepage with a grid of icons for different departments like 'Newcomer', 'Technical', 'Language', 'Exam Center', 'Management', 'Quality', 'OJT', and 'Material Room'.

One Stop Service Learning Portal

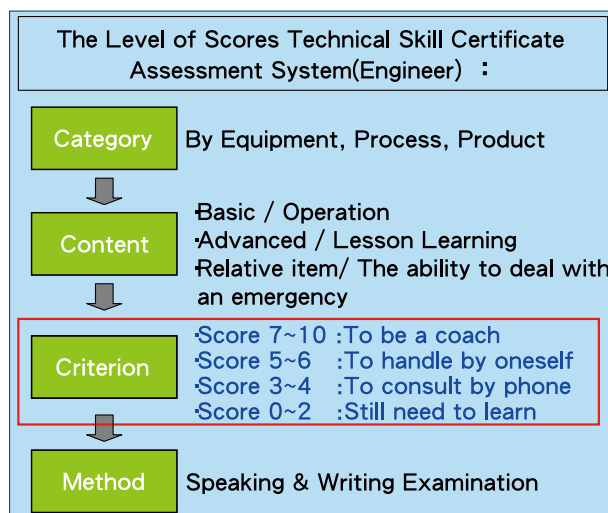
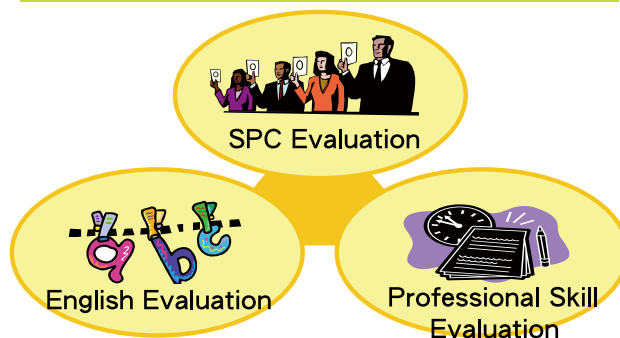
In addition, learning roadmaps are designed based on each employee's job function. Required training courses and hours for each employee are tracked through the monitoring and calculation of the training system, which creates concrete training effects.

In addition to various specialty enhancement training programs and management skills training programs, UMC also provides an easy and convenient self-learning environment. E-learning platform provides a channel for preparation before class and review after class, deepening the knowledge and skills learned and resulting in more fun in learning.

As a multinational enterprise, UMC establishes a qualitative and quantitative basic skills evaluation system. Through TOEIC, SPC and a professional skill evaluation system, UMC effectively evaluates its employees' core capabilities in English, process quality and engineering expertise. This helps to improve manufacturing quality and meet customers' needs all over the world.

◆ Engineer Evaluations:

- Qualitative and quantitative
- Professional skill, SPC and TOEIC.



Professional Skill Evaluation

• Newcomer Training Programs

Recruiting, fostering and retaining talent is the main purpose of UMC's training in shaping the company's culture. "The involvement and support from supervisors is the key for successful training" is a 90 day training program. The effort that every supervisor puts into these 90 days of complete and comprehensive training helps UMC's new employees more easily blend into UMC's culture.

The First 90 Days ~ UMC "U-Camp"



90-day Training Program for Newcomers

• The Key to Successful Training

Dr. Shih-Wei Sun, CEO of UMC, once said, "Training is the best way to enhance employees' capability, to establish organizational disciplines, and to improve the competitiveness of the company." The hi-tech industry is now facing extraordinary competition as time and trends change rapidly. Management level now realizes the importance of training to retain talent since outstanding talent is difficult to find and develop. Talent retention and fostering is a primary goal for the company and is a factor in UMC's continued growth as a world-class foundry.

Employee Welfare and Working Environment

In addition to compensation and bonus, UMC employees have increased expectations on their working environment and other welfare issues. UMC devotes itself to creating a safe and healthy working environment. By looking after employees' needs in every aspect of life and creating a quality environment, UMC hopes every employee can enjoy their life at work.

Competitive Total Compensation

UMC has always viewed its employees as an important asset. In order to attract superior talent and to create a prosperous future, UMC provides compensation that is competitive with the market. Wages are decided upon employee level of education and working experience, performance and market value, and are irrelevant with regard to gender, race, religion, political position, and marital status.

UMC provides various compensation and benefit items, including salary adjustments, bonus, stock dividend and stock-related programs (stock options and treasury stocks). Furthermore, the Company also provides various insurance and pension programs to enhance employees' work life.

Performance Review

UMC conducts performance reviews annually, so that company accomplishments, department goals, and individual employee performance can be measured and evaluated. The

performance review focuses on past and future work and goals, with supervisors and employees working together to come up with development plans. For poor performers, the company will initiate an improvement plan to help elevate their efficiency.

Employee Welfare

As to dining, various eating areas can be chosen from within each fab, combined with coffee shops and convenience stores. As to apparel, employees are allowed to wear casual clothes except for when entering certain areas (such as fab cleanrooms) or employees at certain posts (such as receptionists). For inhabitation, DL and IDL can apply to live in UMC's dormitories. For transportation, regular free-of-charge buses are offered for fast and easy transportation. Finally, UMC's Recreation Center and Sports Park provides first class facilities with low entrance fees for employees' entertainment and leisure.

Furthermore, UMC provides channels for opinions and complaints, such as employee group, TECH, and secretary discussion meetings to collect different suggestions and opinions to ensure the continual improvement of the company. UMC also follows government regulations by establishing explicit rules to protect employees' rights, such as anti-sexual harassment regulations, a retirement system, and leave application. UMC was Taiwan's first private enterprise to adopt a four-shift rotation

system. Particularly noteworthy is that UMC provides comprehensive insurance systems for its employees as soon as they arrive at UMC. These include labor insurance, health insurance and free-of-charge group insurance (including group insurance for NTD 2 million and cancer insurance). Employees' family members are also covered by life insurance, accident insurance, and group health insurance. UMC's comprehensive insurance package offers employees peace of mind so they can dedicate their efforts to their work and society. UMC also fully protects employees' rights by following Labor Standards Law and other related regulations to handle employees' retirement.

Employee Health

UMC offers free-of-charge, confidential psychological consultation to help UMC employees deal with mental stress. In addition, UMC educates its employees with the latest news on pursuing healthy living at work and home through its postings on the company intranet site, flyers, booklets and lectures.

UMC conducts annual employee physical exams performed by professional medical staff and has an "individual health management plan" tailor-made for each employee through an "employee health information system". Through various health improvement activities and information, UMC employees gain a better understanding of how to manage their own health condition as well as their family members'. In addition, UMC's health center conducts regular hearing and vision protection programs to prevent occupational injuries through work safety and health management.

UMC's employee clinic, established in 2003 at the United Tower headquarters, provides professional medical services on-site and through local medical resources. These services include outpatient services such as body checkups, family medicine, and metabolic evaluation. With more convenient, thoughtful clinic services, UMC employees are able to save the trouble of traveling great distances for medical services.

2008 Activities to Help Safeguard Employees' Health

	Health Programs	Themes
Q1 Nutrition Program	<ul style="list-style-type: none"> • Nutritional Ways of Eating • Simple Ways of Eating • Slim Ways of Eating 	<ul style="list-style-type: none"> • Healthy, Tasty Food • Physical Fitness Check • Weight-loss Classes
Q2 Balance Program	<ul style="list-style-type: none"> • Healthy Mind • Sleeping Well • Sound Sleep 	<ul style="list-style-type: none"> • Mental Health Lectures • Sleep Disorder Tests • Light Therapy for Sleep Problems
Q3 Safeguard Program	<ul style="list-style-type: none"> • Colorful Life • Safeguard • Absolute Protection 	<ul style="list-style-type: none"> • Annual Physical Check • Additional Paid Check-up • Influenza Vaccination
Q4 Add-Value Program	<ul style="list-style-type: none"> • Activities for the Middle-aged 	<ul style="list-style-type: none"> • Lectures for the Middle-aged • Ultrasonic Examinations for Prostate

Safe and Healthy Working Environment

UMC recognizes that safety behaviors and attitudes are the keys for occupational safety management, and has invested significantly in protection facilities to meet international standards. UMC declared the concepts of "Be aware of your own safety as well as the safety of others" and "Safety is everyone's responsibility, and my personal accountability" as foundations for its corporate culture of "Safety is my responsibility" since September,

2005. To achieve the goal of "zero-accident", UMC enhances daily safety and health management operation for each department and expects to create a safe and healthy working environment by self-initiative moves from employees in addition to the protection that facilities provide.

• "Safety is My Responsibility"

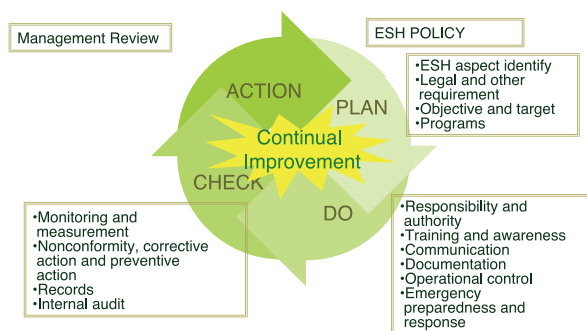
To strengthen safety awareness among its employees, UMC places emphasis on the promotion of safety awareness and concern for others' safety 2008. The major actions are stated below:

- Posters of human error incidents
Various human error incidents were illustrated in posters and posted in each fab. By illustrating the root causes, corrective actions and preventive actions, UMC enhanced the understanding of correct safety actions and prevented the repetition of human error incidents
- Unsafe behavior identification activity
By setting subjects close to daily activities and identifying unsafe behaviors inside the company through e-check system, UMC raised the safety consciousness of its employees and prepared for the activity of "Care for others."
- "Care for others" activity
Collaborating with the safety culture for "Safety is my responsibility", UMC held "Care for others" activities in our fab. Employees were encouraged to remind other employees if they noticed unsafe behaviors. Those who engaged in unsafe behavior would not be punished, but the company would ensure they understood the potential dangerous consequences, and each fab recorded the unsafe cases. Up to the end of 2008, more than 1,000 cases were recorded.

• Environmental Safety and Health Management Cycle

Based on the requirement of ISO14001&OHSAS18001, UMC establishes continually improving environmental safety and health management systems. In 2001, UMC led the industry in certification as the whole company received ISO14001 and OHSAS18001 certifications. The areas covered include: safety design for facilities, education and training for employees, systematic safety management measures and internal and external inspection. For inspections, UMC executives and managers conduct environmental safety and health inspections in each fab semi-annually. Moreover, an external inspection is conducted annually by third-party verifiers for each fab.

Environmental Management System Overview



• Risk Evaluation in Environmental Safety and Health

Since its establishment, UMC has adopted various methods to evaluate the risk of its processes, equipment and chemical usage. UMC also lowers the numbers of incidents as well as environmental pollution by improving its engineering and replacing its processes. In addition to evaluating the safety and risks in all operating environment by using ISO14001 and OHSAS 18001 early examination methods,

UMC also conducts special examination targeting high-risk working areas. Moreover, risks for facility renovation, new chemical usage and new equipment introduction will not be proceeded until ESH professionals finish the risk evaluation and prepare all prevention measures.

• Equipment Safety Management

UMC's equipment safety management can be divided into three key elements:

1. Procurement and installation

Before the procurement of equipment, vendors will be required to provide a SEMI S2 report verified by a third party and also an improvement program. During the process of moving equipment into the fab, the moving path should be confirmed, the moving area should be isolated and equipment unloading should be directed by responsible personnel. Employees and vendors responsible for moving the equipment should wear protective suits to prevent injury.

2. Equipment operating management

Regular maintenance and checks are conducted on normal operating machines. Moreover, periodic IR scanner checks are adopted for manufacturing machines and their subsidiary equipment, and abnormal ones should be reported and tracked for further improvement.

3. Safety components management

The "Safety Interlock," a component to ensure safety, is adopted to effectively protect the safety of operators during operating machines. The safety interlock is strictly prohibited from being isolated except during application and evaluation beforehand.

In addition, Emergency breaker switch (EMO) is installed on each machine. In abnormal or unexpected situations, EMO can immediately turn off the power and chemical supply to avoid further potential damage.

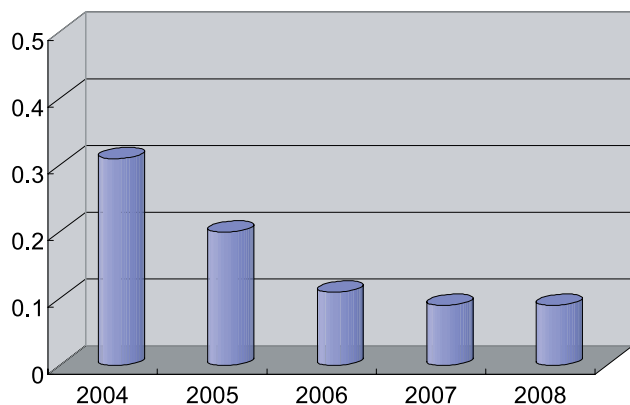
• Environmental Safety and Health Training

There are three levels of environmental safety and health training courses in UMC: Company level, site level, and department level. Continuous training and promotion can strengthen employees' emergency response abilities and sense of safety and further lower the number of accidents resulting from unsafe actions. Annual training programs include emergency response, government laws, the maintenance of safety and health management system, safety notice for special operations and supervision training. In addition to annual training programs, periodic training programs are planned for special cases. 712 classes were held in 2008 with a total of 3,508 attendees. In addition, 105 online classes are available to UMC employees so that they can attend classes based on their own schedules.

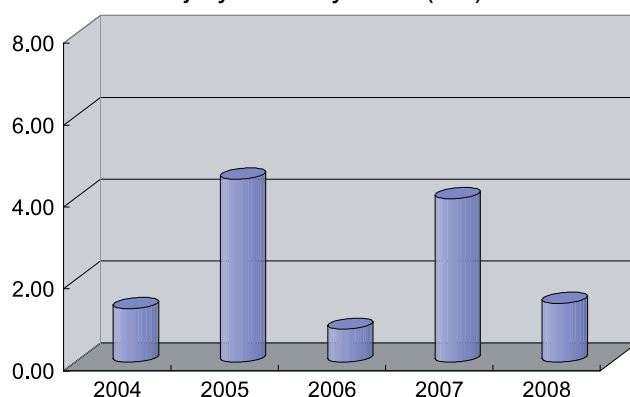
• Occupational Incident Statistics and Analysis

The safety of the environment and employees are primary concerns for UMC. UMC established an incident report and investigation system for information disclosure and storage. Incidents are recorded and analyzed monthly and used to develop preventive measures. UMC evaluates its occupational safety and health performance based on the Injury Frequency Rate (FR) and Injury Severity Rate (SR), established by the Council of Labor Affairs. UMC's FR and SR from 2004 to 2008 are as below:

Injury Frequency Rate (FR)



Injury Severity Rate (SR)



Note: Injury Frequency Rate (FR) = Injury events/Million working hours

Injury Severity Rate (SR) = Injury days-away/Million working hours

• UMC Fire Brigade

Voluntary firefighters dedicate themselves to their daily work but are also able to rapidly mobilize into action during emergencies within minutes. Members of the brigade are required to complete 88 hours of basic rescue training upon enrollment, followed by scheduled monthly training to ensure that rescue skills and safety knowledge remain sharp. In addition to physical strength training, fire and chemistry disaster handling are also included in monthly training. UMC Fire Brigade also conducts specialty training at Hsinchu City's Fire Department training facilities and Seafarer Training Center to gain better proficiency in handling general fires, organic solvent fires and chemical disasters. The brigade also periodically sends key personnel abroad for various training (including TEEX, SCDF...) to learn the latest fire-fighting information. All members in UMC Fire Brigade are able to reflect and refresh what they have learned through the guidance of professional trainers, practical training and off-session discussion.

Emergency Response and UMC Fire Brigade

UMC's hi-tech fire brigade was established in April 1999 and stands by 24 hours a day to quickly respond to all kinds of emergencies. Through constant training, UMC hopes to strengthen its emergency response capabilities at the early stages of any accident, therefore minimizing accident costs, shortening the time needed to resume operation, and reducing any impact to customers.

• Employee Training and Emergency Response

To further reduce the time it takes to resolve accidents, UMC's well-trained fire brigade partakes in several regular internal firefighting trainings, fire drills, and evacuation drills with all employees so that they have basic fire safety and emergency response skills. For example, each of UMC's 13,000 employees undergoes a 2 to 4 hour training program every three years, including basic fire safety lessons and fire extinguisher operation. For each fab,

regular training is also held for ERT (Emergency Response Team) members to familiarize them with the response flows and rescue equipment. Other areas covered include specific duties such as commander, rescue team, logistic team, and announcement control team training.



UMC Brigade's Social Responsibility

Since its establishment, UMC Fire Brigade has secured UMC's fab safety and fulfilled its duty as a corporate citizen based on UMC's corporate culture. In addition to sharing training results and rescue experience to firefighting departments and other companies, UMC Fire Brigade also takes an active role in providing rescue assistance when required by the community.

UMC also helps local fire bureaus and other organizations train for fire and chemical disaster, such as National Fire Agency, Ministry of the Interior, Science Park Administration, Hsinchu City Fire Department, Miaoli County Fire Department, Tainan County Fire Bureau, Hsinchu County Environmental Protection Bureau, Central Police University, Industrial Technology Research Institute, etc.

Organizations that have shown their acknowledgement and appreciation for prompt firefighting and rescue assistance from UMC

Fire Brigade include Taiwan Power Company (Lon-Song Substation), WSMC, Powerchip Semiconductor Corp., XAC Automation Corp., Fu-Guo Chemical, Lite-On IT Corp., Motech, Du Pont Hsinchu office, and the construction site on Pao-shan road. Moreover, UMC Fire Brigade was chosen by the Environmental Protection Administration as the designated support unit for toxic/chemical accidents. UMC believes that the efforts spent in emergency response will reassure our customers and shareholders of our commitment to safety and productivity.



Corporate Social Responsibility

Customer Service

Since 1995, UMC has devoted itself to foundry manufacturing technologies. As to post sale services, UMC provides customer-oriented services based on its foundry expertise. UMC sees situations from the customers' perspective and provides comprehensive services to meet each customer's needs.

Customer Satisfaction

Since the start of its operations, UMC has considered customer satisfaction as fundamental to its mission, and an ultimate goal. Such philosophy has expanded as the company's core value: customer-orientation, as the top priority of the company. Taking a customer point of view to offer total solutions for fulfilling customers' requests is UMC's basis of operation.

• Online Service Platform: MyUMC

In 1998, UMC established its MyUMC online information portal as a pioneer in the semiconductor foundry industry to eliminate geographic and time boundaries. MyUMC gives customers easy access to UMC's world-class foundry services by providing a total online supply chain solution. This application offers 24-hour access to detailed account information such as manufacturing, engineering, design and financial data through each user's own personalized MyUMC start page.



• We're listening: Voice of Customer (VOC)

It is essential for a company to acknowledge customers' requests, suggestions, concerns, and complaints. In 2002, UMC developed VOC (Voice of Customer) - an instant online customer feedback system with a user-friendly interface that is accessible through the company's MyUMC customer web portal. UMC customers can submit any requirement, opinion or suggestion regarding UMC's services, which will be processed and responded to by the appropriate staff members and the status updated periodically on the website. The actions taken must be in compliance with a resolution in a timely fashion. In addition, management will review the incoming complaints/ requests, management progress, and outcomes of issues. Consequently, each department will take necessary actions to resolve the complaints/ requests to improve its function. Therefore, VOC is not just a suggestion box but also a tool to transform customer feedback into concrete actions for UMC's continuous enhancement.

UMC 2008 Corporate Social Responsibility Report



• Customer Satisfaction Monitoring

UMC monitors customer satisfaction through a customer scorecard program. UMC's major customers issue supplier performance scorecards on a routine basis to indicate their satisfaction level towards UMC's foundry services in technology, quality, engineering, delivery, and other aspects.

UMC makes extensive use of customer feedback for continuous improvement. The accountable departments shall propose and implement corresponding actions to improve customer-concerned issues. The customer scorecard program is an effective communication tool between UMC and its customers that facilitates effective solutions to enhance customer satisfaction.

The scorecards provide UMC with an overview of issues that have been accomplished and opportunities for further improvement. The program enables a strong collaboration between UMC and its customer to drive continuous improvement and to achieve mutual success.

In year 2008, UMC received several excellence performance awards from major customers include the following:

- 2008 TI Supplier Excellence Award Winner
- 2008 MediaTek Best Foundry Award (Fab12i) & Best Project Award
- 2008 Marvell Supplier Excellence Award (Fab12A), Technology Collaboration Excellence Award (ITD)
- 2008 Freescale Supplier Excellence Award

• Customer Privacy

UMC's respect for customers directly reflects on the protection the company has for its customers' privacy. UMC sets its own regulations to protect customers' intellectual properties and signs contracts with its customers to protect their confidential data. Employees whose daily work involves confidential customer information are required to participate in training course to ensure they work within the confidentiality policies while interacting with customers. In 2008, there were no incidents of customer complaints from breaches of customer privacy or loss of customer data.

Responsibility in Product's Safety and Health

UMC has no direct potential threats to its customers or the general public since UMC does not have its own end products. However, to ensure the products provided to customers meet international standards and customer requirements, UMC checks government updates on environmental protection laws and regulations monthly and sets up quarterly examination plans for products containing hazardous substances by sending products to a third party organization for examinations on each item on the hazardous substance control list. Moreover, yearly examination results will be announced on MyUMC.com to keep information transparent.

Corporate Social Responsibility

Supplier Relations

UMC considers suppliers as important and valuable partners for future growth and development. To enhance sustainable competitiveness, the efforts and support of suppliers is indispensable.

CSR Requirement for Suppliers

Taiwan's enterprises play a crucial role in the territory of globalization and supply chain structure. As CSR has become the key to business sustainability, Taiwan's enterprises bear higher expectations from the international community. The global wave of social responsibility and environmental protection has already swept across the entire supply chain. Every aspect of the supply chain has to face the pressure of CSR. UMC sees this as challenges as well as opportunities. UMC is aware that CSR activities cannot be limited to the enterprise itself, but also needs to extend to the participation of the whole supply chain. In addition to quality and delivery, UMC's requirements for suppliers have been extended from the original environmental and safety requirements to CSR.

• UMC supply chain CSR declaration

In 2008, the annual supply chain management summit was held on February 22. More than 300 global suppliers from the equipment, raw materials, facilities, components and test and packaging sectors participated in the event. The event focused on breaking

through cost barriers, sustaining long-term partnerships and putting corporate social responsibility into practice, while stressing environmental protection and being active in public interest activities. In the meeting, UMC and representatives of suppliers signed a CSR declaration. The declaration was based on the idea of "caring employees, emphasizing environmental protection and practicing public interests". Several key statements in the declaration included "Valuing labor rights and building a quality working environment", "developing green manufacturing processes, providing green products and establishing a green supply chain", "caring for the minority and the environment and fulfilling our responsibilities as corporate citizens" and "helping up-stream and down-stream vendors to improve their green competitiveness and to create green business opportunities". The declaration was distributed to all UMC suppliers through the procurement system. 150 suppliers received the declaration; 105 of them have already signed it and the response rate was 70%. The 2008 supply chain summit and signing ceremony demonstrates UMC's continued commitment to improving the sustainable value of the overall supply chain by working closely with its partners.

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2008 supply chain management summit



Representatives of Suppliers Signed the Declaration with UMC

Representatives from Applied Materials, ShinEtsu, 3M and L&K Engineering signed the declaration with UMC, with Niven Huang, the secretary-general of Taiwan Business Council of Sustainable Development, present as the signing witness.

Green Supply Chain

The RoHS (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment) Directive has been in effect since July 1st, 2006. The RoHS Directive bans electronic products that contain certain levels of six listed hazardous substances (lead, cadmium, mercury, Chromium VI, PBB and PBDE) from entering European markets, effectively creating a green trade barrier. Therefore, how to react to this international trend for environmental protection and improve UMC's green competitiveness have become

new challenges for business operation.

UMC has been aware of the green production trend from the international community and its customers since 2003. Since then, UMC has promoted green supply chain management and established an SOP for green procurement through supplier, processes and materials evaluations. UMC also regularly requires a third-party organization to examine UMC's products to ensure they meet environmental laws and regulations. UMC became a Sony Green Partner in 2003, and passed qualification again in 2005 and 2007. These actions demonstrate that UMC's progress in hazardous substance management has gained recognition from its customers.

UMC conducts investigations and evaluations on its suppliers' green product management status through management, monitoring and execution programs as part of its participation in the RoHS supplier guidance project initiated by Industrial Development Bureau, Ministry of Economic affairs. In addition, UMC conducts on-site assistance and investigations to major suppliers. For those who fail to meet the standards, UMC offers suggestions and implements follow-up examinations to ensure the completion of the whole green supply chain.



2008 Supplier Symposiums

Meanwhile, to improve the efficiency of green product management, UMC established a cross-division HSPM (Hazardous Substances Process Management) committee to manage all implementation and promotion of related work. HSPM committee meets regularly to enforce execution through communication of project targets. In addition, HSPM committee works aggressively towards the qualification plan for QC-080000 IECQ HSPM.

UMC completed the final system audit for QC 080000 IECQ Hazardous Substance Process Management (HSPM) qualification on June 9th, 2006 to become the first semiconductor manufacturer worldwide to achieve HSPM certification for all fabs. The completion of QC 080000 IECQ HSPM qualification audit demonstrates UMC's capabilities in managing hazardous substances and meeting RoHS Directives. This qualification can ensure that UMC provides cutting-edge and environmental-friendly IC manufacturing services and helps UMC's customers expand their market share.

By helping suppliers establish a hazardous substance control mechanism to conform to international regulations, this project enhances the competitiveness of the entire green supply chain. Key points for green management policies applied to suppliers are illustrated as below:

• Hazardous Substances Control and Management

UMC established a hazardous substance control list based on international environmental protection laws and customers' requirements. Suppliers have to sign a guarantee and provide third-party examination reports if necessary

to ensure their products meet the rules of this control list. Hazardous substances control is also applied to merchandising. All materials that violate the control will be deemed as disqualified products and returned to the suppliers. Suppliers are then required to provide correction and prevention measures.

UMC hazardous substances control list

Substance Category	
1	Cadmium and its compounds
2	Chromium (VI) and its compounds
3	Lead and its compounds
4	Mercury and its compounds
5	Polybrominated Biphenyls (PBB)
6	Polybrominated Diphenylethers (PBDE)
7	Polychlorinated Biphenyls (PCB's)
8	Polychlorinated Naphthalenes (more than 3 chlorine atoms)
9	Mirex
10	Shortchain Chlorinated Paraffins
11	Polychlorinated trephines
12	Tributyl Tin (TBT) and Triphenyl Tin (TPT) and oxides
13	Ozone Depleting Substances Class I & II
14	Asbestos and its compounds
15	Azo-Based Materials
16	Certain Ethylene Glycol Ethers
17	Radioactive Substances
18	Polyvinyl chloride (PVC)
19	Aresnic and its compounds
20	Beryllium and its compound
21	Nickel and compounds
22	Benzene
23	Chlorine organic solvent
24	Formaldehydes
25	Aliphatic & Aromatic Chlorinated Hydro Carbons
26	phthalate compounds

27	Selenium & compounds
28	Pentachlorophenol, salt other salts & compounds (PCP)
29	Barium Compounds

In addition to supplier management, the customer partnerships are also a crucial factor to achieve the enhancement of green supply chain management. UMC's HSPM policy shows that the company shall provide products in accordance with the demands of customers as well as within laws and regulations regarding HSF (Hazardous Substance Free) materials, so that UMC can fulfill its responsibility as a global citizen to protect the environment as well as personal health and safety. UMC also sees customers' requirements as an important information resource for HSPM; therefore free and transparent customer communication is a key factor to achieve green supply chain management.

There are several activities that can help to communicate HSPM related requirements from customer to UMC. These are some examples:

- (1) To hold green management meetings to announce HSF objectives.
- (2) To sign HSF warranty to communicate green management requirements.
- (3) To require suppliers to implement green manufacturing process improvement and hazardous substance reduction/replacement through supervision or on-site investigation.

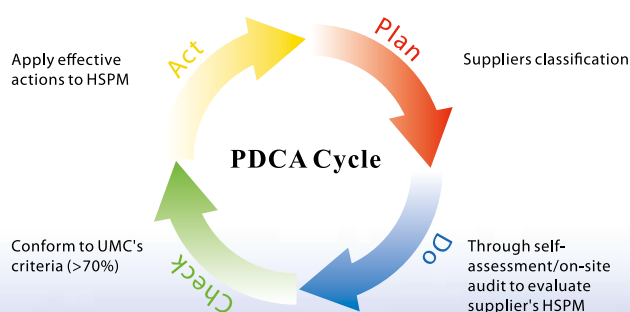
• Supplier Classification

With regard to choosing its suppliers and contractors, their CSR practices will be a primary consideration for UMC, such as their value of green production, environmentally

friendly design for products and hazardous substance free. It can be specified as below :

Suppliers are classified based on their features and risk level (All can be classified by A, B, & C levels). All suppliers have to fill in UMC's hazardous substance control list and conduct self-evaluation. UMC will conduct either document reviews or on-site investigations to confirm the information they provide. Suppliers who fail to meet the standard have to make improvements in a limited period of time. Suppliers who fail at the new material assessment stage cannot be accepted as UMC qualified suppliers. The main purpose of the classification is to encourage suppliers to establish their hazardous substances internal management system. UMC expects to achieve effective control on environmental-friendly design for products and be hazardous substance free through source management.

The approval of a supplier will depend on the third-party examination documents they provide, the control lists they sign and passing a history investigation with no violations. Furthermore, UMC will require them to continue to improve unless they prove that there are no hazardous substances in use following on-site investigation and all its procedures meet UMC's standards.



Supplier HSPM Management PDCA cycle

• Green Procurement Management

UMC's requirements regarding green procurement, including control rules on tier 2 and tier 3 suppliers, are sent to its suppliers accompanied with orders through an e-procurement system. In addition, suppliers must upload their examination results for materials and goods through this platform. UMC can then recognize items that violate the rules in advance and take countermeasures immediately.

• Supplier Evaluations

Suppliers' efficiency in managing hazardous substances will be included in UMC's supplier evaluations. If suppliers obtain certain certificates for environmental protection efforts or hazardous substances management (ISO 14001 or TS16949 or QC080000), they will accumulate positive points in evaluations. UMC will cease procurement or disqualify the suppliers if they perform poorly in the evaluations.

• Supplier Training

UMC believes that suppliers play a crucial role in green supply chain management. Therefore, UMC periodically holds supplier training meetings to promote and communicate UMC's policy and methods in implementing its green supply chain management system as well as items that suppliers shall cooperate with. UMC hopes to create a win-win situation for both UMC and suppliers based on green product consensus.

Contractor Management

There have been various industrial safety incidents due to contracting operation over the years and hi-tech factories suffered significant losses. Therefore, UMC takes a proactive attitude toward contractor management and expects to prevent any contractor incidents through effective management. In addition to qualified contractor evaluations, UMC has an "Environmental, safety and hygiene notice for contractors" document that is distributed to all contractors to inform them of relative company regulations regarding safety and health management. Moreover, UMC requires all contract workers to take " UMC's contractor ESH training program". Furthermore, UMC established a comprehensive e-system when issuing work permits to effectively control and monitor construction applications as well as during pre, during and post construction management. UMC also requires construction safety meetings to be held between UMC supervisory employees and contractors before construction begins. During construction, in addition to responsible supervision, UMC's GRM&ESH Division will conduct random inspections to ensure all construction follows safety regulations.



UMC e-system for Work Permit

Corporate Social Responsibility

Public Interest and Community Care

As UMC works hard to sustain itself as a world-class leading foundry, it also senses that an enterprise requires both hard work and the support from the society to be successful. Since its establishment, UMC has specified in its long-term operating guidelines that the company will make every effort to contribute back to society in addition to focusing on its business growth.

Public Interests and Volunteer work

Education and aid to minority groups are important considerations at UMC. In addition to long-term sponsorship, UMC also encourages its employees to expand their vision by participating in volunteer work. UMC's activities in public interest areas promoted over the years include "Building the future together for our children" (collaborating with World Vision Taiwan), sponsoring school tutoring services for children from mid-to-low income families (conducted by Boyo Social Welfare Foundation) and fundraising to help Bluesky and Good Shepherd Social Welfare Services build shelters for dropouts.

To realize this goal, UMC established the UMC Science and Culture Foundation in 1996 to sponsor and participate in numerous activities in technology development, education, academic research, childcare, environmental protection, culture, art, public interest, and sports. UMC is also involved in community-care activities by way of the company's Candle Light Society, an

organization that is formed voluntarily by UMC employees. The Candle Light Society acts as a bridge between UMC employees and charity groups to provide financial support or volunteer work.

UMC Science and Culture Foundation

Since its establishment, UMC Science and Culture Foundation has put forth great efforts to hold activities such as collaboration development with colleges, long-term education assistance, art and culture promotion and sponsorship, UMC's scholarship and other activities such as college basketball tournaments.

- **Spreading Hope Program-Supporting the Education for Children from Mid-to-Low Income Families**

According to Children's Bureau, Ministry of the Interior and Taiwan Fund for Children and Families, the number of children from mid to low-income families reached 330 thousand in 2005. In addition, statistics show that low-income families are likely to have more children. Economic disadvantage inhibits the educational performance of these children due to lack of resources available to them. Some work to support themselves, leaving less time for schoolwork. Therefore, UMC Science and Culture Foundation decided to provide education and care for these children. A proposal was passed during the board meeting

to fund NTD 50 million to the Spreading Hope Program annually. This program will provide schoolwork tutoring services for children from mid-to-low income families with the hope of increasing these children's future competitiveness through education.

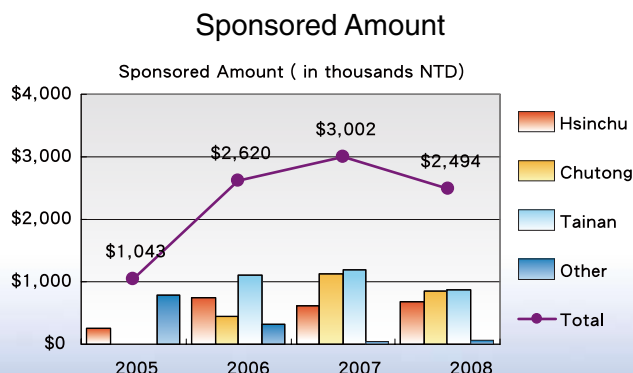
On May 21st 2005, UMC's anniversary, the company designated the day as UMC Public Interest Day to convey the notion of community-care and contribution to society to all employees and their family members. UMC also launched its "Spreading Hope" program. This program, which became effective June 1st, 2005, provides education assistance and expands care to mid-to-low income families and children in remote areas of Taiwan. There are three stages in this program: First, UMC hopes to make up for the insufficiency of their education resources, establish good learning habits and encourage positive thinking by conducting schoolwork tutoring services. Second, through a screening process, UMC provides scholarships to those children who are talented and willing to advance to higher education, and acts as a motivator for children's self-progress. Finally, through evaluation, UMC provides further higher education aid such as subsidiaries for advanced education, or arrangements to study abroad for those who continue to grow with higher self-expectation. Since the program began, 65 tutoring classes have been established in Hsinchu and Tainan to provide long-term tutoring services for children from mid-to-low income families. More than three thousand children have benefited from this service in the past two years.

To further integrate the strength of UMC employees and their family members to

participate in helping children from mid-to-low income families, UMC's voluntary tutoring service team was established in 2005. Since its establishment, there have been more than 300 people participating in UMC's voluntary tutoring service team. UMC also holds summer camps and gift-raising activities at Christmas and other holidays. Many UMC employees not only participate in activities themselves but also invite their friends and family members to join in. In the future, UMC hopes to utilize more passionate educators and enterprises that share the same belief. Ultimately, UMC hopes these economically disadvantaged children can grow up with confidence and happiness through professional tutoring services by continual and long-term support from enterprises.



Flag presentation ceremony for UMC volunteer teams



NTD 99.158 million was sponsored from 2005 to 2008. Most of the money is distributed as operation fees for tutoring centers, expenses for public interest activities in UMC's anniversaries and expenses for volunteer teams.

Total student numbers, attendance rate, and completion rate are shown in the chart below:

	1 st half of 2005	2 nd half of 2005	Summer in 2005	1 st half of 2006	2 nd half of 2006	Summer in 2006	1 st half of 2007	2 nd half of 2007	Summer in 2007	1 st half of 2008	Total (Average)
Number of Children	199	256	345	445	423	462	499	486	542	560	4217
Attendance Rate	97%	96%	95%	94%	95%	92%	95%	95%	94%	96%	95%
Drop Rate	10.2%	6%	2.1%	1.8%	1.4%	0.9%	1.7%	2.4%	1.0%	3.2%	3%

Period Calculated: September 2005 to December 2008

• Fostering Talent for the Hi-tech Industry

Since its establishment, UMC has grown and developed to solidify itself as part of the foundation of Taiwan's semiconductor industry with a global service network. UMC understands that quality talent drives sustainable growth, and therefore supplements its art and public interest activities with academic collaboration and other long-term development programs with several leading Taiwan universities.

To follow through on the theme of "Rooted in Taiwan, Expand to the World", UMC's R&D center in Southern Taiwan's Science Park will continue recruiting local technical talent as part of its long-term talent-fostering program. UMC believes it can improve the quality of hi-tech talent throughout Taiwan through comprehensive steps.

Programs listed below are planned for fostering technical talent for the next generation in Taiwan:

- UMC Scholarship program: UMC scholarship program was established in 2004 to sponsor exceptional college students in the science and engineering fields.
- Collaboration plans: UMC has continued to enhance its collaboration with local government and academic institutions. By aggressively collaborating with leading universities, UMC hopes to encourage students to involve themselves in high-tech research and further improve Taiwan's semiconductor technologies.
- Technical talent workshop and practical lectures for semiconductor processes: UMC has managed the technical talent workshop to help students better understand techniques for semiconductor processes.

• Technology Related Activities and Sponsorships

UMC sponsors university technology forums and international academic meetings by donating equipment, sharing fab information, and holding large-scale seminars. In 2008, UMC sponsored "VLSI-TSA", The 19th VLSI Design/CAD Symposium" and "International Electron Devices and Materials Symposium (IEDMS)" to encourage the development of local hi-tech industry. °

• Promotion and Sponsorship of Various Sporting Events

To encourage the younger generation to participate in healthy pastimes and sports, UMC sponsors a wide range of sporting events and has held numerous basketball and baseball summer camps along with its UMC Cup Women's Table Tennis Tournaments. In addition, UMC's encouragement of sporting activities extends to sponsoring the Special Olympics Run and National High School Sports Day.

The most well known among its activities is the UMC Cup Basketball Open Tournament, which has been held for seven consecutive years since 1999. In addition, UMC held "UMC International Marathon" in 2008 which attracted 13 thousand international and local participants. This event encouraged people to exercise on a regular basis as well as vitalizing tourism in Hsinchu.



UMC Cup Basketball Open Tournament



UMC International Marathon

• Promotion of Art and Community Relations

UMC Science and Culture Foundation has sponsored and participated in numerous activities in technology development, education, academic research, childcare, environmental protection, culture, art, public

interest, and sports. UMC recognizes and appreciates fine art through the sponsorship of large-scale performances such as Chen-Chieh Chang Cello Recital, and also focuses on the promotion of community art activities through IC Broadcasting Station in Hsinchu.

智慧究竟是什麼？

神經心理學專家洪蘭教授，早已發現閱讀和創造力是同一個神經機制，透過閱讀能激發出更多的想像與思考。

聯電與IC之音要與大家一起以更理性而清楚的角度，認識大腦與行為之間的關係、閱讀與創意的關係、生命與價值觀的關係，建構一個智慧的人生。

☆☆ IC之音FM97.5 洪蘭「講理就好」

☆☆ 每周四早上 7:30 首播 每週六下午 3:00 重播

UMC 本節目由聯華電子贊助

Candle Light Society

UMC's Candle Light Society, voluntarily formed by UMC employees in 1992, has acted as a bridge between UMC employees and charity groups to provide financial support and volunteer work.

Candle Light Society hopes that in addition to rewarding employees' efforts, as a public company, UMC must also fulfill its social responsibility by giving back to the society. Therefore Candle Light Society focuses on building an environment to help employees easily participate in public interest activities. UMC employees participate in activities such as annual fundraising and emergency assistance. For example, Candle Light Society raised NTD 2.5 million to help Bluesky and Good Shepherd Social Welfare Services to build shelters for dropouts.

After the 9/21 earthquake, Candle Light Society continued to financially support 10 children through the Taiwan Fund for Children and Families in Nantou. Since 2001, for five consecutive years, Candle Light Society has arranged an annual gathering for their members and supported children. UMC hopes to convey its care for the society to its employees and group everyone's effort to contribute to the society.

Candle Light Society evolves as time goes by and continues to promote activities that fit employees' needs. The group provides ways for UMC employees to give back to the society at all times by integrating the resources from the company and UMC Science and Culture Foundation. UMC and its employees are proud of their positive and aggressive contributions to the community.

These two groups within UMC complement each other. The Candle Light Society provides a list of charity groups to UMC and establishes a convenient donation channel, while UMC Science and Culture Foundation provides assistance whenever needed. UMC's external activities in public interest areas are also promoted by Candle Light Society members within UMC so that more employees can participate and give back to the underprivileged.

2006-2008 Activities and Public Interest Sponsorship

2008	UMC first donated NTD 10 million to Buddhist Compassion Relief Tzu Chi Foundation for rebuilding the area and for helping children return to school following the Si-Chuan earthquake. Later, NTD 3.26 million was raised from UMC employees and was used to rebuild the area.
2008	For UMC's Spreading Hope Program, UMC's employees donated approximately NTD 600 thousand to Boyo Social Welfare Foundation for building classrooms for free after-school tutoring services in Chudong.
2008	UMC Candle Light Society raised approximately NTD 210 thousand for purchasing Mandarin Daily News. These newspapers were distributed to 120 children classes through the Spreading Hope Program in Tainan and Hsinchu to help increase their reading capability.
2008	Secondhand components for computers were donated and assembled by UMC employees. Equipped with the Windows XP system, these computers were expected to be used for another five years. These computers were delivered by UMC employees to Wanda Branch of Chin Ai Elementary School at Jen-Ai Township for computer and information education.
2008	UMC sponsored a program hosted by a knowledgeable professor to lecture on the relation between intelligence, behavior, reading, creativity and life and values at IC Broadcasting Station in Hsinchu.
Since 2007	"UMC Million person Run ~ HERE WE GO " started in 2007 and will be held annually in Hsinchu. With concepts of public welfare, health, and environmental protection, this activity promotes sports culture, and brings tourist development to Hsinchu area.
Since 2006	UMC has managed technical talent workshops at National Cheng Kung University, National Kaohsiung University of Applied Science, National Central University, Chung Yuan Christian University, I-Shou University and National Sun Yat-Sen University. UMC also held practical lectures at National Cheng Kung University, National Kaohsiung University of Applied Science, National Central University and Chung Yuan Christian University to help students better understand techniques for semiconductor processes.

Since 2005	The promotion of "Spreading Hope" Program, which included tutoring services with Boyo Social Welfare Foundation, National Hsinchu University of Education and National University of Tainan. More than 400 children are receiving UMC's tutoring services now. Since 2005, there have been more than a thousand children taking this service. Combined with other tutoring services provided by other local public interest groups (such as Taiwan Fund for Children and Families) prior to this program, more than three thousand children have benefited from these kinds of tutoring services. Total sponsorship so far has been NTD 91.6 million.
Since 2005	Employees' fundraising and UMC's donations has combined more than NTD 6 million for Boyo Social Welfare Foundation in promoting schoolwork tutoring services for children from mid-to-low income families and building classrooms.
Since 2005	UMC has continued to enhance its collaboration with local government and academic institutions, such as National Cheng Kung University, National Central University, National Sun Yat-Sen University, National Kaohsiung University of Applied Science and I-Shou University. By aggressively collaborating with leading universities, UMC hopes to encourage students to involve themselves in high-tech research and further improve Taiwan's semiconductor technologies.
Since 2005	Establishment of UMC volunteer teams, which have had more than a thousand people participate. Major voluntary work in recent years includes: (1) Humanitarian voluntary team: implementation of "Spreading Hope Camps" to help children from mid-to-low income families build positive thinking through sports, environmental protection education and movies. (2) Reading for Hope voluntary team: in addition to collecting books for schools in remote areas, the team also called UMC employees to read for other children as well as their own. Reading promotional activities for elementary schools in remote areas began in 2007. (3) Volunteer service team for Lux Mundi Home for the Severely Retarded: provide assistance to compensate for a shortage of social workers
Since 2004	UMC scholarship program was established in 2004 to sponsor exceptional college students in the science and engineering fields.
Since 2004	UMC has provided funding for masters and PhD degrees in related majors to foster talent in the R&D field. Each qualified student is entitled to NTD 120,000 per semester. This program has been implemented seven times, with 391 students awarded in total

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Since 2000	More than 10 charity groups have participated in UMC's fab bazaars since 2000, including the Development Center for Spinal Cord Injuries, Buddhist Compassion Relief Tzu Chi Foundation, Private Hsian-Yuan Memorial Institute, St. Joseph's Center for Special Education, Genesis Social Welfare Foundation, Eden Social Welfare Foundation, Taiwan Fund for Children and Families, Ananda Marga Welfare Foundation, Taiwan Association for of Family Caregivers, St. Raphael Opportunity Center, Tainan and other charity groups.
Since 1999	After the 9/21 earthquake, Candle Light Society continued to financially support 10 children through the Taiwan Fund for Children and Families in Nantou. Since 2001, for eight consecutive years, Candle Light Society has arranged an annual gathering for their members and those children who are supported.
Since 1999	UMC Cup Basketball Open Tournament has been held annually, with sponsorship totaling approximately NTD 10 million.
Since 1999	UMC continually sponsors campus art and culture activities and lectures at National Tsing Hua University and National Chiao Tung University, and total sponsorship is approximately NTD 2.4 million.
Since 1999	Development of UMC Recreation Center, which opened in 2003. It was constructed and maintained by UMC, but accessible to all nearby Hsinchu residents.
Since 1998	UMC has sponsored research and development programs and international technology forums in National Taiwan University, Tsing Hua University and Chiao Tung University.
Since 1997	UMC and Farmer Bank (now known as Taiwan Cooperative Bank) jointly launched a credit card in 1997. Part of every expense by this credit card was donated to Genesis Welfare Foundation, United Way Taiwan and Lux Mundi Home for the Severely Retarded.
Since 1993	UMC has set up scholarships of approximately NTD 3.6 million in many schools including, St. Joseph's Center for Special Education.
Since 1993	UMC has continually promoted used apparel donations.
2003-2008	UMC sponsored academic collaboration programs for 6years, with a sponsorship of approximately NTD 15 million.
2005-2007	The sponsorship of Hsinchu Spring Music Festival, which had totaled NTD 1.5 million.
2005-2007	UMC has sponsored large domestic sports competitions such as William Jones Cup International Basketball Tournaments and NBA Madness Events to promote basketball in Taiwan. UMC also invites minority groups to participate as well.
2006	UMC financially supported 3 children through CGCH Foundation for Education.
2006	UMC invited Tao-Shan Elementary School to perform at UMC Sky Lobby.

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2006	UMC provided subsidies to charity groups in Tsing Hua University for their summer camp activities.
2006	UMC's Candle Light Society continued to financially support 10 children through the Taiwan Fund for Children and Families in Nantou.
2006	UMC held an ecological activity in Tao-Shan.
2005-2006	UMC provided a sponsorship of NTD 6 million to hold lecture courses in Soochow University. Prominent lecturers in different fields included Chiang Hsun, Dr. Ovid J. L. Tzeng and Chun Chieh Huang.



Supplement of GRI Index

2.9	Significant organizational changes: No significant organizational changes were made in 2007. There was a restructuring of the Executive Team in July 2008. Related information is available on the company website at http://www.umc.com/English/news/index.asp .
3.7	Limitations on the report's scope: Not applicable.
3.8	Joint Ventures, subsidiaries, and outsourced operations: Not included in the report boundary. Related information is available on the company website http://www.umc.com/
3.10	Effects of re-stated information provided in earlier reports: No re-statement.
3.11	Changes from previous reports: No significant changes from last report in the scope, boundary, or measurement methods.
3.13	External assurance: This report has been third-party verified. DNV has verified that this report conforms to GRI G3 application level A+ and fulfills requirements of the AA1000AS framework. In the future, UMC will continually evaluate the benefit of third-party verification by comparing the cost and complexity with the value to UMC and its stakeholders.
4.5	<p>Link between executive compensation and organization's performance: The compensation of Directors, Supervisors and Managers is based on the company's Article and formulations, and is distributed in proper ratios.</p> <ul style="list-style-type: none"> • Policy for Directors' and Supervisors' compensation: The Company's Article has stated that Directors' and Supervisors' compensation is the allocation of 0.1% of the residual amount from net profit after being deducted by payment of taxes, making up loss for preceding years and setting aside 10% for legal reserve. • Policy for Managers' compensation: The company annually evaluates its salary level with similar industries to ensure the company's salary is competitive. The company's salary structure can be divided into fixed and variable. The compensation is set to fully reflect the achievements for individuals and teams.
4.6	Processes to avoid conflict of interest on the board of directors: The implementation of UMC Code of Ethics for Directors, Supervisors and Officers.
4.7	Expertise of board members on sustainability: All board members possess more than five years of experience in business, law, finance, accounting or corporate business related fields.
EC4	Financial government assistance: None .
EC6	Local suppliers: The choice of suppliers is based on the supplier evaluation regulations and is consistent in all areas.
EC9	Indirect economic impacts: None.
EN2	Recycled materials: Due to the semiconductor industry characteristics, recycled raw materials cannot be reused in the manufacturing process, hence the recycling rate is 0%.

EN7	Initiatives for reducing indirect energy consumption: Not Applicable.
EN9	Significant effect of water withdrawal: None.
EN11	Land assets in sensitive areas: UMC's fabs are located in a highly developed science park. The nearby areas are all occupied by buildings and roadways except small areas of trees and farmhouses (mainly bamboo trees and dry farmland)
EN12	Biodiversity within lands owned: UMC's fabs are located in a highly developed science park, and most plants in the neighborhood are landscape plants and introduced plants. Biological resources are more abundant outside the science park, and conservation-listed wildlife have appeared outside the science park as well. The existence of flourishing plants and a variety of animals in the science park demonstrate that during the time of UMC's fab construction and operation, there has been no impact on the organisms in or near the science park since UMC follows all regulations for pollutant discharge.
EN13	Habitats protected or restored: UMC's fabs are located in a highly developed science park. Its pollutants have no impact on any organism within the science park or in the neighborhood; therefore no habitats are preserved or protected.
EN14	Strategies for biodiversity: Green and beautify UMC's fab surroundings in compliance with "Guidelines for Maintaining Landscapes in the Science Park"
EN15	Endangered species: None.
EN19	Ozone-depleting substance emissions: No emissions since no ozone depleting substances are adopted.
EN23	Significant spills: None.
EN24	Waste deemed hazardous under the terms of the Basel Convention: All waste is handled domestically instead of being transported overseas.
EN25	Impacts of discharges and runoff on biodiversity: All discharges except rain are treated and discharged into science park drainage; therefore no direct impacts were caused.
EN27	Packaging materials: All raw material cartons are reused as product packaging boxes and other recyclable materials such as plastics, wood, styrofoam and others are recycled as industrial raw materials.
EN28	Non-compliance sanctions: None
EN29	Environmental impact of transport: Calculated in product life cycle assessments and converted into environmental loads for products.
LA5	Minimum notice periods regarding operational changes: In accordance with relevant local laws and regulations.
LA6	Workforce represented in joint health and safety committee: at least one-third of the number of members (33 %).
LA9	Trade union agreements on health and safety: Not Applicable.
HR1	Human rights clauses in investment: In UMC, all regulations concerning human rights conform to local labor laws and regulations. UMC also follows: 1. The spirit of the Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy of the International Labor Organization, including dimensions such as equal employment, training, and provision of good working environment and living conditions. 2. The spirit of the UN Universal Declaration of Human Rights.

HR3	Training on human rights: Such education has been included for all new employee training.
HR4	Incidents of discrimination: None.
HR8	Training for security personnel: Training rate is 100%. Training hours are not calculated. Security personnel are all contract staffs from legal and professional security service firms. Security personnel have to pass relevant training required by the local government before assuming duty. Human rights protection related to security service has been carried in the company's guidelines.
HR9	Violations of rights of indigenous people: None.
SO6	Political donations: No political donations.
SO7	Anti-competitive behavior: No lawsuit cases in any anti-competition, anti-monopolization or monopolization measures.
SO8	Regulatory non-compliance sanctions: No conviction due to violations of laws or regulations. Details about company's litigation are carried in the 2008 U.S. Annual Report (Form 20-F) which is available on the company website http://www.umc.com/english/investors/h.asp Hejian case : In early 2006, the Hsinchu District Prosecutor's Office brought criminal charges in the Hsinchu District Court against our former Chairman, Robert H. C. Tsao and our former Vice Chairman, John Hsuan in connection with alleged breach of fiduciary duties and certain alleged violations of the ROC Commercial Accounting Act. Prior to such charges, both our former Chairman and former Vice Chairman resigned from their respective positions with our company. The Hsinchu District Court found our former Chairman and former Vice Chairman not guilty in October 2007, and the Prosecutor's office filed an appeal with the Taiwan High Court in November 2007. On December 31, 2008, the Taiwan High Court rejected the prosecutor's appeal and sustained the Hsinchu District Court's decision. On January 20, 2009, Taiwan High Prosecutor's office filed an appeal with the Supreme Court. The case is still pending in the Supreme Court.
PR2	Non-compliance with health and safety standards: None.
PR4	Non-compliance with product information standards: None.
PR6	Marketing communication standards: Not Applicable. UMC is a semiconductor foundry that manufactures advanced process ICs for applications spanning every major sector of the semiconductor industry, not an end product manufacturer.
PR7	Non-compliance with marketing communication standards: None.
PR9	Sanctions for noncompliance with product and service related regulations: No lawsuit cases in noncompliance with product and service related regulations. Details about the company's litigation are carried in the 2008 U.S. Annual Report (Form 20-F) which is available on the company website http://www.umc.com/english/investors/h.asp



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GRI/G3 Application Levels

We have prepared this report using the Global Reporting Initiative Guidelines. DNV has verified that this report conforming to GRI G3 application level A+. We self-declare this report to be GRI Application Level A+.



Report Application Level		C	C+	B	B+	A	A+
Standard Disclosures	G3 Profile Disclosures OUTPUT	Report on: 1.1 2.1 - 2.10 3.1 - 3.8, 3.10 - 3.12 4.1 - 4.4, 4.14 - 4.15	Report Externally Assured	Report on all criteria listed for Level C plus: 1.2 3.9, 3.13 4.5 - 4.13, 4.16 - 4.17	Report Externally Assured	Same as requirement for Level B	Report Externally Assured
	G3 Management Approach Disclosures OUTPUT	Not Required		Management Approach Disclosures for each Indicator Category		Management Approach Disclosures for each Indicator Category	
	G3 Performance Indicators & Sector Supplement Performance Indicators OUTPUT	Report on a minimum of 10 Performance Indicators, including at least one from each of: Economic, Social and Environmental.		Report on a minimum of 20 Performance Indicators, at least one from each of Economic, Environmental, Human rights, Labor, Society, Product Responsibility.		Report on each core G3 and Sector Supplement* Indicator with due regard to the Materiality Principle by either: a) reporting on the Indicator or b) explaining the reason for its omission.	

*Sector supplement in final version



ASSURANCE STATEMENT

Introduction

Det Norske Veritas ('DNV') has been commissioned by the management of United Microelectronics Corporation ('UMC' or 'the Company') to carry out an assurance engagement on the Company's 2008 Corporate Social Responsibility Report ('the Report') against the AA1000 Assurance Standard (2008) ('AA1000AS 2008') and the Global Reporting Initiative 2006 Sustainability Reporting Guidelines Version 3.0 ('GRI G3').

UMC is responsible for the collection, analysis, aggregation and presentation of information within the Report. Our responsibility in performing this work is to the management of UMC only and in accordance with terms of reference agreed with the Company. The management of UMC are the intended users of this statement. The assurance engagement is based on the assumption that the data and information provided to us is complete and true.

Scope of Assurance

The scope of work agreed upon with UMC includes the following:

- The social, environmental and economic indicators presented in the Report.
- The year of activities covered in the Report is January to December 2008.
- The Report covers data from head-office as well as manufacturing sites in Taiwan and Singapore.
- Evaluation of Accountability Principles (Type 2) and specified performance information with a high level of assurance, according to AA1000AS 2008.
- Verification of GRI G3 Application Level A+.
- Verification was conducted by DNV during April 2009.

Verification Methodology

DNV is a global provider of sustainability services, with environmental and social assurance specialists working in over 100 countries. Our assurance engagement was planned and carried out in accordance with the DNV Protocol for Verification of Sustainability Reporting.

The Report has been evaluated against the following criteria:

- Adherence to the principles of Inclusivity, Materiality and Responsiveness, as well as reliability of specified sustainability performance information, as set out in the AA1000AS 2008,
- Adherence to additional principles of Completeness and Neutrality, as set out in DNV's Protocol, and
- The GRI G3 and its Application Level A+.

As part of the verification, DNV has challenged the statements and claims made in the Report and assessed the robustness of the underlying data management system, information flow and controls. For example, we have:

- Examined and reviewed documents, data and other information made available to DNV by UMC;
- Visited the head-office and 3 production sites located in Taiwan;
- Conducted interviews with 40 company representatives, including senior managers and employees of various functions, as well as external stakeholders (including subcontractors and government authorities);
- Performed sample-based reviews of the mechanisms for implementing the Company's own corporate responsibility-related policies, as described in the Report;
- Performed sample-based checks of the processes for generating, gathering and managing the quantitative and qualitative data included in the Report.

Conclusions

In our opinion, the UMC 2008 Corporate Social Responsibility Report meets the content requirements of the GRI Application Level A+, and provides an accurate and fair representation of the level of implementation of related Corporate Social Responsibility (CSR) policies. We have evaluated the Report's adherence to the following principles on a scale of 'Good', 'Acceptable' and 'Needs Improvement':

AA1000 AS 2008 principles:

Inclusivity: Acceptable. The Company is in dialogue with selected stakeholders through different channels. The key CSR issues resulting from the dialogue were collected and reflected in the Report.

Materiality: Acceptable. The Company had developed the process to identify material issues, but the process should be validated with more specific inputs for each business area to bring out material issues that reflect short, medium and long term impacts.

Responsiveness: Acceptable. The Company has adequately responded to stakeholder concerns through its policies and management systems, and this is reflected in the Report.

Additional principles:

Completeness: Acceptable. The Report covers performance against the GRI G3 core indicators that are material within the Company's reporting boundary.

Neutrality: Acceptable. The Company has reported CSR related issues in a balanced manner, in terms of content and tone.

Finally, in accordance with Type 2, high level assurance requirements, we conclude that the specified CSR data and information presented in the Report is reliable. The Company has developed its own data management system for capturing and reporting its CSR performance. No systematic errors were detected.


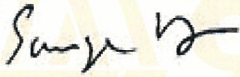
Opportunities for Improvement

The following is an excerpt from the observations and opportunities reported back to the management of UMC. However, these do not affect our conclusions on the Report, and they are indeed generally consistent with the management objectives already in place.

- Strengthen the processes of key stakeholder identification and engagement, as well as implement a more systematic approach to analysing material CSR risks;
- Improve the CSR committee's activities to optimize resources on key CSR issues;
- Improve data compilation:
 - Reporting on trends: present information for the current reporting period and at least two previous periods;
 - Data aggregation: add meaningfulness of information reported on a disaggregated basis (e.g., process technology, wafer size, country or site). Aggregation of information may result in the loss of a significant amount of meaning, and may also fail to highlight particularly strong or poor performance in specific areas. Disaggregation may vary by indicators.

DNV's Independence

DNV was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement. DNV expressly disclaims any liability or co-responsibility for any decision a person or entity would make based on this Verification Statement.

Signed:  Name of Lead Verifier: Chun-Nan Lin	Signed:  Name of Reviewer: Sangem Hsu
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Det Norske Veritas
Taiwan, R.O.C., 25 May 2009
Statement Number: 00001-2009-ACSR-TWN



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2008

CORPORATE SOCIAL RESPONSIBILITY REPORT



United Microelectronics Corporation

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