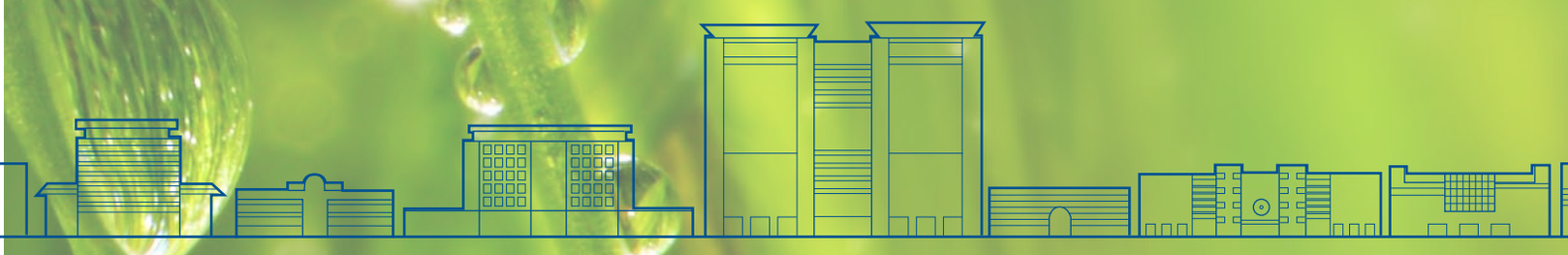
2015

UMC

ECO ECHO . Endless Love to the Earth

Corporate Social Responsibility Report



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VIDEO UMC's CSR film
http://www.umc.com/English/CSR/index.asp

Link»

A word from the Chief Executive Officer

To friends who have accompanied UMC all this while:

In 2015, major economies have continued to face structural issues characterized by high debt, low inflation, and poor employment rates as well as sluggish growth of the global economy. However, UMC operations continued to make steady progress with constant breakthroughs in technologies, production capacity, and customer development. We have also continued to make improvements to our corporate social responsibility (CSR) efforts, and I would like to share with you our vision and strategies of key sustainability topics in UMC as well as the outcomes of our activities.

CEO and CS Committee Chairman

For corporate governance, UMC has stipulated the UMC Corporate Governance Practice Principles, UMC Ethical Corporate Management Best Practice Principles, and UMC Corporate Social Responsibility Principles to provide a referential basis for establishing an effective corporate governance framework aimed at securing our shareholders' equities, enhancing the functions of our Board of Directors, enforcing the functions of our Audit Committee, respecting the rights of our stakeholders, and improving the transparency of our information. In 2015, we not only achieved the highest possible rating of A++ in information disclosure assessment for publicly traded companies, but also attained the prestigious top 5% in the 1st corporate governance assessment conducted by TWSE.

For environmental sustainability and social participation, UMC has continued to uphold the visions of harmonious co-existence and co-prosperity with our surrounding environment and society by working closely with every staff and employee. In 2015, UMC successfully met various objectives prescribed by the 369+ Energy Conservation Project. Meanwhile, we also declared our Green 2020 Project during carbon neutrality and environmental protection activities held on UMC Earth Day. The goal of this project was to achieve another 10% reduction in water, power consumption and waste generation by 2020. In addition to attaining the ROC Enterprises Environmental Protection Award for 13 consecutive years, UMC also attained the highest score in the Taiwanese semiconductor industry for the Climate Disclosure Leadership Index (CDLI) of the international Carbon Disclosure Project. Our Carbon Performance Band attained the highest rating amongst all participating Taiwanese enterprises as well. For social participation, we have continued to operate UMC talent training programs, encourage volunteer culture, and implement social club assessments to actively promote the Eco-echo Ecological Conservation Hope Project. We worked with the Society of Wilderness (SOW) to preserve the habitats of Sauter's Brown Frog (Rana sauteri) in the mountainous regions of Hsinchu. We also established the Energy Conservation Service Team in 2015 to provide energy saving and safety improvement services to the underprivileged. These efforts have expanded our influence and contributed towards a positive feedback cycle for both our enterprise as well as surrounding communities.

For our overall performance, we have been given the highest rating of Gold Class Enterprise for the Dow Jones Sustainability Index (DJSI) and attained the 1st Rank in Taiwan and 2nd Rank in Asia in the Channel NewsAsia Sustainability Top 100 Ranking. Our other accolades include the Taiwan Top 10 Sustainable Company Award, CommonWealth Magazine's Corporate Citizenship Award, and Global Views Magazine's CSR Award. These achievements testify the deeply rooted culture of sustainability and continuous improvements in UMC and the fact that our efforts have been acknowledged and praised in Taiwan as well as internationally.

As UMC continues to face countless risks, growing competition, and challenges in the future, we remain committed to pursuing continuing improvements for our existing advantages and foundations. We hope to work with various sectors, gather outstanding and innovative plans, and generate sustainable and positive energies to maximize the benefits provided to our employees, customers, and shareholders. Such efforts will provide long-term growth and ensure sustainable futures for both our ecology and society.

Po-Wen Yen

Principles for Report Compilation

This report is the 11th Corporate Social Responsibility Report issued by UMC and the 16 consecutive public non-financial annual report. UMC consistently upholds the principles of sincerity, pragmatism, transparency and joint sustainable development, and discloses its corporate sustainability philosophy and approaches to the general public. This report makes public the implementation of the 2015 UMC corporate sustainable development and social responsibility.

Scope

Information disclosed in this CSR Report includes various performance and data of environmental protection, corporate governance, and community participation work carried out by UMC from January 1 to December 31, 2015. For the disclosure of major activities, the period was further extended to March 31, 2016. In addition to information about UMC Headquarters and wafer fabs in Taiwan and Singapore, this CSR Report also included information on local and external organizations such as information of the subsidiary He Jian Technology Company (HJTC), other foundries in China, and affiliated joint ventures and subsidiaries that are relevant to the key material topics. For details, please refer to Page 107 in this Report.

Reporting Guidelines and Principles

The content framework in this report is based mainly on major UMC corporate sustainability issues in 2015 and stakeholder concerns. In addition, this report is compiled according to the GRI/G4.0 guidelines of the Global Reporting Initiative (GRI) for global sustainability reports, and complies with the AA1000 standards and principles for identifying, implementing and disclosing information pertaining to the implementation of corporate social responsibility. Data from the annual financial report prepared by certified accountants (Ernst & Young Accounting) are used in this report, and data on greenhouse gas emission and reduction are based on ISO 14064-1 standards and verified by DNV Business Assurance. For further details, please refer to Chapter 3.

Report Assurance

This report was verified by SGS Taiwan Ltd. in April 2016 according to high assurance standards such as the principles of GRI / G4.0 Comprehensive Standards and the Accountability 1000 Assurance Standard TYPE II. The SGS verification report is attached to the appendix of this report.

Report Publication

After being verified by Tier 1 supervisors of various departments, this Report was provided to the Chairperson of the Corporate Sustainability Committee for approval before subsequent release.

2015 Corporate Social Responsibility Report: Issued in June 2016.

2016 Corporate Social Responsibility Report: Scheduled to be issued in June 2017.

In support of environmental protection, a paperless, electronic version of this report is posted on the company website.

Your Feedback

For any questions or comment about report content or activity, please contact us at:

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GRM & ESH Division

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Major UMC Milestones and Sustainability Performance

Major Milestones

- UMC First Foundry in Taiwan to Receive ISO 15408-EAL6 Certification
- Cypress Licenses 40-Nanometer Embedded Flash IP to UMC, Enabling Next-Generation MCUs, IoT and Wearables Applications
- ARM and UMC Target New 55nm ULP Physical IP Solution for Energy-Efficient Applications
- UMC Unveils UMC Auto℠ Platform to Enable Automotive IC Designs
- UMC Collaborates with ARM to Validate UMC 14nm FinFET Process
- UMC Enters High Volume Touch IC Production using Foundry Industry's First 0.11um eFlash Process
- Synopsys and UMC Expand 14-nm FinFET Collaboration to Include DesignWare Embedded Memory and Test Solutions
- UMC's Automotive Semiconductor Revenue Doubles YoY on Strong Customer Adoption
- UMC Enters Volume Production for TSV Process Used to Enable AMD's High-Performance Radeon R9 Fury X GPU

Sustainability Awards

Dow Jones Sustainability Indices

- Selected as a DJSI global component for the 8th consecutive year.
- Selected as a DJSI Emerging Markets indices.

Taiwan Corporate Sustainability Awards

- Awarded the Corporate Sustainability Report Awards for 8 consecutive years and the Ten Most Sustainable Company Award
- Awards in 2015
  Taiwan Top 10 Sustainable Company Award.
  Taiwan Top 50 Corporate Sustainability Report Awards.
  Climate Leadership Award.
  Supply Chain Management Award.
  Sustainable Water Management Award
  Social Co-Prosperity Award

Dow Jones Sustainability Indices

Received RobecoSAM's gold class sustainability award.

CSR Award from Global Views Monthly

2015 CSR Award - Model Award for Excellence in the technology and traditional manufacturing sector from Global Views Monthly.

Channel NewsAsia Sustainability Top 100 Ranking

Awarded 2nd place in the 2015 Channel NewsAsia Sustainability Top 100 Ranking.

Corporate Governance Accreditation for Listed Companies

Top 5% for the 1st Corporate Governance Assessment Award of the TWSE

Carbon Disclosure Project

- Listed on the international Climate Disclosure Leadership Index (CDLI) for 3 consecutive years.
- In 2015, scored 99 points in the international Carbon Disclosure Project (CDP).

Information Disclosure and Transparency Ranking System for Listed Company

Rated A++ on the Information Disclosure and Transparency Ranking System for listed companies.

CommonWealth Magazine Corporate Citizenship Award

Won 4th place in the 2015 CommonWealth Magazine Corporate Citizenship Award (Top 10 in the last 4 consecutive years).

Enterprises Environmental Protection Award

For 13 consecutive years, UMC's Taiwan fab was awarded the Enterprises Environmental Protection Award by the Environmental Protection Administration.

2015 Sustainability Performance

Economic Performance

Operations Management and Supply Chain Management

1ST ISO 15408 Certification
The first wafer foundry in Taiwan to be ISO15408-EAL6 certified, effectively enhancing safety of company and customer asset management.

More than 3000 Suppliers
joined UMC in committing to sustainable development.

0 High-risk Suppliers
UMC has established the ISO 22301 business continuity management system, and completed business continuity risk assessment for vendors who supply 95% of the company's procurement.

0 Conflict Metals/Minerals
UMC's 12 suppliers and 15 affiliated companies use no conflict metals/minerals

Profitability

6.0% ROE
6% increase compared to 2014

1.08 ESP
11.3% increase compared to 2014

Economic Performance

89.8% capacity utilization rate
0.8% year on year growth

NT$130.69 billion
8.3% revenue growth compared to 2014

Innovative research and development of advanced technologies

11,279 patents
In 2015, UMC was awarded 439 domestic and foreign patents, totaling 11,279 patents to date.

200% growth
Doubled revenue compared to 2014 with immense popularity of automotive semiconductor products amongst customers.

1ST 0.11-micron eFlash process and mass production of touchscreen controller ICs.
Foundry's first 0.11-micron eFlash process in mass production for touchscreen controller ICs.

Environmental Performance

Climate and Energy Management

5.42% Power Reduction
In 2015, reduction reached the targeted goal of 3%. The newly added reduction for 2015 was

55,483Mwh, which is equivalent to a decrease of 28,906 tons in CO2 emissions and a savings of about NT$150 million in cost.

5.33% Natural Gas Reductions
In 2015, reduction reached the targeted goal of 3.38%. The reduction of 11,652Mwh is equivalent to a decrease of 2,292 tons in CO2 emissions and a savings of about NT$18 million in cost.

37.6% Reduction in Units of Fluorinated Greenhouse Gas Emissions.
Achieved the objective for reducing emissions by 37.6%. Reductions in fluorinated greenhouse gas emissions were equivalent to 977,000 tons of CO2e. Gas replacement measures also achieved savings in raw material procurements of over NT$20 million.

Water Resource Management

11.2% Reduction in Water Usage
In 2015, cumulative reduction reached the targeted goal of 6%. The newly added reduction for 2015 was

454,000 tons, which is a savings of about NT$11 million in water cost.

2714 Million Tons of Recovered Water
Recovered water is equivalent to saving 0.86 of the stored water in No.2 Baoshan Reservoir.

126 Daily Reduction of 126 kg of Ammonia Emissions.
Source reduction of nitrogenous wastewater reached the targeted goal 2015 (98 Kg-NH3-N / day). Compared to the base year reduction of 38% and 20% in Hsinchu and Tainan, respectively, the reduction saved NTS40 million in raw material costs for the year, and a saving of NT$180 million in wastewater charges

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Waste Management

11.59% Waste Reduction
Cumulative reduction reached the targeted goal of 9% in 2015. The newly added reduction was 993 tons, which is a savings of about NT$5.5 million in disposal cost for the year.

90.0% Waste Recycling
The amount of reused waste was 30,361 metric tons, which is a gain of more than NT$61 million from recycled resources.

Environmental Management

100.0% Certification
All UMC fabs have passed the ISO 14064-1 greenhouse gas emissions certification, the ISO 14001 environmental management certification, and the QC 080000 Hazardous Substance Process Management Certification.

0 Environmental Incidents or Fines
In 2015, there were no environmental incidents or fines.

NT$30 million Environmental Protection Fund.
UMC contributed NT$30 million into the Eco-echo Ecology Hope Project.

Social Performance

Education and Training

93.1% overall satisfaction with the courses
In 2015, a total of 9,725 courses were held that were attended by a total of 281,732 individuals. Overall satisfaction for these training courses was 93.1%, while satisfaction for the lecturer and teaching materials attained 93.2% and 93.0% respectively.

95.0% completion for training courses on The 7 Habits of Highly Effective Managers and Employees
To achieve company core values and attain the spirit and principle of responsibility, 95% of employees completed training courses on The 7 Habits of Highly Effective Managers and Employees.

Public Service

12,241 total volunteer service hours
In 2015, total volunteer service hours reached 12,241 hours, benefiting 25,416 individuals.

43.4% increase in the number of beneficiaries of community work
In 2015, number of beneficiaries of UMC volunteer work reached 25,416 which was an increase of 14,975 individuals compared to 2014

Benefits System

100% Holistic Health Management Program.
Created a safe working environment, and protected health and work-life balance of employees.

93.0% satisfaction with health promotion activities.
On the average, 93% satisfaction with health promotion activities such as health seminars, relaxation series and health check activities

Positive Labor Relations

0 labor dispute
Actively promoted harmonious labor relations to reduce the likelihood of labor conflict. In 2015, there was no case of labor dispute.

100% of eSuggestions were handled and closed.
Through the audit and reminder system, 100% of cases were closed in 2015.

< 5 on the annual EICC labor / ethics risk index
In 2015, the EICC labor /ethics risk index was less than 5.

100% communication meetings were completed
By the end of 2015, a total of 120 sessions of company-wide forums (4 sessions), fab communication meetings (71 sessions), secretary forums (8 sessions), labor-management conferences (33 sessions), and Benefits Committee Meetings (4 sessions) were conducted.

89.3% of the employees identified with cohesion.
In 2015, up to 89.3% identified with a sense of cohesion.

0 Zero cases of human rights complaints.

Safe Work Environment

0 major occupational hazard

59% reduction in workplace accidents

16 less accidents compared to the reference basis (the year of 2011) and achieved a savings of NT$ 3.08 million in potential asset loss

In 2015, the disabling injury frequency rate was 0.136, and disabling severity rate was 1.698, which were much lower than the semiconductor industry average.

About UMC

Company Profile

United Microelectronics (UMC) is a world leading semiconductor foundry. The company leverages its manufacturing excellence and comprehensive technology portfolios to produce IC wafers for every major electronics sector. UMC offers comprehensive solutions that give IC design companies a competitive edge through advanced processes and a wide range of specialty technologies, helping customers differentiate their products in the competitive IC market

http://www.umc.com/English/about/index.asp

Company Name
United Microelectronics Corp.

Total Capital
NT $ 260 billion

Date Founded
May 1980

Number of Employees
More than 18,000 employees, including worldwide affiliated companies

Company Headquarter
No. 3, Li Hsin 2nd Road, Hsinchu Science Park

Main Operation
Professional integrated foundry services

Product Services
Wafer foundry services, silicon intellectual property according to customer needs, embedded integrated circuit design, design verification, photomask production, wafer manufacturing, testing and other services

Affiliated Businesses
Affiliated business operations including wafer manufacturing, electronics, optoelectronics, investment, insurance and trading.

Firm Taiwan Roots, Global Presence

UMC plays an important role in Taiwan's semiconductor industry. In addition to being Taiwan's first wafer fabrication company, it is also Taiwan's first listed semiconductor corporation. To meet the needs of customers worldwide, UMC has established service locations in Taiwan, Japan, China, Singapore, South Korea, Europe and the United States. UMC will continue to strive to provide its customers with world leading process technologies and a full range of professional foundry solutions so that they may continue to build a competitive advantage in today's rapidly changing industry.

Participation in Outside Associations

Institution	Member	Participation in Project or Committee
Chinese National Federation of Industries (CNFI)	●	
Business Council for Sustainable Development of Taiwan (BCSD-Taiwan)	●	
Taiwan Semiconductor Industry Association (TSIA)	●	●
Association of Industries in Science Parks (ASIP)	●	●
Taiwan Electrical and Electronic Manufacturers' Association (TEEMA)	●	
Chinese Professional Management Association (CPMA)	●	
Semiconductor Equipment and Materials International (SEMI Taiwan)		●
Global Semiconductor Alliance, (GSA)	●	●

Company History

1980
05 | UMC officially founded

1985
07 | Public stock offering

1995
07 | Transition into a foundry company

1999
11 | 12-inch Fab in Southern Taiwan Science Park began production

2000
03 | Produced the world's first copper process wafer
09 | Listed on the New York Stock Exchange

2004
12 | Its flagship Singapore subsidiary, UMCi, was formally acquired and renamed Fab 12i

2007
01 | Expanded production research and development base in the Tainan Science Park

2008
09 | Listed as a constituent stock in the Dow Jones Sustainability Index

2009
12 | Formally acquired the Japanese subsidiary, UMCJ.

2010
05 | UMC 30th anniversary celebration

2011
10 | Pilot production using 28nm process technology

2012
05 | Groundbreaking ceremony for Phase 5&6 of Fab 12A

2013
03 | Acquired HJTC in Suzhou, China.
05 | Established Fab 12i into the Specialty Technology Center of Excellence

2014
08 | Fujitsu listed as a new foundry JV company

2015
03 | Groundbreaking ceremony for United Semiconductor (Xiamen)Co.,Ltd in China

Management Team

Chairman
Stan Hung

Senior Vice President and General Counsel
Peter Courtur

Chief Executive Officer
Po Wen Yen

Senior Vice President
Jason Wang

http://www.umc.com/English/about/a.asp

Sustainable Development Strategy and Organization

Commitment to Sustainability

UMC is committed to the philosophy of "employee care, environmental focus and public service", and furthering sustainable development, corporate social responsibility and guiding society towards a positive cycle. UMC sustainable development is built on the vision of "creating a friendly global ecology where the new value is people orientation, co-existence with the environment and shared social prosperity." "Customers, shareholders, employees, the environment and society" are the primary focus of joint pursuit of sustainable growth

Vision
Creating a friendly global ecology where the new value is people orientation, co-existence with the environment and shared social prosperity

Mission
Company growth is built on green innovation and corporate social responsibility, and helping customers meet the challenge of sustainable development.

Corporate Social Responsibility Principles

UMC has stipulated its Corporate Social Responsibility Principles as a reference basis and guiding rule for fulfilling corporate social responsibility (CSR), improving the economy, environment, and society, and achieving the goals of sustainable development.

The Corporate Sustainability Committee of UMC shall constantly review the development of relevant CSR guidelines and codes in Taiwan and other countries as well as changes to business environment in order to review and improve upon the CSR system established in UMC and improve the performance of CSR activities.

http://www.umc.com/English/pdf/UMC_CSR_Principles_eng.pdf

Equal Emphasis on Core Competitiveness and Social Responsibility

Based on the four competitive advantages of "Independent R&D capability", "Excellent manufacturing capability", "Capable employees "and "Sound financial structure", as well as the five business cultures of "customer orientation", "integrity", "innovation", "accountability" and "efficiency" that have been deeply rooted in the company's operations, UMC is able to maintain its position as an industry leader. Combining its competitive advantages, UMC also defines its corporate social responsibility and the three major directions based on its business culture

Economic: Continue to improve corporate governance

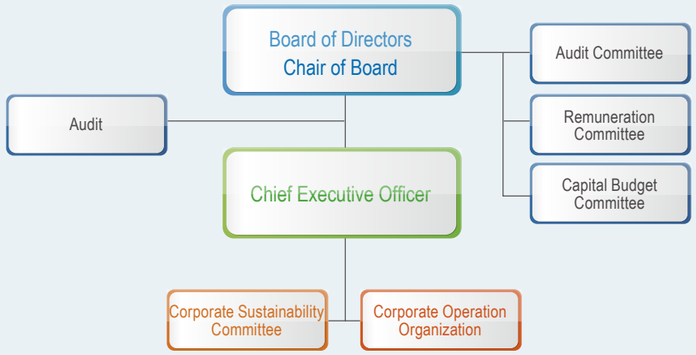
Environment: Dedicate itself to manufacturing green wafers

Social: Fulfill corporate social responsibilities

Sustainable Organization

The structure of UMC's sustainable organization consists of the Board of Directors headed by the chairman. The Board directs the "Corporate Operations Organization" and "Corporate Sustainability (CS) Committee", both of which are headed by the CEO. The execution of sustainable policies is carried out from the top-down, and an audit committee oversees the execution. The "Audit Committee", "Remuneration Committee" and "Capital Budget Committee" enhance the capabilities of the board and strengthen corporate governance. "Corporate Operations Organization" and "Corporate Social Responsibility Committee" also set up sub-committees to meet their respective needs and to jointly execute and practice sustainable commitments.

Corporate Operations Organization vs. Corporate Sustainability Committee



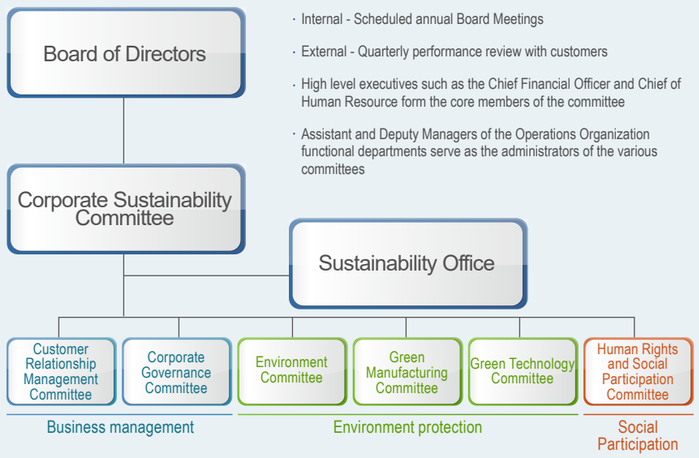
The CEO is a member of the Board of Directors, and simultaneously serves as the Chair of the Corporate Sustainability Committee

Corporate Sustainability Committee Organization and Operation

Organization and Function

The Corporate Sustainability Committee (originally named Corporate Social Responsibility Committee) of UMC was established in 2008 and serves as the highest ranking CSR organization in the company. The Committee is responsible for stipulating the direction and goals of CSR and sustainable development. Every 6 months, the Director and member of the Committee shall review the performance and target achievement of secondary committees. The Committee shall also provide annual reports to the Board of Directors on the performance and plans of CSR activities. In 2016, the Committee also enacted management review of material topics related to the economy, environment, and society during the Board Meeting.

Corporate Sustainability Committee Organization



The Corporate Sustainability Committee has six functional committees: Corporate Governance Committee, Customer Relationship Management Committee, Human Rights and Social Participation Committee, Environmental Committee, Green Manufacturing Committee, and Green Technology Committee.

Descriptions of Committee Functions

Corporate Governance Committee
Help strengthen the function of the Board and shareholder equity, integrate related regulations and policies of relevant departments, and help complete and implement the company's internal control system to ensure information transparency and disclosure, and compliance with regulations. Fulfill the company's business philosophy of core integrity, information transparency, shareholder equity protection, and good internal business management.

Human Rights and Social Participation Committee
Responsible for protecting the basic rights of employees and promoting communication with outside communities and society. Integrate the UMC Cultural and Educational Foundation, and with focus on education, arts, sports, public service and environmental protection, strive to promote technological research and development cooperation, long-term educational assistance, arts and sports activities and other social welfare events.

Customer Relationship Management Committee
Refine customer service and quality control, improve service quality and customer satisfaction, and protect customer interests and relevant trade secrets.

Green Technology Committee
Promote green product research and development and innovations, and lead in cutting-edge green technology.

Environmental Committee
Promote company-wide environmental, safety and health, energy, water and greenhouse gas emission management. Establish sustainable supply chains and long-term partnerships with suppliers to enhance sustainable competitiveness.

Green Manufacturing Committee
Promote company-wide green processes, such as hazardous materials management and increases in resource productivity.

Operation Management Model

2015
In 2015, the Corporate Sustainability Committee stipulated a total of 61 KPIs which were carried out by relevant departments in UMC. A total of 60 KPIs were successfully attained for a completion rate of 98.4%.
(1 KPI was not completed due to suspension of the project)
98.4%

2016
A total of 60 KPIs were stipulated for 2016.
(General CSR aspect: 3 KPIs / Environment aspect: 34 KPIs / Economic aspect: 13 KPIs / Social aspect: 10 KPIs)
60KPIs

Corporate Sustainability Committee Management Mechanisms

Corporate Sustainability Committee
Review:Once every 6 months
Participant
Committee chair
Committee members
Chief administrator
Functional committees administrators
Management Content
Committee reviews
Operational progress of various functional committees
Review and approve goals and plans, review executive performance

Functional Committees
Review:Quarterly
Participant
Functional committee administrators
Members
Management Content
Discuss and plan implementation programs
Follow up implementation progress

Key Corporate Sustainability Projects
Review:Monthly
Participant
Functional committees for promotions
Management Content
Develop key performance indicators (KPI) to quantify the execution of management performance
Follow up and review company project management system
Follow up progress, and present audit results of the Corporate Sustainability Committee

1 Communication with Stakeholders

74

sustainability issues

Adopt the GRI G 4.0 guidelines, ISO 26000 social responsibility standard guidelines, UN Global Compact and domestic and international sustainability assessments as basis for issues.

42

categories of sustainability issues

Members of the Corporate Sustainability Committee Report Group compile and analyze issues.

533

copies of questionnaires

Conduct questionnaire surveys to determine the degree of stakeholder concern over the various types of sustainability issues so that stakeholders can express their needs in terms of sustainable IT.

21

UMC report task group members

The Sustainability Report Group analyzes the impact of issues on company operations sustainability, and screens for materiality issues.

32

material issues

Multiply the score for degree of stakeholder concern over each issue and the score for its respective impact on company operation. Rank issues for disclosure.

3

major material issues

1.Following materiality analysis, the company discusses and decides on the disclosure ranking of sustainability issues.

2.The Sustainability Committee shall conduct management review for material issues related to the economy, environment, and society.

Communication with Stakeholders

To maintain effective stakeholder communication, UMC formulated a management system for the identification of and communication with various stakeholders. This report and the UMC official website were used as a means of disclosing important information.

Communication with Stakeholders

Principles

- Active and timely disclosure
- Providing adequate amounts of information
- Providing suitable and a diverse selection of communication channels

Objectives

- Evaluate and understand the reasonable expectations and requirements of the stakeholders and providing appropriate response to key corporate social responsibility (CSR) issues that the said stakeholders are concerned with.
- Consider all related CSR issues and analyze the potential impact that each issue may exert upon the environment, society, economy, and business operations.
- Employ a system-based mechanism to continuously review and enhance corporate sustainability.

1-1 Mechanisms for Stakeholder Communication

Mechanisms for Stakeholder Communication

1 Identified Major Stakeholders Issues and Concerns
Integrated and coordinated by the Corporate Sustainability Committee
Frequency: Annually

2 Stakeholders Communication Plan and Implementation
Consultation and communication channels with stakeholders are established by respective sub-committees
Frequency: According to plan

3 Assessment of Stakeholder Communication Outcome
Stakeholder communication outcome reported, and key issues reviewed and responded to Corporate Sustainability Committee.
Frequency: Bi-annually

4 Public Disclosure
Annual financial reports, corporate social responsibility report, etc.
Frequency: Annually

- Press Releases
- UMC official website
  (the Stakeholder Area was established in 2015 for stakeholder inquiry)
  http://www.umc.com/English/CSR/c_2.asp

Frequency: As Required

1-2 Procedure for Defining Report Content

1-2-1 Identify Stakeholders

The UMC referenced the nature of its businesses as well as the 5 key principles of AA1000 SES-2011 Stakeholder Engagement Standard (SES) to identify a total of 7 types of stakeholders.

	Customers	Employees	Investors	Suppliers	Government Agencies	Community /Non-profit Organizations	Media
Dependency	3.4	3.5	3.3	3.4	3.3	3.0	2.3	2.8	2.0	2.0	1.3	1.3
Responsibility	3.6	3.1	3.0	2.8	2.8	2.9	2.3	2.3	3.1	2.3	1.7	1.8	1.4	1.3
Influence	3.3		2.8		3.2		2.5		2.5		2.0		2.7	
Diverse perspective														
Tension														
Total	16.98		15.83		15.58		13.49		13.01		9.52		7.96	

Dependency | Responsibility | Influence | Diverse perspective | Tension | Total

1-2-2 Issue Identification, Communication and Review

1 Collect Sustainability Issues
Adopt the GRI G 4.0 guidelines, ISO 26000 social responsibility standard guidelines, UN Global Compact and domestic and international sustainability assessments as basis for issues.
74 sustainability issues

2 Compile Sustainability Issues
Members of the Corporate Sustainability Committee Report Group compile and analyze issues.
42 categories of sustainability issues

3 Survey Stakeholders Concerns
Conduct questionnaire surveys to determine the degree of stakeholder concern over the various types of sustainability issues so that stakeholders can express their needs in terms of sustainable IT.
533 copies of questionnaires

4 Analyze Impact of Issues on Company Operations
The Sustainability Report Group analyzes the impact of issues on company operations sustainability, and screens for materiality issues.
21 UMC report task group members

5 Rank Materiality Issues
Multiply the score for degree of stakeholder concern over each issue and the score for its respective impact on company operation. Rank issues for disclosure.
32 material issues

6 Discussion and Review
Following materiality analysis, the company discusses and decides on the disclosure ranking of sustainability issues.
The Sustainability Committee shall conduct management review for material issues related to the economy, environment, and society.
3 major material issues

Ranking the Materiality Analysis Result of Sustainability Issues

Stakeholders scored differently in their degree of concern for each issue (10 points = very concerned, 8 points=concerned, 6 points =somewhat concerned, 4 points=little concerned, 2 points=not concerned)
UMC Sustainability Report Group member score for impact of each issue on company operational sustainability (5 points=highly impacted, 4 points= impacted, 3 points=moderately impacted, 2 points=not very impacted, 1 point=not impacted)

(Ranking / Total Score)

Corporate Sustainability Plan

1	Sustainable Development Strategy	(1 / 38.6)
2	Stakeholder Communication	(18 / 29.4)
3	Corporate Governance	(8 / 32.8)
4	Ethics and Integrity	(4 / 35.8)
14	Compliance with Regulations	(2 / 37.3)
15	Complaint Mechanism	(20 / 28.2)

Economic

5	Economic Performance	(3 / 37.0)
6	Market Image	(21 / 28.2)
7	Indirect Economic Impact	(34 / 20.9)
8	Procurement Practices	(40 / 16.6)
9	Supplier Assessment	(28 / 25.3)
10	Risk Management	(16 / 29.5)
11	Innovation Management	(5 / 35.3)

Product

12	Customer Service	(6 / 33.3)
13	Customer Privacy	(19 / 28.9)

Environmental

16	Raw Material Use	(33 / 21.1)
17	Energy Use	(7 / 33.2)
18	Water Resource Use	(12 / 31.2)
19	Biodiversity	(41 / 15.4)
20	Greenhouse Gas Emissions	(13 / 30.9)
21	Waste Gas Emission	(15 / 30.4)
22	Waste Water Discharge	(14 / 30.8)
23	Waste	(10 / 31.6)
24	Product Management	(29 / 23.6)
25	Transportation	(38 / 19.1)
26	Environmental Expenses	(35 / 20.6)
27	Environmental Management	(9 / 31.9)
28	Ecological Conservation	(36 / 19.8)
29	Chemical Use	(17 / 29.5)

Social

30	Employer-Employee Relations	(30 / 23.4)
31	Labor Relations	(26 / 26.3)
32	Employee Communication	(23 / 27.7)
33	Occupational Health and Safety	(11 / 31.2)
34	Training and Education	(22 / 27.9)
35	Employee Diversity and Equal Opportunity	(37 / 19.7)
36	Compensation and Benefits	(24 / 27.2)
37	Human Rights	(27 / 26.1)
38	Local communities	(39 / 18.7)
39	Anti-corruption	(25 / 26.7)
40	Public Policy	(42 / 11.9)
41	Fair Trading	(31 / 22.1)
42	Social Welfare	(32 / 21.7)

UMC Major Material Sustainable Development Issues

Based on the results of the materiality analysis for each sustainability issue, the respective management policies, goals and approach are disclosed in the relevant sections of this report. Other secondary issues are summarized in this report.

Key Material Issues

In 2015, Sustainable Development Strategies and Legal Compliance remain as issues that stakeholders are most concerned with. The most important material issues are listed in the following. Of which, waste processing and use of water resources were both affected as a result of local media reporting, resulting in significant increases in the level of concern compared to the previous year.

Sustainability issue	Difference between the years	Chapter in the 2015 CSR Report	Page number	Direction of response
Sustainable Development Strategies	Sustain	Sustainable Development Strategies	6	Fulfill CSR and achieve improvements to the economy, environment, and society
Legal Compliance	Sustain	2-1-6 Legal Compliance	25	Comply with various statutory regulations and make compliance as an integral part of routine management processes
Economic Performance	Increase	2-2-2 Business Performance	28	Continue to commit towards the development of advanced technologies to improve competitiveness of UMC.
Ethics and Trust	Increase	2-1-5 Code of Ethics and Anti-Corruption	25	Improve behavioral integrity and professionalism of every UMC employee
Innovation Management	Decreased	2-2 Innovation Management	27	Provide specialized solutions for wafer foundry technologies that fulfill market trends and customer requirements
Customer Service	Decreased	2-3 Customer Service	31	Improve service quality and customer satisfaction; protecting customer assets
Energy Utilization	Increase	3-2. Energy and Greenhouse Gas Management	56	Optimize energy use efficiency, promote green building, and introduce renewable energies
Corporate Governance	Increase	2-1 Corporate Governance	21	Establish an effective corporate governance framework, safeguard the interests of the shareholders, strengthen the functions of the board of directors, and improve information transparency
Environment Management	Decreased	3-1 Green Factory	47	Continue to introduce various environmental management systems and improve environmentally friendly technologies
Waste	Increase	3-1 Green Factory	47	Reduce total waste and convert waste into useful resources; ensure proper processing of waste and final disposal management
Occupational Health and Safety	Decreased	4-3 Health and Safety Workplace	91	Safeguard employees' physical and mental health with special focus on work environment safety and work-life balance.
Water Resource Utilization	Increase	3-3 Water Risk Management	63	Maximize water use efficiency and improve the water risk handling capacity of upstream and downstream industries in the supply chain, and encourage efforts and savings in water resource utilization

Management Review of Material Issues

In addition to disclosing the outcomes of the Phase 1 material issue identification process, UMC also implements a management review (Phase 2) conducted by the CEO, CFO, CHO, and other senior managerial staff to review material economic, environmental, and social issues and to discuss and verify the value of the said issues in UMC or their potential impact on the company's financial performance.

Energy Utilization
(decommissioning of the nuclear power plant or nuclear plant explosion)

Importance
- Power restrictions will directly affect production capacity and revenue
- Legal restrictions will indirectly lead to increased costs of power

Strategy
Promote measures in reducing energy consumption that include optimization of power use efficiency (PUE), use of green buildings, and introducing renewable energies.

KPI
- Cumulative power consumption from for a 3-year period from 2013 to 2015 reduced by 3%
- Achieve total energy savings of 10% for 2016 to 2020.

Performance in 2015
An additional 55,483 Mwh of energy savings are achieved in 2015. In 2013 to 2015, total energy consumption was reduced by 5.42%.

Occupational Health and Safety

Importance
Any occupational health and safety risks may lead to severe economic or social losses to the company, and lower the company's competitiveness

Strategy
Establish a 10-year accident prevention management plan

KPI
- Achieve a 75% reduction in the number of accidents from 2011 to 2020
- Number of extremely severe disasters: 0

Performance in 2015
- Number of extremely severe disasters: 0
- Number of slight accidents: 11

Company Merger Risk

Importance
Important clients was acquired or merged by a competitor or a major client of a competitor, leading to a loss of purchase orders to the said competitor

Strategy
Improving the proportion of orders with advanced processing (< 40 nm) that could not be manufactured elsewhere

KPI
- Weight of revenue for advanced processing
- Weight of revenue for existing customers

Performance in 2015
- Weight of < 40 nm processing: 34% (2014: 24%)
- Weight of revenue for existing customers: 99%

Outcomes of communications conducted in this year showed that stakeholders regarded air pollution (PM2.5) as an issue that UMC should further investigate.

Current Status

UMC currently uses only natural gas and low-sulfur diesel as fuel. High performance preventive treatment facilities were also deployed to treat waste gases that include acidic exhaust, basic exhaust, and volatile organic compound (VOC) exhaust in order to reduce the amount of pollutants entering the atmosphere and ensure that the levels of pollutants in emitted gases are compliant to (or lower than) the limits imposed by the environment protection laws.

Response

- The company-wide Safety Committee was charged with providing PM2.5 issue reports. Employees in various departments were also given reminders and instructions on how to protect their personal health.
- Arranged a plan for conducting PM2.5 measurements in areas around the site.

1-3 Key Points and Outcomes of Stakeholder Communication

Stakeholder communication method, key concerns and major outcome for 2015 are compiled as follows:

Employee

Key Concern
- Compensation and Benefits
- Economic Performance
- Human Rights
- Sustainability Development Strategies
- Employee Communication

Communication Method
- CEO –employee forums, , secretary forums, Benefits Committee conference, factory dialogues, labor relations, communication platforms
- eUMC information website for employees, BBS message boards, sexual harassment complaint channel, mailbox for reporting fraud or professional ethics violation, e-suggestion and feedback platform, confidential complaint system, 12885ER help hotline
- My UMC website, UMC CSR Newsletter
- Employee satisfaction survey on benefits measures, service satisfaction survey, HR satisfaction surveys, employee recognition survey

Key Stakeholder Communication Outcome in 2015
- Continue to implement industrial salary surveys and provide competitive performance-based and differentiated remuneration and welfare systems (that include rewards, employee compensations, and shares).
- Continue to enhance the UMC ice-cream APP welfare information platform to improve accessibility to employee benefits and discounts
- In 2015, the comprehensive health care program was initiated to focus on 3 areas: creating safe work environments, protecting employee health, and ensuring work-life balance.
- Strengthen communication of business strategies and directives and to continue the provision of up-to-date information of corporate performance. A total of 141 communication meetings were held in 2015.
- e-suggestion opinion feedback platform received 388 opinions from various employees in 2015; all cases (100%) have been closed.
- Strengthen the EICC Committee; continue to promote and respect international code and standards of laborers as well as human rights.

Customer

Key Concern
- Customer Service
- Customer Privacy
- Ethics and Ontegrity
- Innovation Management
- Sustainable Development Strategy

Communication Method
- Online Service Platform
- Regular communication and discussion meetings
- Questionnaire response
- On-site audit and discussion
- Voice of Customer (VOC) instant customer online complaint system
- Customer satisfaction monitoring

Key Stakeholder Communication Outcome in 2015
- UMC was successfully certified with ISO 15408 Common Criteria for Information Technology
- Evaluation to improve management and safety of assets belonging to the company or its customers.
- Organized a technical forum in Shanghai in 2015 to showcase UMC leadership in IoT wafer foundry and manufacturing.
- Organized a technical forum in Japan in 2015 to provide customers an introduction of technical and production solutions for chips employed in IoT and automotive applications.
  Continuous customer services - provide a total of 67 BCM / BCP risk management data.

Investor

Key Concern
- Labor Relations
- Sustainable Development Strategies
- Ethics and Integrity
- Corporate Governance
- Economic Performance

Communication Method
General Shareholders:
- Annual general shareholder meeting
- Quarterly investor conferences
- Financial report

Corporate shareholders:
- Quarterly domestic and overseas investor conferences
- Domestic and overseas seminar for investing institutions

Key Stakeholder Communication Outcome in 2015
- Worked with the Financial Supervisory Commission (FSC) to complete corporate governance accreditation
- Continue to hold stockholder's meetings and seminars
  http://www.umc.com/chinese/investors/e.asp
- Upload multimedia information of the financial and business report in the stockholders' section of the UMC official website
  http://www.umc.com/English/investors/e.asp

Supplier

Key Concern
- Customer Privacy
- Customer Service
- Ethics and Integrity
- Sustainable Development Strategies
- Compliance with Regulations

Communication Method
- Review reports or meetings
- Explain ESH and corporate social responsibility management
- Questionnaires and audit visits
- Jointly implement ESH and corporate social responsibility program with suppliers

Key Stakeholder Communication Outcome in 2015
- Promote BCM management amongst suppliers; completed risk assessments for suppliers that constitute 95% of UMC purchases
- Implemented anti-corruption measures and promoted the signing of Agreement on Supplier Code of Ethics and Conduct
- Completed conflict mineral surveys for 2015
- Organized the 2015 UMC Seminar and Conference for Sustainable Corporate Development
- Completed RFID collaboration and promotion program

Community /Non-profit Organization

Key Concern
- Compliance with Regulations
- Human Rights
- Local Community
- Occupational Health and Safety
- Environmental Management

Communication Method
- Assigned a department for community communication
- Participate regularly in community meetings
- Visit community leaders and residents during holidays
- Invite community residents to participate in the company's Family Day activities
- Participate in community activities or seminars
- Participate in the operations of outside associations

Key Stakeholder Communication Outcome in 2015
- Organized the 2015 UMC family day activity
- Promoted volunteering culture and provided a total of 159 community services for the underprivileged.
- Chung-Shan Institute of Science & Technology (CSIST) shared practical experience in management through guided tours (MBWA) and safety observations
- Worked with the Society of Wilderness (SOW), an ecological conservation organization, to promote the Eco Echo ecological conservation program
- Worked with the National Taiwan University (NTU) to develop water risk management tools
  Organized an energy saving and safety volunteer demonstration team, helping Shih Guang
- Educational and Nursing Institution to improve upon energy saving and water conservation efforts as well as general environment safety.

Governmental Agency

Key Concern
- Compliance with Regulations
- Occupational Health and Safety
- Energy Use
- Environmental Management
- Chemical Use

Communication Method
- Participate in parks and Science Park Administration functional organizations for operations.
- Participate in public hearings and symposiums organized by governmental authorities

Key Stakeholder Communication Outcome in 2015
- Offered industrial operating experiences and recommended additional contents for drafts on secondary laws for the Greenhouse Gas Reduction and Management Act
- Worked with the Ministry of Science and Technology (MOST), park bureaus, and park associations to establish a Professional Platform for Science Park Workplace Safety.
- Served as a consulting company by the Northern Occupational Safety and Health Center of the Occupational Safety and Health Administration (OSHA) and shared experiences in obtaining the National OSH Awards.
- Served as the leader of the Joint Prevention Organization for Toxic Chemical Substances of Hsinchu City
- Promoted PFOA / PFOA-related Free programs, 369+ energy reduction plans, and Green 2020 plans within the company

Media

Key Concern
- Waste Water Discharge
- Economic Performance
- Water Use
- Sustainable Development Strategies
- Energy Use

Communication Method
- Press conferences
- Press releases
- Company Website

Key Stakeholder Communication Outcome in 2015
- Released 32 press articles on corporate governance and sustainability management
  http://www.umc.com/English/news/2015/2015.asp
- Released the environmental protection objectives of UMC Green 2020 project

Other Opinions and Expectations of Communications with Various Stakeholders

Corporate Sustainability Planning
- Having the ability to support social visions, commitment, and development programs after attaining business growth.
- Becoming a company where sustainable management is an integral part of CSR and performance indexes.
- Develop a subsidiary as social enterprise.
- Consider the use of partnerships and work with NGOs / conservation groups / government agencies to tackle issues that the general public are concerned with and improve CSR image of the company.

Economic Dimension
Pay attention to short-, medium, and long-term impacts to global economy that may be caused by China's continuing economic downturn.

Environmental Dimension
- Acquire the ability to improve and maximize the effectiveness of water resource utilization.
- Widely adopt clean energy (green power), recycled water (water conservation measure), and proper environmental conservation efforts.
- Next generation product development associated with environmental friendliness, i.e. less resource usage, zero waste in industrial networks.

Social Dimension
- Focus on services for the disabled.
- Committed focus upon social services and stipulate long-term directives and executive strategies that help stabilize the society. Insist upon and continue to promote the right things.

Summary of Outcomes from UMC Partnerships and Opinion Feedback

Society of Wilderness

Details of the Partnership

Eco-Echo Ecological Conservation Hope Project

UMC worked with the Society of Wilderness (SOW) in the Habitat Conservation Campaign for Sauter's Brown Frog and trained conservation volunteers to help defend the frog's habitats and construct ecological corridors.

For more information, please visit the UMC ecological conservation webpage.

http://www.umc.com/English/CSR/d_ecoecho.asp

Feedback

environmentally friendly concepts and actions, as well as government support helped to invigorate ecological conservation efforts and improved our hopes for achieving corporate sustainability.

Society of Wilderness / President Liu Yuemei

Suppliers

Details of the Partnership

RFID Technology Deployment Project

Feedback

Patrick Chen, Air Products San Fu Co. Ltd., PM Sales Director, ASIA

At Air Products San Fu, we have a comprehensive set of values and practices for corporate social responsibility. These values include our commitment to protecting both people and the environment. Our actions, projects, and business approach are designed to positively influence our community and the world. We place great importance upon our role in the supply chain. The global theme of development, conservation, and care were adopted to promote sustainable development in the economy, environment, and general society. San Fu works with both upstream and downstream businesses in the supply chain to achieve joint development and establish healthy, robust, and active corporate governance systems.

Recent developments in radio frequency applications have attracted a lot of attention, particularly in the development, innovations, and constant advancements made in radio frequency identification (RFID), which will be enacting major changes to industrial development. RFID offers a broad spectrum of applications and many businesses hope to leverage this technology in order to reduce production and procurement costs, streamline complicated process management, save time through quick-tracking of shipments, and improve profitability.

San Fu is glad to achieve recognition from UMC and we have deployed RFID technology upon special gases and chemical containers to support processes such as warehouse management, inventory management, delivery processes, shipment tracking, and information management. The aim is to achieve joint partnerships which can be further extended to upstream and downstream partners in the supply chain in order to benefit the economy, environment, and society in general.

Customers

Details of the Partnership

Strengthen Collaborative Efforts for Manufacturing Processes and Expand Strategic Partnerships
- Expand 14-nm FinFET Collaboration to Include DesignWare Embedded Memory and Test Solutions
- Validate 14nm FinFET Process
- 55nm Low Power (LP) embedded Flash process
- Extend Collaboration on 65- and 55-nm SONOS Embedded Nonvolatile Memory

Feedback

John Koeter, vice president of marketing for IP and prototyping at Synopsys

Our expanded collaboration with UMC demonstrates our mutual goal to help designers incorporate DesignWare IP into their SoCs on UMC processes," said John Koeter, vice president of marketing for IP and prototyping at Synopsys. "With more than 45 FinFET test chip tapeouts, Synopsys continues to make significant investments in providing high-quality IP for FinFET processes, enabling designers to lower integration risk and speed their time to volume production.

http://ww w.umc.com/English/news/2015/20150622-2.asp

Will Abbey, general manager, physical design group, ARM.

ARM and UMC share a long history of successful collaboration through multiple technology generations. We are highly encouraged by the test chip tape-out of a Cortex-A family core using UMC's 14nm FinFet process. ARM will continue its close partnership with UMC during the development of this advanced process node.

http://www.umc.com/English/news/2015/20150622-1.asp

Jensen Yen, associate vice president of marketing and spokesperson at Faraday Technology

Faraday has been cooperating closely with UMC to build robust platform solutions for power-sensitive applications spanning from 0.18um to 0.11um, and now on 55nm eFlash. Our IP expertise and high familiarity with UMC processes led to these newly-launched IPs with UMC's HVT core devices that significantly reduce power consumption, greatly catering to the growing IoT market. With this important milestone and our continuous collaboration with UMC, we are confident that our mutual customers will soon be able to seize new business opportunities in the IoT market.

http://www.umc.com/English/news/2015/20150312.asp

Sam Geha, vice president of the Technology and Intellectual Property Business Unit at Cypress.

We are pleased to continue working with UMC to extend the adoption of our SONOS IP as the top choice for embedded nonvolatile memory. The 40-nm SONOS process is embedded in an ultra-low power process technology and other 40-nm variants. It will benefit a broad range of UMC's customers looking to develop smart, power-efficient products for the Internet of Things and wearable electronics markets. 40-nm SONOS also enables faster processing speeds and lower power consumption for microcontrollers.

http://www.umc.com/English/news/2015/20150121.asp

Shih Guang Educational and Nursing Institution

Details of the Partnership

Energy Conservation and Safety Volunteer Demonstration Team Program

Energy saving and carbon reduction service volunteers provided support in multiple aspects that span across the areas of energy and water conservation, environmental protection, and fire safety to the underprivileged. The team also supported diagnostics and improvement efforts for Shih Guang Educational and Nursing Institution.

Donation of energy saving lights

Fire safety diagnostics

Feedback

Peng Shaocheng, Superintendent, Shih Guang Educational and Nursing Institution

We thank UMC for its gifts of energy saving LED natural lighting equipment that helps provide secure lighting for our institution. This lighting helps to illuminate the way for employees, teachers, children, and parents leaving home late at night. Teachers and staff members could also perform their work safely, clean the environment, and perform waste disposal after dark.

LED lighting equipment not only provides safe lighting, their energy saving features also reduces monthly electric bills. We hereby offer our most sincere thanks to UMC for "bringing light" to our institution.

We also express our gratitude to UMC for offering energy saving consultation services in late 2015. Such efforts went a long way to renovate and refurnish indoor environments within our institution.

National Taiwan University (NTU)

Details of the Partnership

Joint Development of Water Risk Management Tools

For water resource issues, UMC not only enacted active measures for water conservation, but also worked with the Department of Bioenvironmental Systems Engineering of National Taiwan University to develop a UMC HSP Plant Decision and Early Warning Support System for Water Shortage (UMCDEWS). A quarterly (every 3 months) water shortage early warning system was established. The system was capable of simulating water forecasts provided by the Water Resources Agency (WRA) and predict future water availability and potential water use restrictions for UMC's HSP fabs. Existing facilities for responding to water shortages were also integrated into the system to prepare for impending water shortages and reduce business risks.

Feedback

Dr. CP Tung, National Taiwan University

Impacts caused by recent climate changes have led to increasingly frequent weather extremes that include heavy rain and droughts. A very severe drought occurred in early 2015, forcing the HSP Park to impose a rare Level 2 water use restriction. Such water shortages also led to business risks for UMC. There are many cases of drought prediction and management in Taiwan and other countries. Outcomes demonstrate that the ability to predict water resource availability as well as early warning management systems could help reduce a company's operational risks. A solution presented itself in the second half of 2015. UMCDEWS was developed with the aim to support water shortage management and reduce water shortage risks in UMC. The system is capable of providing water availability forecasts for 3 upcoming months as well as recommend response measures for water shortages. This allows UMC's HSP fabs to effectively assess future trends in water availability and to prepare or implement water saving measures to reduce business risks. The early warning features offered by this system would help reduce water shortage risks for UMC, lower social costs, and achieve better sustainable business operations and management.

1-4 Key Report Considerations and Boundaries

With due consideration to internal and external influence and impact on UMC, the disclosures in this report are shown below in accordance with the materiality analysis outcome of sustainability issues and recommendations of the GRI G4 guidelines:

Economic Dimension

Issue	GRI G4 guidelines	Within the organization					Outside the organization			
		UMC	HJTC / United Semiconductor	Wavetek / NexPower	UMC Group USA /UMC Group Japan /UMC Capital Corp.	Unitruth Investment Corp. / TLC Capital Co., Ltd. / Fortune Venture Capital Corp.	Supplier	Contractor	Customer	Neighboring Communities
Economic performance	Economic performance	●	●	●	●	●				
Supplier assessment	Procurements	●	●				●			
Compensation and benefits	Market image	●	●	●	●	●				
Risk management	Other issues (Non GRI G4 guidelines)	●					●			
Innovation management		●								

Product Dimension

Issue	GRI G4 guidelines	Within the organization					Outside the organization			
		UMC	HJTC / United Semiconductor	Wavetek / NexPower	UMC Group USA /UMC Group Japan /UMC Capital Corp.	Unitruth Investment Corp. / TLC Capital Co., Ltd. / Fortune Venture Capital Corp.	Supplier	Contractor	Customer	Neighboring Communities
Customer service	Product and service indicators	●	●						●	
Customer privacy	Customer privacy	●							●	
Compliance with regulations	Compliance with regulations	●	●	●	●	●	●	◉	●	●

Environmental Dimension

Issue	GRI G4 guidelines	Within the organization					Outside the organization			
		UMC	HJTC / United Semiconductor	Wavetek / NexPower	UMC Group USA /UMC Group Japan /UMC Capital Corp.	Unitruth Investment Corp. / TLC Capital Co., Ltd. / Fortune Venture Capital Corp.	Supplier	Contractor	Customer	Neighboring Communities
Energy use	Energy	●	●	●			○			
Water use	water	●	●	●			○			
Greenhouse gas emission	Emissions	●	●	●			○			
Waste gas emission										
Wastewater discharge	Wastewater and waste substance	●	●	●			○			
Waste substance										
Product management	Products and services	●	●	○			○			
Supplier assessment	Supplier environmental assessment	●	●				●			
Compliance with regulations	Compliance with regulations	●	●	●			●			●
Environmental management	Other issues (Non GRI G4 guidelines)	●	●	●			○			
Chemical use		●	◉	○			○			

● Highly significant, disclose at this time ◉ Highly significant, plan to disclose within the next 3 years ○ Highly significant, disclosure not yet planned

Social Dimension

Issue	GRI G4 guidelines	Within the organization					Outside the organization			
		UMC	HJTC / United Semiconductor	Wavetek / NexPower	UMC Group USA /UMC Group Japan /UMC Capital Corp.	Unitruth Investment Corp. / TLC Capital Co., Ltd. / Fortune Venture Capital Corp.	Supplier	Contractor	Customer	Neighboring Communities
Employee-Employee relations	Employee-Employee relations	●	●	●						
Labor relations	Labor relations	●	●							
Supplier assessment	Supplier labor assessment	●	●				●			
	Supplier human rights assessment	●					●			
	Supplier social impact assessment	●					●			
Occupational health and safety	Occupational health and safety	●	●	●				●		
Training and education	Training and education	●	●	○						
Compensation and benefits	Employee diversity and equal opportunity	●	●							
Human rights	Non-discrimination	●	●	●						
	Freedom to organize associations and collective agreements	●	●	●						
	Child labor	●	●	●						
	Forced labor	●	●	●						
	Human rights complaint mechanism	●	●	●						
	Assessment	●	●							
Anti-corruption	Anti-corruption	●	●	●	●	●	●	●		
Fair trade	Anti-competition	●	●	●	●	●				
Compliance with regulations	Compliance with regulations	●	●	●	●	●				●
Employee communication	Other issues (Non GRI G4 guidelines)	●	◉							
Public services		●								●

● Highly significant, disclose at this time ◉ Highly significant, plan to disclose within the next 3 years ○ Highly significant, disclosure not yet planned

2 Sustainable Development-Economic Growth

89.8%

capacity utilization rate

0.8% year on year growth

11,279

patents

In 2015, UMC was awarded 439 domestic and foreign patents, totaling 11,279 patents to date.

200%

growth

Doubled revenue compared to 2014 with immense popularity of automotive semiconductor products amongst customers.

1st

ISO15408

The first wafer foundry in Taiwan to be ISO15408-EAL6 certified, effectively enhancing safety of company and customer asset management.

3000

More than 3000 suppliers joined

UMC in committing to sustainable development.

0

High-risk Suppliers

UMC has established the ISO 22301 business continuity management system, and completed business continuity risk assessment for vendors who supply 95% of the company's procurement.

2-1 Company Management

UMC has an effective corporate governance framework that is consistent with Taiwan's Company Act, Securities and Exchange Act, and other related laws and regulations. UMC also established the "UMC Corporate Governance Practice Principles", "UMC Ethical Corporate Management Best Practice Principles" and "UMC Corporate Social Responsibility Principles" as practical company considerations to protect shareholders' equity, respect stakeholders, enhance information transparency, strengthen the competency of the Oversight Board, and uphold corporate integrity and code of conduct. It is hoped that through effective corporate governance, the company can fulfill its corporate responsibility in sustainable development and enhance corporate performance.

Executive Summary

Establish Effective Corporate Governance Framework

Performance in 2015
- The Corporate Sustainability Committee will meet regularly with the Board to report promotional outcome and plans.

Plans and Objectives for 2016
- The Corporate Sustainability Committee will meet regularly with the Board to report promotional outcome and plans.

Ensure Shareholder Equity, Strengthen Competencies of the Oversight Board

Performance in 2015
- In 2015, the company established a practice of maximum tenure for independent directors.
- The 13th Board of Directors had been elected according to the company's Policy for Nomination and Election of Directors. In 2015, the first female board member had been elected.
- The 3rd Audit Committee had been established by the independent members of the 13th Board of Directors
- The 3rd Remuneration members had been decided by the 13th Board of Directors
- The members of the Capital Budget Committee had been assigned by the 13th Board of Directors

Plans and Objectives for 2016
- The performance of the board will be reviewed and evaluated annually according to the company Directors' Self-Assessment of Performance.

Enhance Information Transparency

Performance in 2015
- UMC was rated the top 5% of listed companies by the Corporate Governance Evaluation Results in Taiwan
- In April 2015, UMC's information disclosure for 2014 was rated A++ by the Securities and Futures Institute

Plans and Objectives for 2016
- To promote the effectiveness of the Corporate Governance Evaluation.

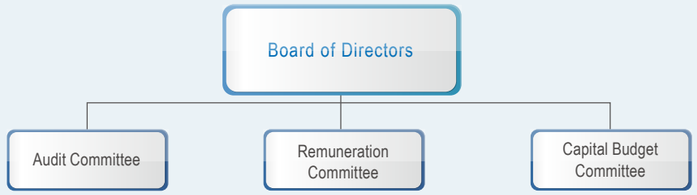
The UMC Board of Directors, Audit Committee, Remuneration Committee and Capital Budget Committee conduct their duties according to the regulations of "Convention Rules for Meetings of Board of Directors", "Audit Committee Charter", "Compensation Committee Charter", and "Capital Budget Committee Charter". To implement corporate governance, enhance capability and review performance of the Board, UMC instituted the Board of Directors' Self-Assessment of Performance in 2015 to assess the performance of the Board annually in order to enhance the Board's role and responsibilities, the participation degree of company operations and understanding the business and its risks, the improvement of policy decision quality, the composition and structure of the board of directors, the election and continuing professional education training of directors, internal control and Audit Committee communications, oversight of the financial reporting process and so on.

The conclusion of the Board of Directors' Self-Assessment of Performance in 2015 is that the Board is functioning efficiently and as intended.

In addition to the company's annual operational disclosure, the company has the corporate governance section on the UMC website so that stakeholders can easily access UMC corporate governance information to view its Corporate Governance Policy.
(🔗 URL:http: //www.umc.com/english/investors/corp_gov.asp).

2-1-1 Board of Directors

The UMC Board of Directors comprises of 9 members from different professional backgrounds, and is responsible for company operation and supervision. The diverse academic and industrial experiences of the Board members are an asset to corporate decision-making and long-term strategy planning. Currently, the Board has four seats for independent directors and two for outside directors. More than half of the director seats are filled by members of outside companies. In 2015, a total of 7 board meetings were held. The average attendance rate was 95.24%, and ratio of total remuneration for board directors to company after-tax net income was 0.44%.



Policy for Nomination and Election of Directors

To ensure the fair, just, and open election of directors, the nomination and election procedures of the Company's directors shall comply with the Company Act and all related laws and regulations. The organizational culture, business model and long-term development of the Company shall be taken into consideration when determining the composition of the Board members. The criteria established to ensure the diversity of the Board members shall include, but are not limited to the following three dimensions:

🔗 Please refer to ： http://www.umc.com/English/investors/Corp_Gov.asp

UMC Board of Directors

Chair of Board

Stan Hung	♂ age 56	Attendance Rate 100%

Director

Po-Wen Yen	♂ age 60	Attendance Rate 100%
Jason S. Wang	♂ age 53	Attendance Rate 100%
Shan-Chieh Chien	♂ age 58	Attendance Rate (Note)
Ting-Yu Lin Capital Budget Committee member	♂ age 54	Attendance Rate 100%

Independent Director

Chun-Yen Chang • Convener for Audit Committee • Convener for Remuneration Committee • Convener for Capital Budget Committee	♂ age 79	Attendance Rate 85.71%
Chung Laung Liu • Audit Committee member • Remuneration Committee member • Capital Budget Committee Member	♂ age 82	Attendance Rate 85.71%
Cheng-Li Huang • Audit Committee member and financial expert • Remuneration Committee member • Capital Budget Committee member	♂ age 67	Attendance Rate 100%
Wenyi Chu • Audit Committee member and financial expert • Remuneration Committee member • Capital Budget Committee member	♀ age 49	Attendance Rate 100%

The board was reelected on June 9, 2015.

Directors' current position at UMC or other company is disclosed on Page 17 of the company's annual report.

Note: The UMC Science and Culture Foundation appointed Mr. Shan-Chieh Chien as its representative (former representative was Mr. Jiann-Hwa Shyu) on March 1, 2016.

The Board has 9 seats, of which 4 are occupied by independent directors. The various committees are composed of independent directors and outside directors, and members do not include members who also serve as administrative directors.

The Board has 9 seats, of which 4 are occupied by members who also serve as administrative directors, namely the Chief Executive Officer, Chief Strategy Officer and Senior Vice President.

Board members are elected by shareholders according to regulations for Director Election during shareholder meetings, and in compliance with the Board of Directors Regulations and company constitution. Jurisdiction for each committee is based on organizational constitution, and committee members are nominated and approved by the Board.

Each year, UMC arranges for its directors and managers to participate in economic, social and environmental courses in corporate sustainability. Continuing education for directors in 2015 is disclosed on Page 36 of the company's annual report.

To implement corporate governance, enhance capability and review performance of the Board, UMC instituted Board of Directors' Self-Assessment of Performance in 2015 to annually assess the performance of the Board in order to enhance operation efficiency of the Board.

Principles for Avoiding Conflict of Interest in Management

Provisions for avoiding conflict of interest are stated in the company's Convention Rules for Meetings of Board of Directors and Audit Committee Charter. Directors with vested interest in an agenda, whether it is personal or representing organizations, should explain the key content of their interest at the meeting. Should that interest undermine company interest, the said directors are not permitted to participate in discussions or votes, must be excused from discussions and decisions, and must not vote on behalf of another director. The name, key content and excuse from participation are recorded in the meeting minutes.

The company has formulated Ethical Corporate Management Best Practice Principles, the Procedure of Transaction with Related Parties, the Code of Ethics for Directors and Officers and the Employee Code of Conduct to avoid conflict of interests. In addition, employee code of conduct implementation is reported to the Audit Committee. Detailed regulations, stakeholder communication contacts and information regarding disclosure are available in the Stakeholder Engagement section of the company website. The company has spokespersons and a dedicated email address for handling enquiries and input from various stakeholders.

2-1-2 UMC Functional Committee

UMC Functional Committee

Capital Budget Committee

Function

The Capital Budget Committee comprises of independent directors and outside directors to assist in the company's long-term development strategy, financial planning and business performance. The Committee discusses plan implementations, and modifies and follows up on the company's capital expenditure budget by auditing its cost-effectiveness and tracking its performance.

Effectiveness in 2015

The UMC Capital Budget Committee was established in October 2013. In 2015, the Committee met 5 times, and audited and approved capital budget expenses of NT $ 91,084 million.

Disclosure Oversight Committee

Function

In response to the US Securities and Exchange Commission (SEC) demand for disclosure as a result of the Sarbanes-Oxley Act, UMC has established a Disclosure Oversight Committee comprising of the company's Level 1 executives. Information is rigorously gathered and managed to ensure that information reported to securities authorities are accurate and timely, thereby fulfilling the company's disclosure responsibility and obligation.

Effectiveness in 2015

In April 2015, UMC's information disclosure for 2014 was rated A++ by the Securities and Futures Institute.

The Audit Committee

Function

Assists the Board in its oversight responsibilities, and is responsible for tasks dictated by the Company Act, Securities Exchange Act and other relevant laws. Since UMC is listed on the New York Stock Exchange (NYSE), it is also subjected to the US laws for foreign issuers. The UMC Audit Committee comprises of four independent directors, of which two are financial experts. According to the terms and responsibilities stated in the company's Audit Committee Regulations, members are required to meet at least 4 times per year.

Effectiveness in 2015

In 2015, the Committee convened 6 times, and maintained positive communication channels with the company's internal auditors, certified accountants and employees.

Remuneration Committee

Function

According to Regulations Governing the Appointment and Exercise of Powers by the Remuneration Committee of a Company Whose Stock is Listed on the Stock Exchange or Traded Over the Counter Act, UMC established the Remuneration Committee to strengthen corporate and risk management. In addition, to motivate and retain talents the Committee reviews and supervises the remuneration system of the company's directors and managers. The committee meets at least twice a year.

Effectiveness in 2015

Meeting convened in March, July and December of 2015, respectively. Please refer to Page 41 of the company's annual report for attendance record of committee members.

All four independent directors meet the requirements of the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies for professional qualification, work experience, and restrictions and the independence of independent directors.

Remuneration for High Level Managers

In addition to leading the company towards its operational direction and goals, UMC's high level managers also maintain focus on sustainable development indicators, and work diligently in economic, environmental and social development and innovation to create common harmony and prosperity for the corporation and society.

Remunerations for UMC general managers and deputy general managers include salary, pension, employee compensation , special disbursement, and disposition of earnings and employee stock options. Performance evaluation and salary remuneration policies, system, standards and structure for directors and managers are determined and reviewed by the Remuneration Committee. In addition, regular review and comparison within the industry and talent pool ensure competitive salaries to attract, motivate and retain talent. The effectiveness of high level managers are reflected in the company's overall performance, including indicators such as customer satisfaction, product innovation and technology development, capacity utilization, environment and sustainable development, and personnel training and development. Remuneration is primarily divided into fixed and variable remuneration to fully reflect individual and team performance as well as ensuring steady operating growth and breakthrough innovative power for the company.

Taiwan	Singapore
Ratio of maximum remuneration to median annual remuneration	
11.1	5.5
Ratio of % increase in highest total annual remuneration to % increase in median total remuneration	
1.89%	3.62%

2-1-3 Shareholders' Participation in Corporate Decisions

In the 2015 UMC shareholder meeting, electronic voting accounted for 47.2% of total shares outstanding, and 57.9% of those attending the meeting. Investors may exercise their voting rights via direct electronic voting, thereby significantly reducing the difficulty of transportation and schedule conflict to attend shareholder meetings. Direct participation of shareholders in decision-making can reduce agency costs and risk, and increase the motivation of shareholders to exercise their voting right.

All admitted bills and motions during UMC shareholder meetings are discussed and voted by meeting attendees, and resulting shareholder support and vetoes for each bill are recorded so that shareholder opinions are fully reflected in the resolutions.

Under the global trends of Shareholder Activism, UMC requests for a motion during the general shareholders' meeting from any shareholders that hold more than 1% of the company. Given that activist shareholders pay more attention to financial performance, compensation schemes and corporate governance of the company, the sub-committee of the Board shall assist the management with such issues.

2-1-4 Internal Audit

UMC has established an internal audit under the direct jurisdiction of the Board for the following purpose and tasks:

Purpose

- Examine and evaluate the effectiveness of the internal control system
- Evaluate the efficiency and effects of the business operation
- Ensure reliability, timeliness, transparency and legal compliance of reports
- Provide timely suggestions for improvement to ensure the sustainability and effective implementation of internal control operations

Key Tasks

- Conduct annual audit in accordance to the provisions of the Taiwan authorities, or conduct unscheduled checks in the event of risks.
- Issue audit reports and track improvement.
- Regularly revise internal control system, and audit implementation details and annual internal self-assessments.
- Communicate with independent directors, and report to the Audit Committee and Board of Directors.

Since UMC is listed on the New York Stock Exchange (NYSE), it is also subjected to US regulations for foreign issuers. Since 2006, UMC has complied with the SOX 404 Act, and has been audited by certified accountants. To date, the certified accountants have given unqualified opinions on the effectiveness of UMC's internal control plans and implementation.

For details of the internal audit and operation, please refer to the company's Website at

http://www.umc.com/chinese/pdf/audit_c.pdf

2-1-5 Code of Ethics and Anti-Corruption

UMC has developed the UMC Code of Conduct for all directors, managers and employees to enhance company and employee knowledge of conduct and professional ethics from the top down.

UMC expects all employees to comply with the company's Code of Conduct in their daily work and business execution to gain public confidence and ensure sustainable growth and development for the company. By promoting the Code of Conduct (targets include company subsidiaries, joint ventures, suppliers, customers and others entities pertaining to UMC operation and development), it is hoped that joint efforts can be put into fulfilling corporate social responsibility and promoting balanced and sustainable economic, social and environmental development.

UMC encourages open communication with employees and third parties. Questions pertaining to ethical and legal conduct or unequal treatment in the workplace may be referred to the Human Resource Office or Employee Care Office for assistance, and reports may be filed to uncover, stop and prevent major misconduct or violation of government regulations.

For relevant information, please refer to the company Website at
http://www.umc.com/chinese/CSR/c_4.asp

UMC provides online self-testing and training courses to help employees clearly understand the concept of appropriate employee conduct. In addition, the employee code of conduct is posted on the company's intranet for employee reference. Employees may refer relevant questions to the Human Resource Office for inquiry and assistance in implementing the code of conduct in their daily work and tasks. In 2015, 100% of employees completed and passed the online employee code of conduct training and self-testing course.

Through annual internal control and self-assessment, UMC has also conducted a self-review of all fabs, departments and subsidiary operations, including compliance with laws and regulations, awareness of professional code of conduct and risk assessment. The design and implementation of internal control systems are also adjusted to achieve self-monitoring. In addition, based on the risk assessment outcome, the Audit Division has formulated audit plans for relevant reviews, and regularly reports results and follow-up improvements to the Audit Committee and the Board of Directors.

2-1-6 Legal Compliance

UMC's customers are located around the world, and its operations are distributed over several countries. To ensure that operations are in compliance with the laws and regulations of each country, thereby avoiding losses due to legal violations or avoiding profit loss due to fines, UMC has consistently paid close attention to all changes in policies or laws that might impact the company's business or finances.

All UMC departments must comply with relevant laws and regulations. The company has a dedicated legal department serving as a legal platform to offer legal advice and assistance to each department. UMC and its employees are required to comply with relevant business laws and regulations. The company arranges training programs and courses on legal compliance to familiarize employees with updated regulations. Prompt updates allow employees to implement job regulations into their daily management, thereby ensuring that the company complies with the law.

UMC Training Courses for Legal Compliance

Online Courses

Allow employees to learn at any time, and strengthen awareness of the latest laws, and offer online testing, review and correction of employees' legal knowledge. Other related online courses or tests include: Fair Trade Law (antitrust law), import and export control.

Classroom Courses

Classroom instruction on important policy or statutes, including fair trade, insider trading, classified information protection, high-tech export controls, intellectual property protection and personal data protection are offered.

Seminar Courses

Outside legal professionals and experts are invited to lecture on the latest legal trends and information, and exchange ideas.

Outsourced Courses

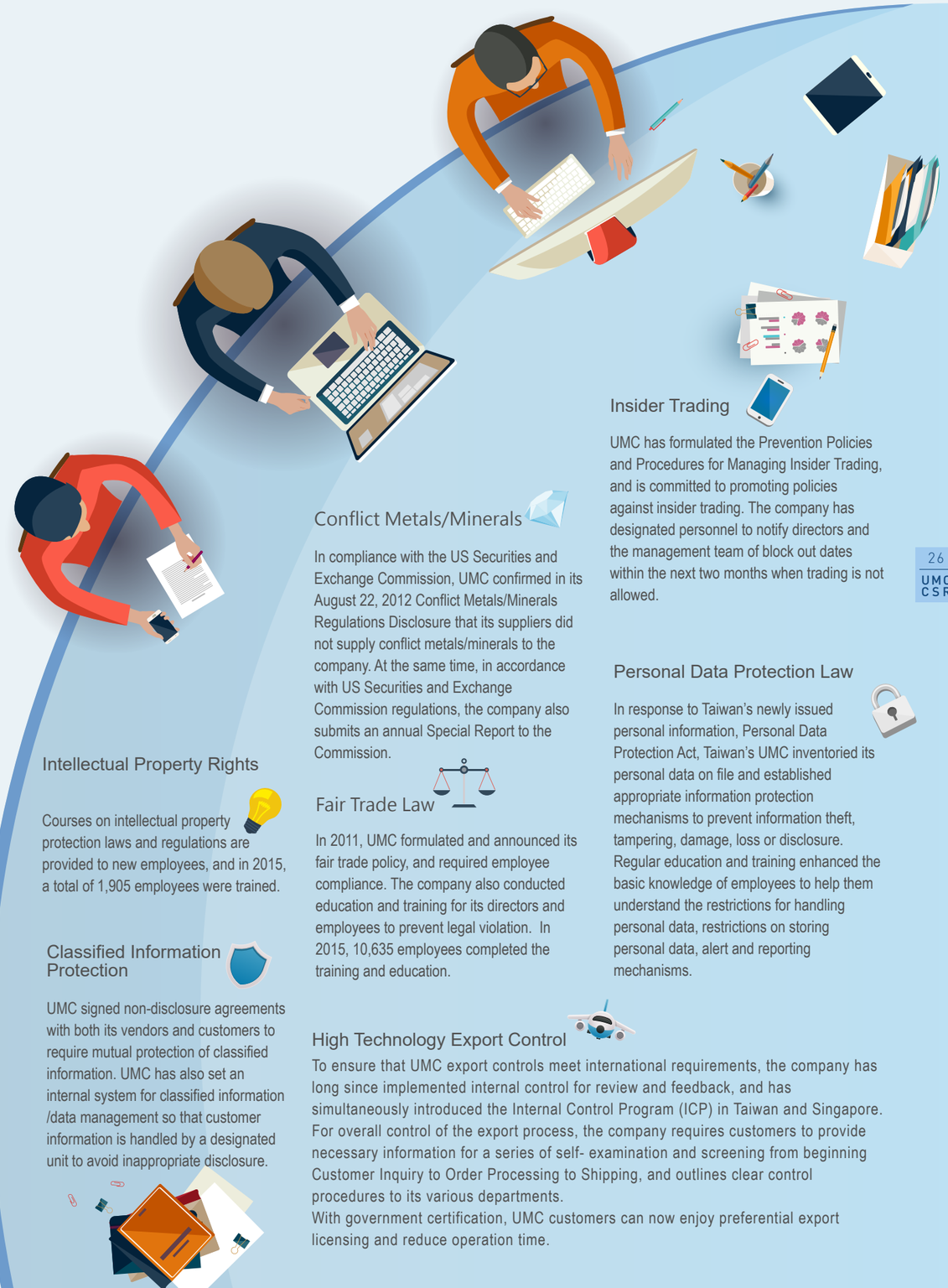
Arrangements are made for legal staff to attend outside training to update their knowledge of amendments and latest news and details to ensure compliance with latest requirements.

Employees can obtain training course information and promotional information from the company's internal intranet site. Information updates, internal reviews, regulation amendments and implementation ensure our compliance with legal standards.

Regulation Compliance in 2015

Cases of anti-trust complaints against the company	Cases of product, service information and labeling regulation violations	Cases of hefty fines imposed on the company for regulation violations	Violation of customer privacy act/number of data loss complaints
0	0	0	0

Examples of UMC Legal Compliance:



Insider Trading

UMC has formulated the Prevention Policies and Procedures for Managing Insider Trading, and is committed to promoting policies against insider trading. The company has designated personnel to notify directors and the management team of block out dates within the next two months when trading is not allowed.

Conflict Metals/Minerals

In compliance with the US Securities and Exchange Commission, UMC confirmed in its August 22, 2012 Conflict Metals/Minerals Regulations Disclosure that its suppliers did not supply conflict metals/minerals to the company. At the same time, in accordance with US Securities and Exchange Commission regulations, the company also submits an annual Special Report to the Commission.

Personal Data Protection Law

In response to Taiwan's newly issued personal information, Personal Data Protection Act, Taiwan's UMC inventoried its personal data on file and established appropriate information protection mechanisms to prevent information theft, tampering, damage, loss or disclosure. Regular education and training enhanced the basic knowledge of employees to help them understand the restrictions for handling personal data, restrictions on storing personal data, alert and reporting mechanisms.

Intellectual Property Rights

Courses on intellectual property protection laws and regulations are provided to new employees, and in 2015, a total of 1,905 employees were trained.

Fair Trade Law

In 2011, UMC formulated and announced its fair trade policy, and required employee compliance. The company also conducted education and training for its directors and employees to prevent legal violation. In 2015, 10,635 employees completed the training and education.

Classified Information Protection

UMC signed non-disclosure agreements with both its vendors and customers to require mutual protection of classified information. UMC has also set an internal system for classified information /data management so that customer information is handled by a designated unit to avoid inappropriate disclosure.

High Technology Export Control

To ensure that UMC export controls meet international requirements, the company has long since implemented internal control for review and feedback, and has simultaneously introduced the Internal Control Program (ICP) in Taiwan and Singapore. For overall control of the export process, the company requires customers to provide necessary information for a series of self- examination and screening from beginning Customer Inquiry to Order Processing to Shipping, and outlines clear control procedures to its various departments.
With government certification, UMC customers can now enjoy preferential export licensing and reduce operation time.

2-2 Innovation Management

Current Status and Development in the Semiconductor Industry

The development trends for end electronic products are oriented towards functional improvement and lighter weight, but the introduction of energy conservation and carbon reduction have also impacted chip design. Therefore, in view of factors such as functional integration, increased performance and low power consumption, chip design has become increasingly complex. Moreover, for production efficiency, semiconductor manufacturing technology must continue to miniaturize, and wafer surface area must increase in diameter. Hence, given these two major trends, the threshold for semiconductor manufacturing is increasing, and investment cost is rising rapidly.

Future Business Opportunities in the Semiconductor Market

The four types of traditional IC products are computers, communication, consumer and car electronics. Electronic products are already more compact, save more power and are interconnected. For example, notebooks and tablets have a longer operating time, and cell phones can be connected to laptops and tablets via wireless networks. In addition, significant improvement in the bandwidth of broadband networks has facilitated the combination of the Internet and smart TV. Through information reading, transmission and processing, objects are linked into a large network, and the many derivative breakthrough applications will result in huge business opportunities.

In the future, key technologies for smart phones, wearable electronics, virtual reality / augmented reality, autopilot/electric vehicles and Internet of Things (IoT) market will continue to be adopted and commercialized, and professional wafer fabrication services must quickly achieve corresponding process development to meet customer needs for 4C and IoT products.

▶ The Internet of Things (IoT)

VIDEO Enabling the IoT Era
http://www.umc.com/English/

2-2-1 Innovative products and technologies

Innovative Products and Technologies

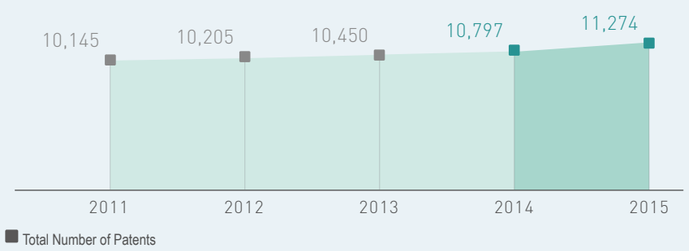
The UMC R&D team is committed to developing advanced manufacturing technology, and upholds the philosophy of offering foundry solutions that are consistent with market trends and customer needs, such as world class advanced manufacturing technology, customer support and production.

Innovative Development of Advanced Technologies

Increasing its key technology capabilities, UMC is also focused on patent distribution to protect its intellectual property rights, and has seen steady growth in its number of patents.

In 2015, numerous domestic and foreign patents were awarded. To date, UMC has a total of 11,274 patents that provide UMC's manufacturing process with comprehensive and powerful barriers to protect its intellectual property. To remain competitive, UMC has also significantly increased the patent quality of its key technologies, and continues to strengthen its customer service and competitive advantage, while generating profits for the corporation.

▶ Total Number of Patents



▶ Successful Technology and Process Development in 2015

- Successfully developed 14nm Fin Field-Effect Transistor (FinFET) components with performance that is consistent with the standards of leading semiconductor technology companies. **14nm**
- Successfully developed 28nm HPC+ （High Performance Compact Plus） process technology that produces less leakage current and power consumption, and verified the process through pilot production on customer products. **28nm**
- Successfully developed 55nm embedded flash memory technology, which passed product verification and entered mass production. **55nm**
- Successful developed TSV （Through-Silicon Via） technology and began mass production to increase the performance of customer graphics processing unit (GPU) products. **TSV**

▶ 2015 Environmental and Social Benefit R&D Progress

In addition to continuing to develop technologies that reduce power consumption, UMC also develops processes for energy management, body sensor and medical, mobile communications, imaging sensors and displays to reduce the environmental impact of end product use, promote social communication and enable health care and safety.

Using 28nm HK-MG Process Technology

UMC continues to optimize and improve the manufacturing process for gate oxide layers and silicon germanium to further enhance component characteristics and effectively reduce current leakage and power consumption by nearly 40%, thereby giving existing process technologies a competitive advantage and enabling customer products.

Display Driver Process Technology

To meet the 2K/4K high resolution LCD needs, UMC's 55nm high-voltage platform technology provides SRAM memories that are smaller but have higher capacity.

Complementary Metal Oxide Semiconductor Image Sensor Technology (CIS)

The 65nm process has been certified and mass production has begun. New processes such as back-illuminated sensor (BSI) and 55nm CIS process technology are in the verification phase, and technology is expected to provide higher sensor resolution to meet demands for product upgrade.

Micro-electromechanical Technology (MEMS)

- More than two hundred million customized MEMS microphone products were manufactured by the end of 2015.
- Functional verification was completed for gas detection sensors by the end of 2015, and mass production is expected to begin in 2016.
- Customized MEMS triaxial accelerometer process was successfully developed by the end of 2015, and samples are currently being distributed.

Power Management Process Technology

To meet the demands of the wide range of power management (PMIC), UMC has already begun mass production using its Ultra High Voltage (UHP) process, which is suitable for power chargers, LED light bulbs, power amplifiers, AC-DC converters and motor drives and other special applications. In addition, a higher voltage -800V process has also been developed to meet the higher voltage needs of industries and achieve energy conservation by reducing energy losses during voltage conversion.

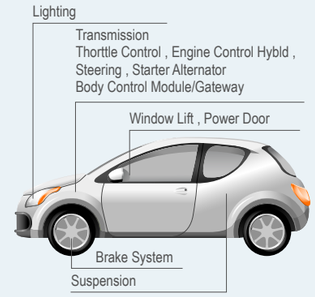
A platform that is compatible with standard logic and comprehensive silicon intellectual property is provided for customers requiring high integration PMIC.

In addition, world class low-resistance high-voltage (5V ~ 100V) components are combined with an integration of nanometer technologies in applications such as cell phones, tablets and home appliances, and automotive industries. Furthermore, UMC's 55nm uses PMIC copper processing for a comprehensive SoC solution to serve green energy needs.

(UMC Auto Solutions Platform)

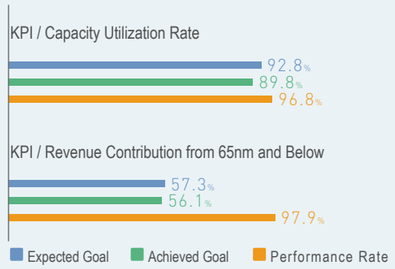
UMC announced the UMC Auto℠ technology platform to target companies designing chips used for automotive applications. In 2015, revenue from automobile semiconductor manufacturing was double that of the previous year.

- Implemented the comprehensive Automobile Service Plan which incorporates zero defect processing methods that meet stringent ISO TS-16949 automobile quality standards.
- UMC is also the first specialized wafer fabrication company in Taiwan that complies with ISO 15408 EAL6 common criteria, and has successfully ranked as one of the elite companies (currently, only 1% of companies and products in the world have achieved ISO 15408 EAL6 certification or above). This security certification indicates that UMC is capable of achieving rigorous security measures in the manufacturing process, thereby satisfying the high security needs required by most wafer products for sensitive applications (such as door lock sensors for cars and navigation systems)



2-2-2 Business Performance

▶ Key Performance Indicators in 2015

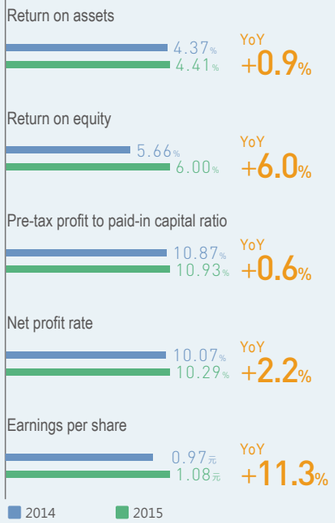


▶ Continual Growth in Advanced Processes

Proportion of advanced process capacity for 40 nm or less has reached **23%**

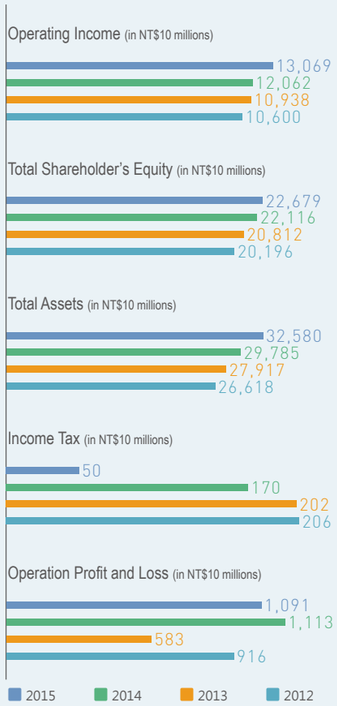
Compared to the previous year, the proportion of advanced manufacturing capacity for 28nm or less has increased by **35%**

Profitability



Note: The above financial information is based on the Executive Yuan Financial Supervisory Commission approved international financial reporting guidelines. Please refer to the Company's 2015 Annual Report on Page 143

Operating Income / Total Assets / Operation Profit and Loss / Total Shareholder's Equity / Income Tax



Note 1: The above information is in accordance with the Executive Yuan Financial Supervisory Committee approved international financial reporting guidelines.

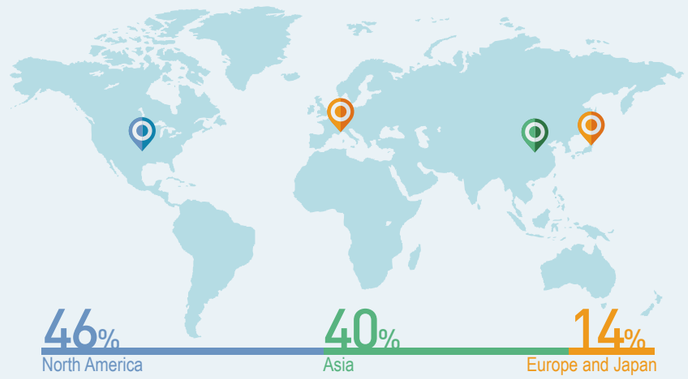
Note 2: The above information is UMC's financial information. For consolidated information, please refer to Page 140&147of the company's 2015 Annual Report

Marketing and Sales Overview

Being highly recognized by customers, UMC's customer base includes major vendors in different regions. North America and Asia Pacific account for most of the product sales, where respective total sales in 2015 were 46% and 40%, while Europe and Japan accounted for 14% of the company's total revenue. UMC will continue to strengthen cooperation with world class customers, and is committed to developing high level customer products to ensure long-term stable growth.

In recent years, IC design companies in China have been booming. In addition to geographical or cultural similarities to target this market, UMC's Hejian and partnership role for a 12-inch wafer fab in Xiamen has helped UMC gain a favorable position in the global market and expand market share. Furthermore, products, orders and process technology have become better integrated to meet customer demand and the expansion of UMC's China market and operational scale has increased the company's competitive advantage.

Export Ratio



Factors Favoring UMC's Sustainable Economic Development

The foundry market flourished under the dis-integration of the vertical IC design and manufacturing model, and global demand for foundry grew rapidly.

Integrated device manufacturing (IDM) giants have adopted an outsourcing strategy for foundry, which contributes to the growth of the foundry market.

Strategic alliances with international companies have resulted in long-term stable orders.

UMC's advanced 28nm manufacturing process is already in mass production. UMC is one of the very few specialized wafer companies that can provide such technology for helping customers increase product profitability and reduce production costs. In addition to the breakthrough advance in 28nm process technology, UMC has also entered mass production of these wafers for a highly diversified customer base, thereby further strengthening the long-term competitiveness of UMC.

UMC has established the industry's most powerful dedicated IoT platform. In addition, UMC's ultra-low power (uLP) process offers an extremely low leakage design that is suitable for a variety of applications. IoT wafer design companies can make full use of UMC's low-power consumption technology as a base for combining different processes into a customized platform to satisfy specific customer needs and advance into the IoT and wearable markets。

Note : For detailed information, please refer to Page 93 of the Company's 2015 Annual Report

Unfavorable Factors in Future Development

Unfavorable Factors in Future Development

Given the prospect of long-term demand and growth in the semiconductor industry, the world's leading foundries have increased their capital expenditures to expand advanced manufacturing capacity, which may cause imbalances in future market supply and demand.

Countermeasures

- Continue to control spending and improve efficiency to reduce costs, and strategically and efficiently expand 28nm manufacturing capability. Strengthen company competitiveness by increasing advanced manufacturing and product portfolio.
- Build equity and strategic alliances to expand the 12-inch foundry base, and reduce construction time, risk and cost for new foundry fabs, thereby reducing risk for the local market.
- No indiscriminate expansion of production capacity, careful assessment of investment plans, comprehensive consideration of UMC's high level process maturity and customer capacity requirements at different stages.
- Strategies for new competitors: Continue to strengthen advanced manufacturing development, and maintain the existing advantages of stable high yield and comprehensive service. Expand the gap with new competitors while also creating distinction so that UMC remains the best choice for customers.
- Provide the most advanced and optimal manufacturing services for featured IC products in various applications, and help customers achieve lowest cost, high efficiency and low power consumption.
- Strengthen marketing effectiveness and customer service mechanism, and continue to increase customer satisfaction.
- Strengthen the building of long-term partnerships with customers, provide competitive advanced manufacturing process and production capacity, help customers capture market share and grow together with customers to seize the next wave of growth opportunities.
- In the face of the global recession, be ready to respond to market changes with contingency measures. Through customer expansion, improved product mix and flexible capacity deployment, UMC reduces the impact of cyclical fluctuations.

2-2-3 Investment to Enhance Competitiveness

UMC's R & D team is committed to promoting the development of advanced manufacturing technology, and upholds the philosophy of foundry solutions that are consistent with market trends and customer needs, including world class advanced manufacturing technology, customer technical support and production. With the expansion of the Southern Taiwan Science Park, the company continues to employ a large number of R & D personnel, and spares no effort in recruiting and nurturing R & D talents.

2015 Investment Item

Development funds for advanced manufacturing technology

Key Content
- 28nm manufacturing technology
- 14nm manufacturing technology
- 10nm manufacturing technology
- Through Silicon Via (TSV) manufacturing technology
- Other advanced and specialty technologie

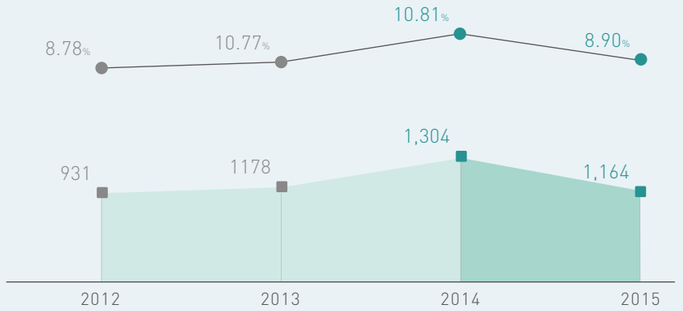
Investment Amount: About NT$ 11.64 billion

Build advanced manufacturing capacity

Key Content: Construct new fabs and incorporate advanced manufacturing technology and production facilities.

Investment Amount: About NT$ 60.36 billion

Invested R&D Funds



Note 1: The R&D expense is in accordance with the Executive Yuan Financial Supervisory Commission approved international financial reporting guidelines.

Note 2: The above information is UMC's financial information. For consolidated information, please refer to Page 89 of the company's 2015 Annual Report.

2-2-4 2016 Operational Goals

2016 Operational Goals

2-3 Customer Service

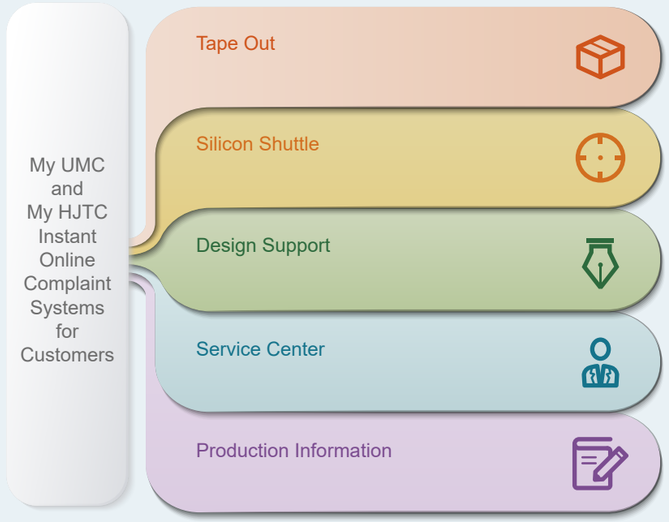
In the spirit of UMC's philosophy of towards sustainable development, we believe sustainable economic development requires stability and growth in business performance, respect for customer feedback, customer demand, customer recognition and customer long-term support.. While striving to strengthen operational performance, the company's economic growth and business sustainability is facilitated by a virtuous cycle that can only be truly created by investing and giving back to society, so that mutual benefits can be realized.

UMC is a leader in the semiconductor foundry industry. It provides advanced process technology and foundry services, and is a major wafer manufacturer for various application products in the IC industry. UMC is committed to meeting customer product demand, and emphasizes customer orientation and professional support. The company thinks from the customers' perspective, and based on their needs, provides a full range of services to achieve customer satisfaction and business sustainability.

2-3-1 Improving Service Quality and Customer Satisfaction

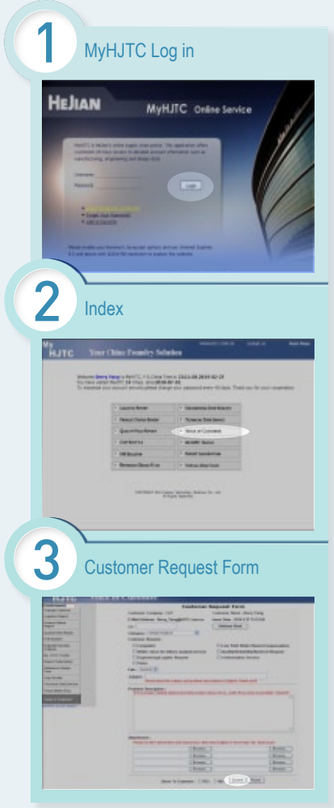
Since the beginning of its operations, UMC has been committed to customer satisfaction as its duty and long-term objective. This customer-centric mentality became the core value of the company. Customer-oriented products and services are our priorities, and overall solutions for fulfilling demands are based from a customer perspective. UMC has introduced the My UMC and My HJTC (reserved for HJTC customers) online service platforms to provide customers with complete and immediate online supply chain information, including production status of orders, shipping date inquiry, and product quality data and status. At the same time, the website also offers an Engineering Data Analysis feature which provides an easy engineering analysis function for customers. Moreover, the Voice of Customer (VOC) instant online complaint system allows customers to request UMC products or services, or offer comments or suggestions. Designated employees are responsible for distributing the feedback and managing and responding to customers, who may make online enquiries about the progress at any time. For UMC, understanding customer needs through the VOC, and transforming these requests into practical action enhance the company's service quality and competitiveness, and ultimately achieves customer satisfaction.

Online Service Platforms for Providing Real-time Information



My UMC Instant Online Complaint Systems for Customers

My HJTC Instant Online Complaint Systems for Customers



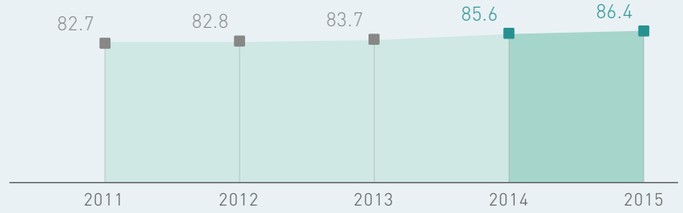
2-3-2 Improving Customer Satisfaction

UMC (including its subsidiary HJTC) regularly receives satisfaction ratings from those customers that generate more than 60% of its revenue. Customer scorecards are distributed on an annual, semi-annual or quarterly basis. Rating results are analyzed to identify opportunities for improvement, and UMC upholds its responsibility to make timely and effective improvements to increase customer satisfaction.

UMC's (and its subsidiary HJTC) use of scorecards to determine customer needs and satisfaction allows for more immediate knowledge of customer needs. In addition, UMC also responds to customer needs through meetings, and ensures that their needs receive proper attention. At the same time, the company lists product quality and timeliness as key indicators of the company's internal performance to further enhance customer satisfaction and create a win-win business.

Customer scorecard ratings show that customer satisfaction towards UMC (and its subsidiary HJTC) has been growing steadily. At the same time, UMC's overall performance over the years has also received customer approval and awards, thereby indicating customer endorsement of UMC's product and service quality, and demonstrating the positive interaction and cooperation between UMC and its customers.

Customer Ratings



2-3-3 Protecting Customer Assets

UMC satisfies customer needs by helping manufacturers systematically develop, design and manufacture reliable and safe products that comply with international standards. In 2014, UMC began pushing for International Organization for Standardization (ISO 15408) certification. In addition, its Fab 12A was awarded ISO 15408 Level EAL6 safety certification by the Germany Federal Office for Information Security (BSI), becoming the first wafer foundry in Taiwan to win such a certification and possessing manufacturing conditions that comply with the ISO 15408 Common Criteria. In addition to the comprehensive increase in the security of company and customer assets, customers are not required to verify wafer fabrication safety in their future applications for product safety certification, thereby reducing their costs in time and resources, and accelerating their product entry into the market. For further information, please refer to the company website at
http://www.umc.com/English/news/2015/20150112.asp

Product perspective

Content of verification includes all stages of product development, from initial product

- Design
- Operation
- Production
- Delivery

Applicable

Applicable to security products such as government documents, passport chips, electronic identity cards, electronic banking and electronic payment.

Protecting Customer Assets - Customer Property (physical + information + data) Confidentiality (diagram)

2-4 Risk and Crisis Management

The ultimate direction of UMC's business operations is sustainable development, sound risk management and appropriate crisis management to ensure sustainable operations. To reduce accidents and their subsequent negative impact and losses, UMC is diligent in its crisis response, crisis prevention and drills to maintain its company image and protect the interests of stakeholders.

2-4-1 Financial and Operational Risks

Analysis of the impact of financial performance indicates the following financial risks for UMC:

Liquidity Risk

Content

The semiconductor industry requires intensive capital. If adequate cash cannot be maintained, the company may face liquidity risk in its short-term financial needs.

Risk Strategy

To continue operations in emergency situations, UMC maintains a cash reserve equivalent to about three months of operational revenue to cope with operational needs under various situations. In addition, UMC maintains cash balance and bank facilities of no less than the amount of monthly revenue to ensure liquidity.

Currency Interest Rate Risk

Content

Revenue and capital expenditure in the semiconductor industry is mainly calculated in currencies other than NT, and hence fluctuates with exchange rates. However, due to large exposure of deposits and loans in the semiconductor industry, changes in interest rates could result in deviations from expected financial performance.

Risk Strategy

UMC balances foreign currency assets and liabilities by natural hedging. In addition, appropriate management of debt period and fixed or floating interest rate structure reduces interest rate risk

Credit Risk

Content

Due to financial deterioration or other factors, clients may be unable to fulfill their contractual obligations, resulting in risk of loss from default.

Risk Strategy

UMC's Credit Management Department controls customer credit amount according to company's credit policies and customers' financial conditions.

Property and Operational Disruption Risk

Content

Natural disasters or accidents may result in risk of property or operational loss.

Risk Strategy

UMC mitigates natural or man-made disaster risks through property damage and business interruption insurance policies. The insurance scheme balances risk management costs, insurance premiums and risk retention capacity.

2-4-2 Emerging Semiconductor Risks and Global Risk Trends

Taiwan's semiconductor industry growth outpaces the world. Driven by factors such as advanced process technology R&D, peripheral equipment and material cluster effect and the layout of the emerging markets, the competitive advantage and growth potential of Taiwan's semiconductor industry is optimistic. Although the semiconductor market is expanding, the trend is expected to slow compared to the highly complex growth of past demand cycles. Moreover, the impact of Mainland China's national support strategies for its semiconductor industry in recent years cannot be ignored.

▶ UMC Assessment of Possible Emerging Risks and Countermeasures in the Semiconductor Industry

Risk 1

Risk Description

In 2014, China announced a nearly $600 billion investment to support its domestic semiconductor industry, and used national strategies to define semiconductors as a future key industry in China.

Impact on Operations

May affect customer's choice of OEM.

Countermeasures

In 2014, UMC announced a joint venture with China's Xiamen municipal government in Fujian Province to establish the first Taiwan-funded 12-inch wafer fab (United Semi, a UMC subsidiary). Current progress is ahead of schedule and mass production will begin in 2016.

Expand the technology and production capacity of Hejian, UMC's subsidiary in Suzhou, and maintain close cooperation with customers in China.

Risk 2

Risk Description

Over the past four decades, Moore's Law has driven revenue growth, power, performance and cost improvement in the semiconductor industry. However, with shrinking processes, Moore's Law will reach a physical limit that will challenge the semiconductor industry.

Impact on Operations

With the cessation of Moore's Law, customer groups may contract,, causing revenue to become concentrated to a few customers, which undermines profit and sustainable development.

Countermeasures

IoT is the next breakthrough application of science and technology that will become prevalent in daily life. Applications such as smart city, smart car (car networking), smart home, smart medicine (telemedicine), smart individual (health and fitness), smart factory and smart process may become the next important opportunities for the semiconductor industry.

Characteristics constructed by innovative companies create market competitiveness for more and smaller customers. Since 2014, UMC has established an IoT task force to develop specialized platforms

for helping customers quickly gain an edge in the IoT market.

As a link in the supply chain, UMC remains aware of both emerging industry risks and the trend in global risks. Based on the Global Risk Report released each year by the World Economic Forum (WEF), UMC discerns risk trends and formulates early countermeasures for reducing risks.

▶ Early Countermeasures for Reducing Risks

	Global Risk List	UMC Countermeasure
Environment	Extreme weather event Natural catastrophes	Refer to 2-4-3 for disaster and risk control.
Society	Water crises	• Establish UMC water risk management tools for early warning and develop coping strategies. • Strengthen Fab 12A flood control capacity, and complete the installation of flood gates and drills at specific entrances to prevent direct losses caused by floods.
Technology	Cyberattacks	Install online defensive systems such as NG IPS, Anti-APT and WAF, and the SIEM information security management system to strengthen defense capability against attacks • NG IPS: Next Generation Intrusion Prevention System • WAF: Web Application Firewall • APT: Advanced Persistent Threat • SIEM: Security Information & Event Management
	Data fraud or theft	• Install encryption mechanisms for computer systems to reduce the risk of information leak due to laptop loss or inappropriate use. • Install computer endpoint protection mechanisms for recording data output to reduce the risk of information leaks due to inappropriate use.

2-4-3 Business Continuity Management

With rising global risk, UMC recognizes the issue of business continuity, which means providing uninterrupted services to strategic customers and key relationships, and upholding customer diversity, sound quality and uninterrupted foundry manufacturing as the highest mission for business continuity management. Since 2002, UMC has established the Business Continuity Plan (BCP) for its plants, and became a leader in the industry in 2013 when the Hsinchu headquarters and Fab 12A were awarded the ISO 22301 Business Continuity Management System Certificate by SGS Taiwan Ltd. Under such an operation and maintenance mechanism, continuous and sophisticated evaluation ensures that in the event of a disaster or impact, the highest operational goals can be fully maintained and recovered, thereby protecting the maximum interest of customers and stakeholders. In 2015, the management of supply chain integrity was further strengthened by adding on-site assessment of high-risk suppliers to effectively control supply chain risk and reduce the risk of supply disruptions. Furthermore, the business continuity management system was expanded to the 12-inch fab in Singapore.

Note: Please refer to 2-5 Supply Chain Continuity Management for issues on sustainable supply chain management

UMC Business Continuity Management Organization

The UMC business continuity management system comprises the Business Continuity Management executive representative who is responsible for promoting management matters. The executive director periodically reviews management performance and makes decisions on business continuity management policies.

Note: Please refer to the Risk Management section of the company website for information on policies and organization.

▶ System Operation Goals

System Operation Goals Achieved in 2015

Completed

100% on-site audit of high-risk suppliers.	12-inch fab passed ISO 22301 pre-audit.	Substituted 80% of PFOA material in 12-inch fabs.
100%	Pass	PFOA free

2016 System Operation Goals

100% participation in the critical 48-hour equipment rescue training.	Establish qualified personnel inspection procedure for customer BCM responses.	Complete review of Fab 12A seismic protection risk.
100%	Customer Satisfied	Seismic Improved

2-4-4 Hazard Risk Control

UMC well recognizes the impact and influence of natural and man-made disasters on production and operation. Hence the company has consistently adopted an active attitude toward preventive disaster risk management, and seeks to achieve the highest standard of semiconductor industrial safety through rigorous risk engineer controls and implementation of safety regulations and norms.

Fire Disaster Risk Management Objectives

Fire Safety

UMC incorporated the international standards of the US Factory Mutual Insurance Company (FM), Underwriters Laboratories Inc. (UL), the US National Fire Protection Association (NFPA), the Semiconductor Equipment and Materials International (SEMI) and other international standards into its building construction, equipment, engineering controls and risk assessment, and formulated relevant company regulations for additional requirements.

Earthquake Protection

UMC actively planned and established sound disaster risk management and response procedures, and collaborates with internationally renowned structural consultants specializing in earthquake response, which is Vibration Engineering Consultants (VEC) to assess the earthquake safety of its building, factory facilities, pipelines and production machines.

Equipment Safety

The Environmental Health and Safety Standards (SEMI-S2) for semiconductor manufacturing equipment is the primary international standard adopted by UMC for reviewing newly procured machineries and company standards. UMC's Taiwan and Singapore fabs lead the region in introducing the UMC Equipment ESH Purchasing Specifications into its procurements. Equipment must conform to review before being brought into the fab, and conform to inspection after installation for effective equipment safety control.

Risk Management Achievements and Goals

2015	2016-2017	2018-2020
Management Performance	Short Term Risk Management Goals	Long Term Risk Management Goals
Fab fire and smoke diffusion control design improvement: use numerical simulation to certify effectiveness of smoke control design in fabs. Replicate the design rule to the new fab (USC) in China to reduce the impact of fire and accelerate disaster recovery, thereby fulfilling continual risk reduction and insurance commitment.	· Improve technology of loss prevention and control within 48-hours for disaster. · Incorporate new earthquake protection/reduction technology. · Establish water resource early warning devices for the Southern Taiwan Science Park factory. · Evaluate plant fire and explosion risks.	· Standardize risk control for new processes/new chemicals. · Expand business continuity management systems to the entire company. · Develop disaster warning system.

Response to Customer Concerns About the Impact of the Tainan Earthquake

Although the pre-dawn 6.4 Richter scale earthquake in southern Taiwan on February 6, 2016 resulted in considerable impact on many vendors in Southern Taiwan Science Park, UMC performed well in terms of disaster loss compared to other similar industries. At the time of the earthquake, all UMC personnel were safe, and the automatic safety mechanism in Fab 12A fab in Southern Taiwan Science Park was activated. Automated equipment shut down functioned normally in response to the earthquake. As a result, impact on wafer production was minimal and normal operations were quickly resumed.

Triple-Star Rating system

Since 1998, UMC has introduced the Triple-Star Rating System, which contains 20 items, including the Human Element and Physical Protection, where the highest rating for each item is three stars. Since 1999, the AIG international insurance company is invited to conduct a yearly audit. With UMC's continual self-expectations and self-improvement efforts, 19 items were given the highest 3-star rating compared to only 15 items in the original factory. In 2015, the new Fab 12A P5 fab was awarded the highest 3-star rating on 20 items at its first audit. The results of UMC's efforts are fully illustrated in the following table.

Human Element	Physical Protection
Risk Management	Automatic Fire Protection and Fire Water Supply
Tools and equipment hazard evaluation procedure	Fire Detection, Outside Hydrant, First Aid Fighting Equipment
Housekeeping & Fire Safety Inspections & Maintenance of Fire Fighting Equipment	Power Supply
Hot Works	Air Handling System
Emergency Organization	Other Facilities & Support Equipment
Business Continuity Planning	Flammable Liquid Hazard
Management of Change <MOC>	Flammable Gas Hazard
Impairment Policy for Fire Fighting Equipment	Production Tools & Equipment Hazards
Inspection of Electrical Installation	Clean Room Note2
Watchman & Security	Earthquake Protection

3 Rating Note1

Note 1: This risk rating does not include UMC's subsidiary HJTC in China.

Note 2: Fabs 8A, 8C and 8E are limited by the conditions of the original plant design. After improving their exhaust ventilation, rating for the clean room was upgraded from one star to two stars.

2-5 Sustainable Supply Chain Management

We realize that the global wave of social responsibility and environmental protection has spread beyond the company itself into the entire supply chain. Regardless of where in the supply chain, corporate social responsibility must be confronted. For UMC, such a challenge also presents opportunities. The Environmental Committee has formed a special task force to promote sustainable supply chain management. UMC's worldwide suppliers are not merely business partners, but in addition to quality and delivery, UMC also expects them to fulfill their social responsibility in related issues such as environment-related substances control in products, climate change, labor safety, health and human rights, conflict metals/ minerals, and water footprint. Since 2008, UMC has been inviting suppliers to promote the UMC Corporate Social Responsibility Joint Declaration for Supply Chains.

UMC Corporate Social Responsibility Joint Declaration for Supply Chains.

Reach out to employees, emphasize environmental protection, offer public service	Be people-oriented, emphasize human rights, create a high-quality work environment	Develop green manufacturing, offer green products, build a green supply chain	Reach out to the disadvantaged, nurture the environment, and fulfill corporate social responsibility	Assist upstream and downstream manufacturers, enhance green competitiveness, and jointly create sustainable business opportunities

2-5-1 Localize supply chain and procurement

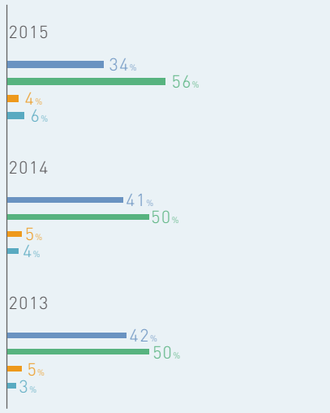
When corporate social responsibility becomes the key to business continuity, UMC must fulfill increasing international expectations towards business standards in Taiwan. In 2015, UMC cooperated with more than 1,800 suppliers worldwide. Major UMC production bases in Taiwan are located in Hsinchu Science Park and Tainan Science Park. Overseas locations are mainly located in Singapore (UMC Singapore Branch) and Mainland China (subsidiary He Jian Technology). In order to build close partnerships, promote local socio-economic developments, and reduce carbon footprints of raw materials required during production, localized procurement became a key strategy adopted by UMC when looking for potential partners and suppliers.

A groundbreaking ceremony was held in March 2015 for the new company United Semiconductor in order to expand production bases in Mainland China, which currently comprises of He Jian Technology in Suzhou Industrial Park (SIP). A total of 80 major suppliers were invited to the ceremony with the hope of creating an integrated local supply chain to enable both upstream and downstream partners to greatly benefit the economy, environment, and society.

United Semi will specialize in 12-inch wafer fabrication services and is a joint venture invested by UMC, Xiamen Municipal Government, and Fujian Electronics & Information (Group).

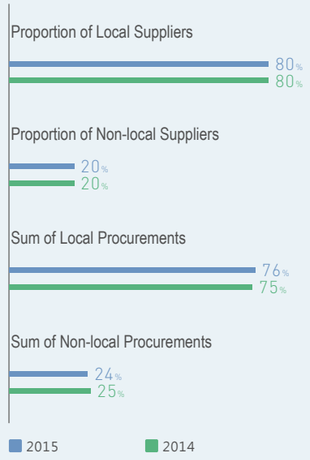
Groundbreaking ceremony for the new United Semiconductor (Xiamen) Plant in China

Proportion of UMC Raw Materials, Consumers, Spare Parts, Photo Masks and Other Items Purchased from Domestic Vendors.



Note: Data is based on orders made to local vendors

Analysis of suppliers for the Singapore Branch

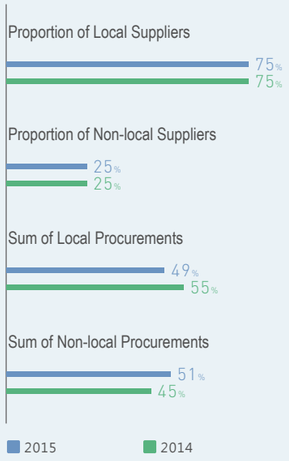


Note: Analysis of suppliers for the Singapore Branch:

1.In 2015, locally registered businesses accounted for up to 88% of the total indirect materials and parts procurement amount.

2.In 2015, up to 80% of the procurements were acquired from local suppliers and the procurement amount was up to 76%, which was slightly higher than that of 2014.

HJTC



Note: Analysis of suppliers for the Mainland China subsidiary HJTC

1.In 2015, locally registered businesses accounted for up to 65% of the total indirect materials and parts procurement amount, demonstrating that most procurements were indeed localized.

2.In 2015, up to 75% of the procurements were made from local suppliers and the procurement amount was up to 49%, which was slightly lower than that of 2014

2-5-2 Sustainable Supply Chain Management

Policy

1. To protect the environment and emphasize society's obligation, labor rights, security, health and the goal of a continually developing supply chain.
2. To regard vendors as partners, and guide them towards long-term cooperation. To build up an eternal supply chain to continually develop the semiconductor industry.
3. To ensure products and the supply chain do not contain conflict minerals.
4. To cooperate with upstream & downstream vendors and collaboratively create business opportunities.
5. To manage vendor's quality, cost leadership, delivery, service/response, and sustainability. To fulfill demand in accordance with UMC and promote the spirit of competition.

For relevant information, please refer to the company Website at: http://www.umc.com/English/CSR/c_3.asp

UMC Supplier Management Capability Assessment

UMC has planned a comprehensive supplier management approach, and expects to establish a sustainable supply chain management mechanism for providing control and counsel in the following 4 major dimensions:

New Supplier Selection
- Review supplier quality/finances/price/environmental protection and labor rights and other dimensions.
- Only those who meet UMC requirements may become suppliers for UMC.

Grade Suppliers and Counsel Accordingly
- Categorize suppliers according to characteristics and risks.
- Assess suppliers according to categories during annual supplier audits
- Based on assessment outcome, provide counsel to achieve company requirements

Supplier Review/management
- Score suppliers according to supplier review mechanism
- Stop purchasing from or cancel qualified status of suppliers who score below UMC requirements

Supplier Education and Training
- Conduct supplier education and training periodically
- Promote and communicate UMC supply chain management approach

Only suppliers who satisfy UMC's assessment criteria such as product quality, financial, price, quantity and reputation may become suppliers for UMC

Selecting New Suppliers

Currently, criteria for selecting new suppliers include

1. status on the Dow Jones Sustainability Index
2. compliance with UMC Supplier and Employee Professional Ethics and code of conduct
3. compliance with principles of open and fair competition.

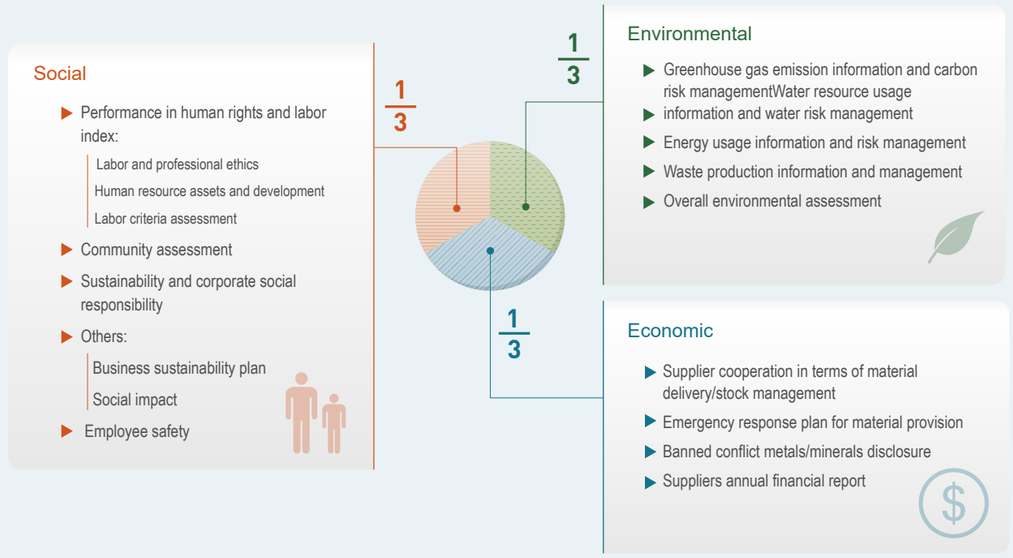
Currently, items evaluated by the UMC Supplier and Employee Professional Ethics Agreement and the EICC audit for suppliers include business ethics, labor rights, environmental protection, safety and health, and management systems. In 2015, 350 new suppliers satisfied UMC requirements for raw materials, supplies, components, photo mask and other items, and 100% of the new suppliers signed on with the company, indicating that supplier cooperation and participation is necessary to maximize efficiency. The company urges suppliers to jointly value and promote corporate social responsibility.

Sustainable Supplier Assessment

For major suppliers, quarterly assessment includes dimensions such as Q (Quality), C (Cost/ Financial), D (Delivery), S (Service) and S (Sustainability). In terms of sustainability, the focus is on supplier compliance with environmental, social, and economic requirements.

Supplier management performance was included as an indicator item in supplier assessments conducted by UMC. Suppliers which have a certification related to environmental protection or hazardous substance management (ISO 14001, TS 16949, or QC080000) or can demonstrate capabilities in fulfilling the requirements of the EICC Code of Conduct may be provided with additional points. This incentive was provided to help guide and encourage suppliers to comply with these standards. For suppliers whose assessment scores are too low, UMC may suspend procurement or remove them from the list of qualified suppliers.

Sustainable Supplier Assessment



Mechanism for Assessing Supplier Sustainability

Management Target	Management Unit	Management Approach	Assessment Item
Suppliers for various raw materials used for production	Supplier Chain Management Group	• Each quarter, collect from relevant units supplier performance data for analysis • Periodically conduct supplier questionnaire surveys • Conduct annual on-site audit of major suppliers or request performance summary from the suppliers	• Sustainability Index • Quality Index • Price Index • Delivery Index • Service Index

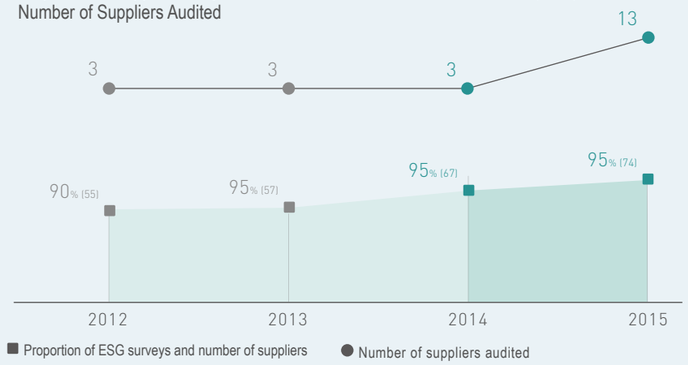
Assessing Supplier Sustainability Level and Response Measures

Assessment Level	Assessment Score	Response Measures
Good	90-100	▶ Increase procurement amount.
Satisfactory	80-89	▶ Maintain current operation, but request supplier to strengthen management mechanism.
Needing Improvement	70-79	▶ Audit suppliers who scored less than 80 points in the current year, and counsel improvement. ▶ The Supply Chain Management Group should review procurement from suppliers who scored between 70-79 points for two consecutive years.
Significant Deficiency	低於70	▶ Audit suppliers who scored below 70 points in the current year, and counsel improvement. ▶ The Supply Chain Management Group should discuss terminating procurement from or canceling supplier status of suppliers who scored below 70 points for two consecutive years.

To achieve anti-corruption and sustainable supplier management, the Chairperson's Directive was issued in 2013, requiring all suppliers to sign an Agreement on Supplier Code of Ethics and Conduct. This allowed UMC to stand firmly by its adherence to anti-corruption and social responsibility regulations. Currently, over 3000 of UMC's suppliers agreed to sign the Agreement to jointly commit themselves to UMC's anti-corruption practices and sustainable development initiatives. Any supplier with substantiated violations shall be penalized and may be removed from the list of qualified suppliers for major misdemeanors. This item was also included as a basic selection criteria for new supplier assessments.

UMC conducts annual questionnaire surveys for qualified suppliers that manufacture various raw materials to investigate their economic / environment / social practices. Survey results in 2014 showed that up to 50 suppliers attained rating levels above Satisfactory. However, there were 17 suppliers whose state of system implementation failed to achieve the required standards. UMC therefore provided these 17 suppliers with training, consultation for improvement actions, and post-improvement re-assessments. A total of 13 on-site verifications were carried out from August to December. Overall annual assessment revealed that there were still 3 suppliers who failed to meet relevant standards which were then included as targets for subsequent re-audits, consultation, and follow-up verifications.

Proportion of Suppliers Subject to Environment, Social, and Governance (ESG) Audits and Number of Suppliers Audited



Consultation, Improvements, and Re-assessments of 17 Suppliers that Failed to Meet Standard Requirements and Outcomes of Subsequent Re-assessments:

>90		>80		<70	
Good		Satisfactory		Significant Deficiency	
Raw material supplier	Parts suppliers	Raw material supplier	Parts suppliers	Raw material supplier	Parts suppliers
2	1	8	6	2	1

(Number of suppliers)

3 Nonconforming Suppliers and the Cause of Nonconformities

- Raw Material Vendor A

  Economic
  Failure to meet UMC standards in BCP risk management.

  Environmental
  Failure to meet UMC standards in greenhouse gas emission data and carbon management, water usage data and water risk management, energy usage data and management, and waste generation data and management.

  Social
  Qualify.

- Raw Material Vendor B

  Economic
  Failure to meet UMC standards in BCP risk management.

  Environmental
  Failure to meet UMC standards in greenhouse gas emission data and carbon management, water usage data and water risk management, energy usage data and management, and waste generation data and management.

  Social
  Failure to meet UMC standards in employer-employee communication.

  Failure to meet UMC standards in BCP risk management.

- Raw Material Vendor C

  Economic
  Failure to meet UMC standards in BCP risk management.

  Environmental
  Qualify.

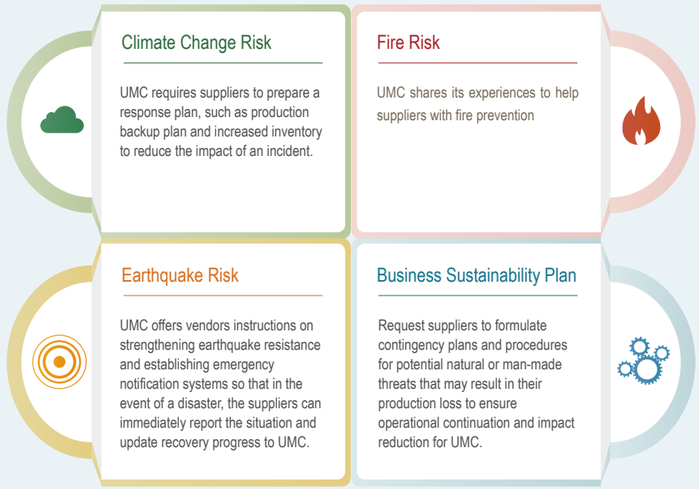
  Social
  Failure to meet UMC standards in implementing or achieving the required scope of coverage of the EICC Code of Conduct and other international standards.

For the 1st quarter of 2016, UMC shall target key suppliers whose transaction volume with UMC exceeds NT$ 40 million (for a total of 74 suppliers and 95% of all transactions) to conduct annual ESG surveys. ESG requirements shall also be promoted amongst class 1 suppliers whose transactions were below NT$ 40 million (for a total of 127 suppliers and 5% of all transactions).

Sustainable Supplier Risk

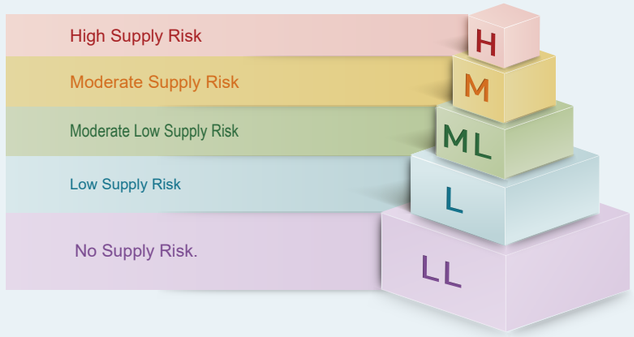
After the 2011 flood in Thailand, tsunami and nuclear disaster in Japan, and global financial crisis, the operating conditions, raw material distribution and geographical location of supplier production lines were assessed and controlled to reduce future risk of supply shortage due to extreme weather or major natural disasters. UMC has established a supply chain risk assessment system and developed a set of scoring methods for supplier sustainability. Delivery time, quality, financial, operational and other variables are included in the supply chain risk assessment for formulating the UMC procurement strategy. Each year, UMC primarily conducts an annual sustainability risk survey, audits and scores major suppliers of raw materials such as silicon wafer, gases, chemicals, quartz components, photo masks, and component cleaning, who represent more than 95% of procurement dollar value. This fully demonstrates the close cooperation between the company and its partner suppliers to facilitate the commitment to increase overall value of the supply chain.

UMC Supplier Risk Management



Outcomes of the annual supplier risk assessment conducted in 2014 showed that 6 suppliers had failed to reach a score of 80 points in one or more areas. In 2015, improvements were carried out according to consultation and requirements. On-site audits and consultation for business continuity management (BCM) were also implemented so that 3 of the said suppliers achieved an overall score of over 80 points to become middle- to low-risk suppliers. Although 3 suppliers still failed to meet standard requirements, improvements were underway and alternative suppliers were secured in order to achieve zero risk.

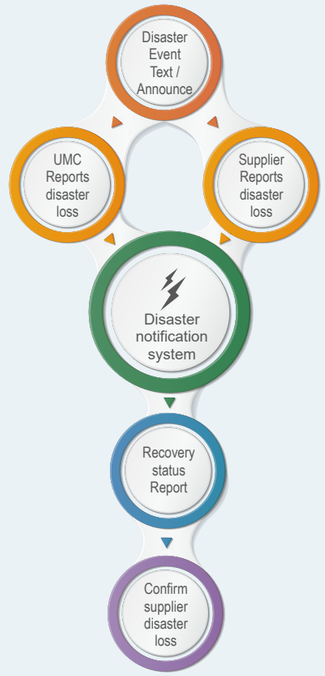
UMC Supplier Risk Indicators are Divided into 5 Levels



Earthquake Disaster Risk Control

An emergency notification system is established so that in the event of a disaster, suppliers can immediately report the situation and update recovery progress to UMC.

Supply Chain Disaster Loss Reporting System



Supplier Education and Training

UMC believes that suppliers have a very important position in the green supply chain management system. Therefore the company periodically organizes supplier education and training programs to promote and communicate the company's green supply chain management system policies and practices, and necessary collaboration with suppliers. The company hopes to reach a green product consensus with suppliers, and work together toward a win-win situation.

2015 UMC Seminar and Conference for Sustainable Corporate Development

2-5-3 Sustainable Supply and Quality Enterprise Certification

In November 2013, the Ministry of Finance Customs Administration signed a Mutual Recognition Arrangement (MRA) with the United States, and in 2014, extended the MRA to Singapore, Israel and other countries. The Authorized Economic Operator system for quality corporations has clearly become an international trend, and will become a prerequisite for international trade.As an international semiconductor foundry company, UMC is fully cognizant of issues such as global terrorism and cargo security. In February 2013, the company initiated a meeting to officially declare implementing the AEO, and in July, completed tasks such as document review under the advice of customs, and conducted on-site assessments. Subsequently, the company was awarded three AEO quality certifications for manufacturing, import and export, becoming the first company in the nation's wafer industry to be successfully certified.To ensure that activities related to Authorized Economic Operator (AEO) topics could be implemented effectively while fulfilling AEO requirements, UMC shall continue to refer to requirements prescribed in Article 27 of Regulations Governing the Certification and Management of the Authorized Economic Operators and upload information related to supply line safety to the AEO platform. Being an AEO, UMC shall continue to offer win-win solutions to customers, provide them with convenient and safe delivery services, and achieve simultaneous improvements in the competitiveness of international trade and export.

2-5-4 Conflict Mineral Management

In its conflict minerals management, UMC has been conducting suppler assessment and obtaining supplier signatures since 2009 to guarantee non-conflict minerals and ensure that products from suppliers are not in violation of conflict minerals manufacturing. To date, all suppliers have returned assurances of non-conflict minerals in all their products.

UMC Conflict Minerals Management Measures

- Retention of survey data to demonstrate legal compliance and due diligence
- Vendor transparency and availability of information for evaluation is one of the company's conditions for transacting with the vendor.
- Establish internal investigation for the company (including subsidiaries) and investigation mechanism for suppliers.
- Establish annual periods for investigating operations and controlling operations.
- Establish and consolidate investigation data, and store in data bank.

According to the finalized statutes and provisions in Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act enacted by the US Securities and Exchange Commission on August 22, 2012, Specialized Disclosure Reports must be completed every May.

http://www.umc.com/chinese/CSR/c_3.asp

Results of Recent Surveys

2013

Suppliers: 10

2014

in addition to UMC suppliers, surveys were further expanded to all affiliated companies of UMC.

Suppliers: 22 | Affiliated companies: 42

2015

- an additional 12 suppliers and 15 affiliated companies of UMC were included in the survey
- All past survey results proved that no conflict minerals were utilized in our supply chain.

Suppliers: 12 | Affiliated companies: 15

2016

plans were made to survey 23 suppliers and 14 affiliated companies of UMC.

Suppliers: 23 | Affiliated companies: 14

UMC expects every business in the supply chain to uphold these principles. Clear objectives have been established with relevant guidelines and tools to help suppliers enhance the effectiveness of their efforts in improving the society and the environment.

UMC also made plans to incorporate Conflict-Free Sourcing Initiative (CFSI) in 2015 with applications submitted during the 1st quarter of 2016. Suppliers were also requested to actively monitor foundries and mines lacking relevant certification to undergo Conflict-Free Smelter Program (CFSP) or other equivalent and independent third party's audit program inspections.

http://www.conflictfreesourcing.org/about/members-and-collaborations/

Additionally, UMC also responded the content related to EICC survey forms to our clients based on the latest EICC Code of Conduct. A total of 128, 254, and 244 responses were provided in 2013, 2014, and 2015 respectively.

2-5-5 Control of Strategic High-tech Commodities

In 2012, UMC completed its certifications, indicating that the company's export control standards are consistent with international and government export control standards, and therefore qualified to simplify the complicated licensing process for exporting high-tech commodities. As a result, shipping has become smoother and quicker, and the rigorous system management has reduced product misuse or illegal export to the minimum level of risk. Both the company and its customers have benefitted from the convenience and time efficiency.

For two consecutive years in 2014 and 2015, the subsidiary HJTC was awarded the AA Class Management Enterprise of China Customs, satisfying the requirements of customs administration, business management and trade security.

The Company has adopted a series of self-assessment and screening from the beginning of Customer Inquiry to Order Processing and Shipping as a means of managing the company's overall export process. In addition, the well-defined steps in each department in the company must comply with the SOP process.

Regular Management Measures.

Education and Training

Export employees are required to attend at least one export control education and training course per year. E-Check or training courses help employees understand legal content and changes, and further their understanding of regulations and violation penalties pertaining to export licensing.

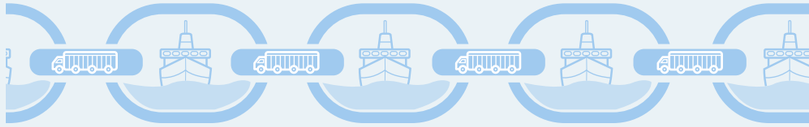
Internal Audit

An audit is conducted at least once a year, and all relevant departments in the company are required to schedule for the internal audit. An internal audit report must be submitted before January 31 of each year.

Submit Report

Every six months before the end of the next month, detailed customs permit transactions must be compiled and submitted to customs for inspection by the Trade Bureau.

Currently, the company has 30 customers using the above preferential licensing.
(Taiwan:25 customers , Singapore:14 customers)



3 Sustainable Development-Environment

5.42%

Power Reduction

In 2015, reduction reached the targeted goal of 3%. The newly added reduction for 2015 was
55,483Mwh, which is equivalent to a decrease of 28,906 tons in CO2 emissions and a savings of about NT$150 million in cost.

5.33%

Natural Gas Reductions

In 2015, reduction reached the targeted goal of 3.38%. The reduction of 11,652Mwh is equivalent to a decrease of 2,292 tons in CO2 emissions and a savings of about NT$18 million in cost.

11.59%

Waste Reduction

Cumulative reduction reached the targeted goal of 9% in 2015. The newly added reduction was 993 tons, which is a savings of about NT$5.5 million in disposal cost for the year.

11.2%

Reduction in Water Usage

In 2015, cumulative reduction reached the targeted goal of 6%. The newly added reduction for 2015 was
454,000 tons, which is a savings of about NT$11 million in water cost.

126 kg

Daily Reduction of 126 kg of Ammonia Emissions.

Source reduction of nitrogenous wastewater reached the targeted goal I2015 (98 Kg-NH3-N / day). Compared to the base year reduction of 38% and 20% in Hsinchu and Tainan, respectively, the reduction saved NTS40 million in raw material costs for the year, and a saving of NT$180 million in wastewater charges.

90%

Waste Recycling

The amount of reused waste was 30,361 metric tons, which is a gain of more than NT$61 million from recycled resources.

Major Material Environmental Issues

There were three major categories of material environmental issues in 2015: (1) Operational Eco-efficiency (2) Environmental Management (3) Water Risk

Indicator	2015 Goal	Compliance for 2015	2016 Goal
Operational Eco-efficiency			
Electricity consumption.	Reduce 3-year cumulative electricity consumption by 3%	● Additional reduction of 55,483Mwh of electricity for the year. 5.42% reduction in cumulative electricity consumption for 2013-2015.	Electricity consumption intensity reduced by 2%.
Natural gas consumption.	Reduce natural gas consumption by 3.38%	● Additional reduction of 11,652Mwh of natural gas for the year. 5.33% reduction in natural gas consumption.	Natural gas consumptionintensity reduced by 2%.
Intensity of fluorinated greenhouse gas emissions.	Reduce intensity of fluorinated greenhouse gas emissions by 35%.	● Reduced intensity of fluorinated greenhouse gas emissions by 37.6%.	Fluorinated greenhouse gas emissions intensity >37.6%.
Waste generation.	Reduce 3-year cumulative waste generation by 9%.	● Additional reduction of 993 metric tons of waste for the year. 11.59% reduction in cumulative waste generated.	Waste generation intensity reduced by 2%.
Environmental Management			
Compliance with regulations.	0 cases of environmental regulation violation.	● No incidents of environmental regulation violation.	0 cases of environmental regulation violation.
Certification for management system	100% passing rate for various annual environmental management system certifications.	● The entire company (9 fab areas) passed ISO 14001, ISO 14064 and QC 080000 certifications.	Continue to pass various annual environmental management system certifications.
Supplier assessment.	Conducted ESG assessments for 67 suppliers Conducted on-site audits for 25 waste disposal companies	● 1. A total of 67 suppliers have been assessed. 2 suppliers failed to reach environmental standards required by UMC and were therefore included in the list of suppliers to be re-audited, consulted, and given follow-up analysis.	1. Conduct ESG annual assessments for 74 key suppliers (95% purchasing volume).
		● 2. A total of 27 waste disposal companies have been audited. All the companies have been rated as excellent or better.	2. Conduct on-site audit of more than 31 waste disposal companies.
Hazardous material management.	Substitute 80% of PFOA materials in 12-inch fabs.	● Substituted 100% of PFOA material in 12-inch fabs.	Substitute 100% of PFOA material in 8-inch fabs.
Water Risk			
Water consumption	Reduce 3-year cumulative water consumption by 6%	● Additional reduction of 454,000 tons for the year. 11.2% reduction in cumulative water consumption for 2013-2015.	Reduce water consumption by 2%
Wastewater quality improvement (reduction of ammonia concentration in the wastewater).	Reduce ammonia by 17,536 L / month.	● Reduced ammonia by 22,359 L / month	Reduce ammonia concentration in the wastewater by more than 10%.

● Compliant ○ Non-compliant

Note: The various annual indicators are included in the company's and Corporate Sustainability Committee's KPI (Key Performance Indicator) and policy development, integrated with major company policies, and continually reviewed and improved.

Environmental Information

Greenhouse Gas Emissions

Scope 1 Direct Greenhouse Gas Emissions	621.4 1000 ton CO_2e
Scope 2 Indirect Greenhouse Gas Emissions	1,167.2 1000 ton CO_2e
Scope 3 Greenhouse Gas Emissions	2,514.2 1000 ton CO_2e
Scope 1 Direct Carbon Dioxide (CO_2) Emissions	46.5 1000 ton CO_2
Scope 1 Direct methane (CH_4) emissions	0.4 1000 ton CO_2e
Scope 1 Direct nitrous oxide (N_2O) emissions	139.8 1000 ton CO_2e
Scope 1 Direct hydrofluorocarbon (HFC) emissions	36.9 1000 ton CO_2e
Scope 1 Direct perfluorocarbon (PFC) Emissions	260.7 1000 ton CO_2e
Scope 1 Direct sulfur hexafluoride (SF_6) emissions	90.5 1000 ton CO_2e
Scope 1 Direct nitrogen trifluoride (NF_3) emissions	46.6 1000 ton CO_2e

Waste Water

Total Waste Water Discharge	9,795 1000 m^3
Chemical Oxygen Demand (COD)	1.84 1000 ton

Water

Total Recycled Water	27,140 1000 m^3
Water Recycling Rate	73.80 %

Other Air Pollutant Emissions

Nitrogen Oxide (NOx)	64 ton
Sulphur Oxides (SOx)	4 Kg
Volatile Organic Compounds (VOCs)	36.76 ton
Ozone-Depleting Substances (ODSs)	0 ton

Waste Generation

Total Waste	33.56 1000 ton
Hazardous Waste	20.61 1000 ton
Recycling Waste	30.36 1000 ton
Landfill Waste	1.02 1000 ton

Paper

Recycling Waste Paper	0.34 1000 ton

Output Wafer **289 ton**

Input Wafer **304 ton**

Water

Total Water Usage	41,596 1000m^3
Total Water Intake	14,456 1000m^3
Surface Freshwater	0.00 1000m^3
Underground Water	0.00 1000m^3
Salt Water	0.00 1000m^3
Tap water	13,831 1000m^3
Rain/Condensate Water	625 1000m^3
Purified Water	14,818 1000m^3
Water consumed per unit of production	83.5 m^3/wafer-m^2

Fuel

Natural Gas	35,653 1000 m^3
Diesel	0.15 1000 m^3
Coal	0.00 1000 ton

Energy

Total Energy Consumption	2,538.4 1000MWh
Electricity	2,305.7 1000MWh
Renewable Energy	1.85 1000MWh
Natural Gas	233 1000MWh

Raw Materials

Total Raw Materials	77.9 1000ton
H_2O_2	4.4 1000ton
H_2SO_4	16.1 1000ton
HF	1.4 1000ton
NaOH	12.4 1000ton

Paper

Paper Consumption	0.03 1000 ton

3-1 Green Factory

To alleviate ecological deterioration, reduce the greenhouse effect and slow global warming, UMC's environmental protection policies aim to minimize the consumption of resources and create minimum waste. Therefore, the company continues to enhance its technology, self-regulate and introduce high-performance pollution control technology and equipment to achieve environmental symbiosis, shared prosperity and sustainable global development.

Environmental Protection Policy

01 UMC's goal is pollution-free production. We not only comply with, but also strive to exceed international standards and all applicable environmental and safety regulations. We want to be an environmentally friendly enterprise characterized by continuous improvement.

02 We incorporate our environmental management system into the overall organizational management system.

03 We take the initiative to reduce waste production and prevent pollution by introducing and developing environmentally friendly technology into design, production, and operation.

04 We conserve energy and recycle natural resources as a model of environmental protection for the international community.

05 o meet our Corporate Social Responsibilities, we play an active role in government and community to improve and protect our natural habitat.

06 We educate employees about environmentally sound ethics and practices.

3-1-1 Green Factories and Buildings

Using past promotional experience and success of its departments in source reduction, recycling and reuse, UMC employs outside green building and ecology experts and collaborates with relevant academic programs to plan and construct green buildings that are consistent with the US LEED and domestic EEWH standards. In 2010, the company participated in the Green Factory Promotion Alliance, which integrates industrial, governmental and academic forces, to help the government formulate a green building and clean production evaluation system for developing Green Factory standards for Taiwan.

In 2012, the company's new fab in Tainan Science Park and over 17-year old Fab 8A in Hsinchu Science Park were awarded the 1st Green Factory logo by the Industrial Development Bureau. Moreover, Fab 8A was the first 8-inch foundry facility in the nation to receive the award. In 2013, UMC redoubled its efforts to have all its Taiwan factories achieve the Industrial Development Bureau certification for clean production. In 2014, UMC constructed Fab 12A P5 & P6 , which are expected to receive the LEED Gold certification, EEWH Diamond Certification and Smart Building Diamond certification upon completion in 2016.

Certificate

Green Factory Logo
FAB 12A P3/4 FAB 8A

LEED Gold Certificate
FAB 12A P3/4

candidate for Green Building certificate
FAB 12A P5/6

candidate for Smart Building certificate
FAB 12A P5/6

Green Factory Logo
FAB 12A P3/4 FAB 8A

UMC Future Plans for Green Building and Green Fab

Designs for new fabs will adhere to green building, green factory and smart building principles.

Existing fabs will undergo green building and green factory assessments, and green design and construction will be gradually incorporated.

UMC Green Building Features

In addition to incorporating various energy-saving designs, UMC increased bio-diversity and green indexing for its buildings that far exceed legal requirements, thereby highlighting UMC's commitment to conservation strategies and action.

Renewable Energy In-situ Design

Solar power systems are installed to generate renewable energy for fabs.

Energy Saving Lighting Design

Fab 12A P3 / P4 leads the industry by using all LED lighting fixtures in offices and outdoor areas to significantly reduce lighting electricity consumption without compromising illumination. LED lighting for cleanrooms is being assessed for reducing FAB electricity consumption without compromising production conditions.

Energy Saving Air-conditioner Design

VAV and winter "Free cooling" enthalpy control systems are used in all offices. Heat pumps are innovatively applied by using Hot DI for heating during manufacture, which partly replaces gas boiler usage and significantly reduces the annual gas consumption of the boiler system.

Ecology, Green Base and Water Conservation Design

The circular Green Belt design is adopted to avoid barriers to biological migration. Ecological detention ponds are installed in two sections within the base to serve as biological habitats, flood control and rainwater recovery and regulation. Artificial gardens, soil interception design and grass are used in unexcavated areas to provide natural permeability. Open-celled stones are used for roads instead of poor, water permeable AC asphalt.

Greening Index

Create multi-tier ecology
Trees, shrubs and mixed stratified planting methods are used, and a diverse mix of species is selected.

Increase planting distance
Large trees are planted on both sides of service roads, with adequate growth room.

Strive for 3-D greening
Soil thickness above the basement of Building OB is increased to create an environment that is conducive to plant growth.

Bio-diversity

Ecological Green Network
The fabs are surrounded by a continuity of green areas to increase opportunity for biological migration, foraging and habitat.

Creature Habitat
Green detention ponds, porous banks, mixed forests, grasslands and bush retention provide for the needs of different creatures.

Plant Diversity
Adhering to the principle of native and diverse plants that also attract butterflies and birds, conditions for developing a diverse habitat are created.

UMC 's Smart Building Features

To satisfy user demand while also conserving energy, ICT Information and Communication Technology is integrated with energy conservation strategies to improve building quality. Design concepts include security monitoring, healthcare, convenience and comfort, and sustainable energy conservation.

1 Illumination sensors, indoor humidity detectors and air conditioning system control linkages are used in offices to reduce energy use and increase the comfort of the work environment.

2 Conventional energy boilers are replaced with solar water heaters.

3 Traditional full-time full-power exhaust fans in basement parking are replaced with carbon monoxide and ventilation equipment linkages to reduce energy consumption and promote safety in public basements.

3-1-2 Energy Resource Productivity Improvement Plan

Currently, environmental issues are a major issue of business sustainability among stakeholders. To improve energy resource productivity and reduce greenhouse gas emissions, UMC recently promoted various reduction measures and set targets for each stage.

UMC Energy Resource Improvement Status

333 Reduction Plan (Completed) 2010~2012 (Base Year—2009)	369+ Reduction Plan (Completed) 2013~2015 (Base Year—2012)	Green2020 Reduction Plan (Implementing) 2016~2020 (Base Year—2015)
Electricity Usage 3%	Electricity Usage 3%	Electricity Usage 10%
Fluorinated Greenhouse Gas Emissions Intensity 33%	Water Usage 6%	Water Usage 10%
	Waste Generation 9%	Waste Generation 10%
	Fluorinated Greenhouse Gas Emissions Intensity Note1 36%	Fluorinated Greenhouse Gas Emissions Intensity 36%

Note1: The base year for the 369+ and Green 2020 plans to reduce the intensity of fluorinated greenhouse gases (FCs) is 2010

Note2: For the Green 2020 reduction plan, please refer to http://www.umc.com/English/news/2015/20150420.asp

Implementation of the 2015 UMC 369+ Energy Resource Productivity Improvement Plan

3 Electricity Usage
Goal 3% Base Year 2012
Reduction Status (2013-2015year)
5.42%
Additional reduction of 55,483Mwh of electricity for the year
Reduction Measures
- Increased energy efficiency
- Improved air conditioning systems
- Improved lighting systems

6 Water Usage
Goal 6% Base Year 2012
Reduction Status (2013-2015year)
11.2%
Additional reduction of 454,000 tons for the year
Reduction Measures
- Expanded wastewater recycling
- Reduced water consumption of production machines.
- Expanded condensation water recycling

9 Waste Production
Goal 9% Base Year 2012
Reduction Status (2013-2015year)
11.59%
Additional reduction of 993 metric tons of waste for the year
Reduction Measures
- Ammonium sulfate: Source reduction of ammonia solution
- Sludge: Source reduction of hydrofluoric acid
- Sulfuric acid: Extend raw material usage cycle time
- Waste solvent: Extend raw material usage cycle time

+ Fluorinated Greenhouse Gas Emissions Intensity
Goal >35% Base Year 2012
Reduced intensity of fluorinated greenhouse gas emissions
37.6%
Reductions in fluorinated greenhouse gas emissions was equivalent to 977,000 tons of CO2.
Reduction Measures
- Installed high efficiency FC abatement in new tools
- Optimized process conditions

Note: Fluorinated greenhouse gases (FCs) reduction goal exceeds the reduction standard set by the World Semiconductor Council (30% less emissions intensity in 2020 compared to 2010)

3-1-3 Clean Production

UMC Clean Production Promotion

UMC continues to develop manufacturing processes and high efficiency production equipment that utilizes low hazardous raw materials and produces less waste, reduces risk factors and harmful intermediate products during manufacturing, and reduces waste production and toxicity to maximize resource utilization.

Manufacturing

Production

The nature of its operations makes it more difficult for UMC to control end product recovery. Hence UMC focuses on reducing environmental impact and hazard of product manufacturing and utilization, and adopts energy efficient design.

UMC also spares no effort in assessing its semiconductor product lifecycle. To minimize resource and energy consumption, UMC collects information on upstream suppliers to assess product lifecycle for its downstream customers (end-products businesses). Moreover, its harmful substance control measures, green procurement management and voluntary greenhouse gas reduction enable UMC to achieve green products.

Management System and Certification

Currently, all 9 UMC fabs and its subsidiary HJTC are ISO 14001 certified, and continue to incorporate various management systems and certification.

Management System and Certification

ISO 14001 Environment Management System Issuing Agency: DNV Range: Entire UMC and its subsidiary HJTC	ISO/TS 16949 Quality Management System Issuing Agency: DQS-UL Range: Entire UMC and its subsidiary HJTC	ISO 9001 Quality Management System Issuing Agency: DQS-UL Range: Entire UMC and its subsidiary HJTC	ISO 22301 Business Continuity Management System Issuing Agency: SGS Range: UMC Headquarters, Fab 12A and Fab12i
OHSAS 18001 Occupation, Health and Safety Management Issuing Agency: DNV Range: Entire UMC and its subsidiary HJTC	ISO 50001 Energy Management System Issuing Agency: SGS Range: UMC Fab 8A	ISO 14046 Water Footprint Verification on Integrated Circuit Wafers Issuing Agency: DNV Range: UMC fabs in Taiwan	Certificate of Green Partner SONY Sony Green Partner Issuing Agency: SONY Range: Entire UMC and its subsidiary HJTC
ISO 14064-1 Greenhouse Gases Emissions Verification Issuing Agency: BSI , DNV Range: Entire UMC and its subsidiary HJTC	IECQ HSPM QC 080000 IECQ HSPM QC 080000 Issuing Agency: DQS-UL Range: Entire UMC and its subsidiary HJTC	EPD Environmental Production Declaration Issuing Agency: DNV Range: UMC Fab 12A and Fab 8A	CO2 Carbon Footprint Verification on Integrated Circuit Wafers Issuing Agency: DNV Range: UMC Fab 12A and Fab 8A

Business Continuity Management System | Quality Management System | Environment Management System
Greenhouse Gas Emissions Verification | Green Product Certifications | Energy Management System
Occupation, Health and Safety Management

Raw Material Management

By improving manufacturing process design and technology, UMC not only reduces raw material consumption, but also reduces pollution emissions at its source, thereby reducing operating costs, resource consumption and environmental impact. Consistent with environmental protection and international environmental / governmental chemical concerns, UMC prioritizes the reduction of raw materials that contribute to major waste, and coupled with the company's cost reduction policy and benchmarking, each department assesses the feasibility of reducing benchmarked materials and conducts small-scale tests. Once feasibility is verified, reduction is implemented among all the fabs.

Management Approach

01 Implemented by the Green Production subcommittee within UMC's CS committee.

02 Established an electronic system to manage UMC's rational use of raw material, and designated a unit to regularly analyze optimized usage.

03 In addition to analyzing the relationship among the amount of key raw materials used, production capacity and waste output, reduction programs for reducing source through process optimization, work process improvement and objective management are promoted.

Effectiveness of Raw Material Management in 2015

Continue Promoting Process and Source Reduction and Reduce Use of Organic Cleaning Agents

ST-250 (Liquid photoresist)

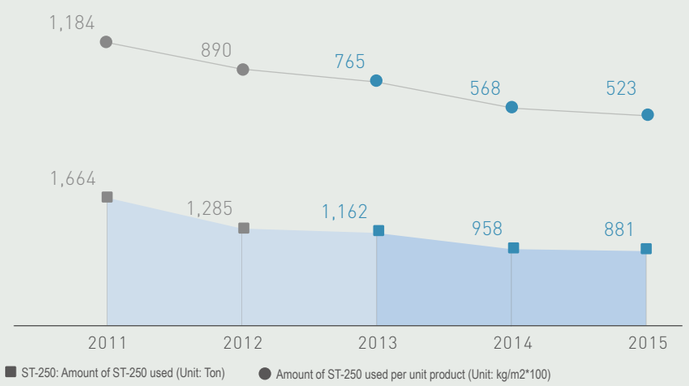
Implementing Factory

8D / 12A / 12i

Compared to 2014, the amount of ST-250 per unit used decreased by 8%

8%

ST-250: Amount of ST-250 Used



Waste Management

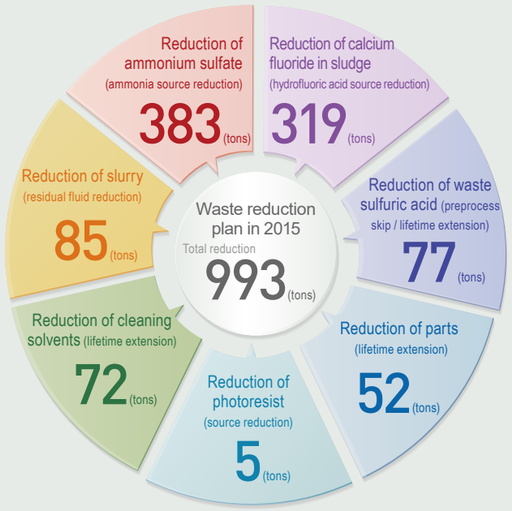
Waste Reduction

UMC's ultimate waste management goal is zero waste using the strategy of total waste reduction and waste-to-resource. By improving process technology, raw material source reduction and other source management measures, waste output is reduced to achieve waste reduction.

UMC's total waste output is 33,563 metric tons (not including routine office waste), and waste output per unit production capacity is 194 kg / m2, which is an increase of 21.0% compared to 2014. Hazardous waste output is 20,607 metric tons, and hazardous waste output per unit production capacity is 119 kg / m2, which is an increase of 16.1% compared to 2014. The increase in waste output is due to the increase output of sulfuric acid in high-order processes.

In 2015, UMC's reduction plans and measures resulted in a total waste reduction of 993 metric tons, as shown in the figure below. The cumulative reduction for 2013 to 2015 is 2,788 tons, and the reduction ratio is 11.59%, which is 9% of the 2015 reduction target.

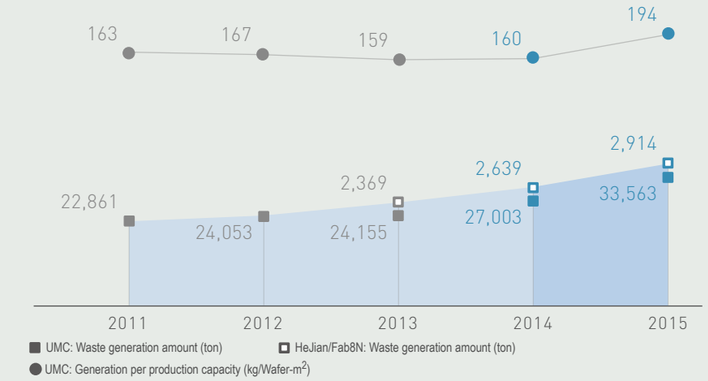
Waste Reduction Plan in 2015



Waste Reduction Measures Proposed for 2016

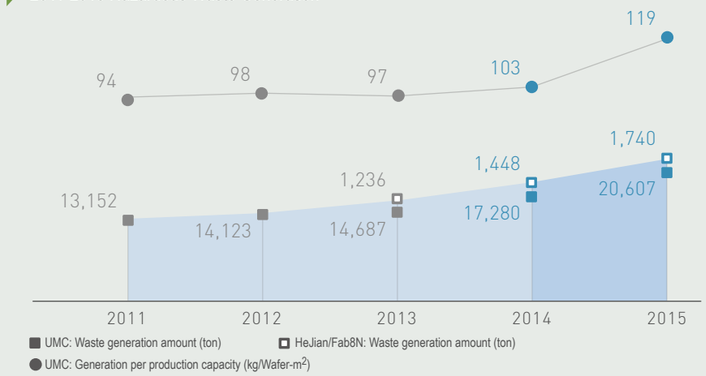
- Promote sulfuric source reduction and waste sulfuric acid reduction.
- Promote hydrofluoric source reduction and waste sludge reduction.
- Continue to promote chemical lifetime extension and liquid waste chemical reduction.
- Promote ammonia reduction and waste ammonium sulfate reduction.
- Implement reduction of residual chemicals in empty containers.
- Implement independent recycling of diluted sulfuric acid after removal of hydrogen peroxide.

2011-2015 Total Waste Generation



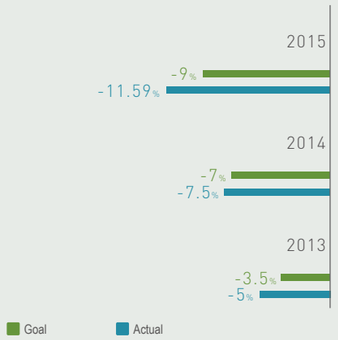
Note: In 2015, the overall waste generation per wafer area of UMC and its subsidiary HJTC foundry (8N) was 187 Kg / Wafer-m^2

2011-2015 Hazardous Waste Generation



Note: In 2015, the overall hazardous waste generation per wafer area of UMC and its subsidiary HJTC foundry (8N) was 115Kg / Wafer-m^2

UMC Waste Reduction Goal and Status



Note 1: Reduction goal is based on the company's total waste generation in 2012

Waste-to-Resource

In addition to reducing waste from the manufacturing source, UMC continues to promote recycling and reuse in place of existing end-of-pipe control to turn waste into resources, subsequently creating three advantages: waste reduction, waste disposal energy and cost reduction, creating a positive waste-to resource ratio.

In 2015, UMC recycled 30,361mt of waste, which accounts for 90% of waste being recycled. For 4 consecutive years, the recycling rate has exceeded 90%. The amount of recycled hazardous waste is 19,268mt, which accounts for 94% of hazardous waste being recycled. In 2015, revenue from resource recycling (fabs in Taiwan) was about NT61 million.

Basel Convention hazardous wastes definition: Except for 2.8354mt of nickel-cadmium batteries transported to Korea for reuse in July and December 2015, respectively, all UMC waste is treated domestically.

In the future, UMC will continue to actively collaborate with waste management companies/raw material suppliers to research and develop new waste recycling methods and goals.

Waste Company Control Measures

UMC conducts on-site audit of its waste cleanup/ treatment / recycling vendors mainly to inspect their management, storage areas, treatment facilities management and pollution control, site safety management and operating conditions (including sales flow of recycled products). Based on the evaluation result, the company determines whether to maintain cooperation or increase the frequency of audits. The table below shows the results of the audit and subsequent follow-up:

In 2015, UMC audited a total of 27 waste disposal companies. The companies were rated excellent or above.

Outstanding	90 points or more	Maintain cooperation Audit once every 2 years
Excellent	80-89 points	Maintain cooperation Audit once every year
Satisfactory	70-79 points	Maintain cooperation (list as a substitute vendor) Audit once every year
Inadequate	60-69 points	List as under observation. Increase audit if improvement is made within given time; otherwise, terminate contract. Audit once every 6 months.
Unsatisfactory	60 points or less	Replace immediately

Suppliers offering waste processing and recycling services were encouraged to retain proper records for the overall process for final accountability of waste processing and recycling procedures. These records could then be provided to source customers or government agencies to conduct effective inspection and prevent any case of intentional violations or environmental pollution. In 2015, UMC jointly formulated the High Tech Industry Waste Disposal Supplier Assessment and Commendation Project with TSIA and TTLA to encourage waste processing and recycling suppliers to optimize their management. Suppliers that achieved exemplary performance in the assessments would be publicized on a list of supplier associations and would be awarded with relevant trophies in the annual conferences or public gatherings.

List of Major Waste Recycling Resource in 2015

Photo Mask
Collected by recyclers, cleaned to remove patterns, and renewed as photo masks or made into optical materials.

Receptacle
Cleaned by recyclers for re-use.

Fluorescent Lamp
Collected by recyclers for reusable fluorescent powder and metals.

Wood
Recycled as raw material for wood products.

Lead Acid Battery
Collected by waste disposal vendors to recover raw lead and waste plastic materials.

Mixed Hardware
Collected by recyclers to extract the heavy metals or recover other metals.

Recycling Category
Scrap paper, scrap aluminum, aluminum foil, plastic bottles and scrap plastics are collected by recyclers for re-use.

Sulfuric Acid
Collected by recyclers and diluted into industrial grade sulfuric acid, or re-made into poly aluminum chloride or sulfate.

Copper sulfate
Collected by recycler, and using electrolysis to recover copper, which is re-made into copper plates, copper sulfide or copper sulfate.

Phosphate
Collected by recyclers and re-made into industrial grade phosphoric acid or biological nutrients.

Ammonium sulfate
Collected by the supplier to be remade into industrial grade ammonium sulfate that could be used as welding flux, leather goods, electroplating solutions, and dyes.

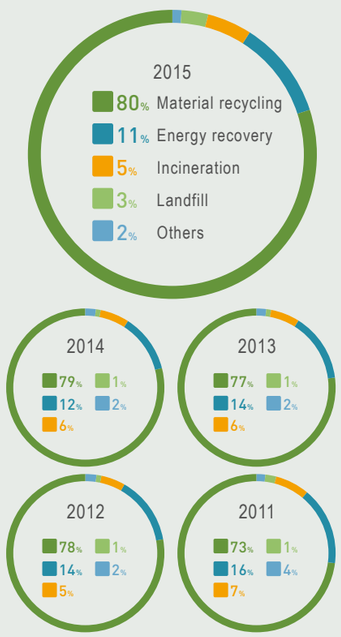
Resin
Collected by recyclers, classified and cleaned and used as second grade resin for ion exchange.

Calcium fluoride sludge
Supply to cement companies as cement additive.
Collected by recyclers and made into artificial fluorite for use as solvent by steel mills.

Solvent
Convert to chemical grade raw material through distillation / extraction by chemical factories.

Waste solvent
Collected by the supplier to be remade into coating thinners or banana oil mixtures.

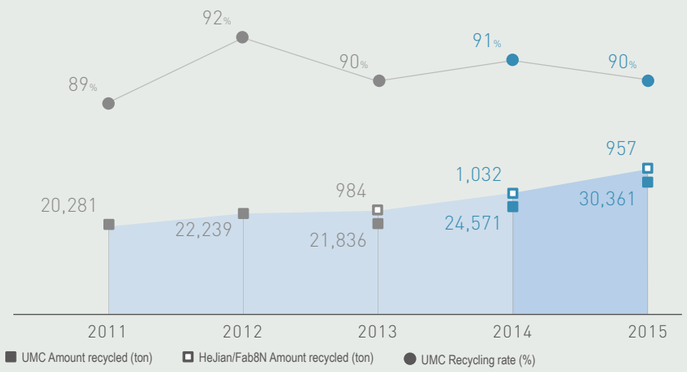
UMC Waste Recycling Trend



Note 1: Other waste recycling methods include solidification, overseas treatment and chemical treatment.

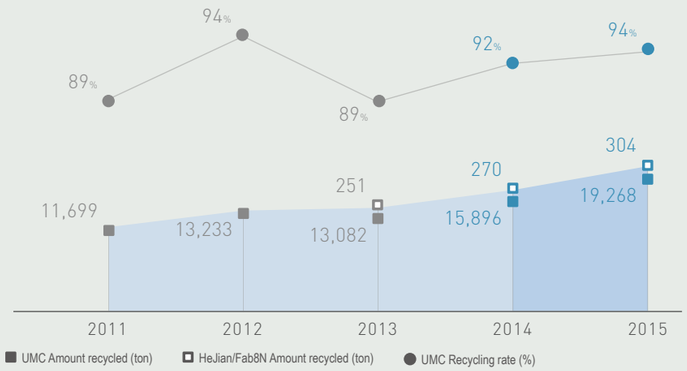
Note 2: Energy Recovery means that waste solvent was recycled as an auxiliary fuel.

2011-2015 Recycling Status



Note: In 2015, the overall recycling rate of UMC and its subsidiary HJTC fab (8N) was 86%.

2011-2014 Hazardous Material Recycling



Note: In 2015, the overall recycling rate of UMC and its subsidiary HJTC fab (8N) was 88%.

Packaging Material Management - Collection and Recycling

All shipping materials used by UMC fully comply with EU PPW (Packaging and Packaging Waste) stipulations for material containing heavy metals. All materials are supplied with inspection reports prepared by qualified, impartial laboratories, and low environmental impact materials such as recyclable materials and non-bleached cardboard cartons are used when possible. In addition, since UMC is not an end product manufacturer, with customer consent, raw material and certain product packaging are re-used for shipping products to assembly or testing factories to reduce the amount of packaging materials and waste production.

The company will continue to cooperate with other organizations. From influencing customers to learning from suppliers and downstream supply chains, the company is increasingly able to use packaging that is recyclable or contains recyclable materials. In particular, since 2015, the amount of recyclable packaging in the well-established Hsinchu 8-inch production line has increased to 129,719 kg, of which 81,196 kg contains recyclable materials, representing a recovery rate of 63%.

Air Pollution Control

UMC air pollution control strategies involve using high-performance equipment to treat exhaust gas from rational contaminants to reduce the emission of air pollutants to a level that complies with (or less than) the government's environmental stipulations. Test results over the years showed that UMC air pollutant emission is less than the emission standard set by the EPA. UMC categorizes waste gas from manufacturing processes into acidic exhaust, alkaline exhaust, volatile organic exhaust and general exhaust.

Acidic and Alkaline Exhaust

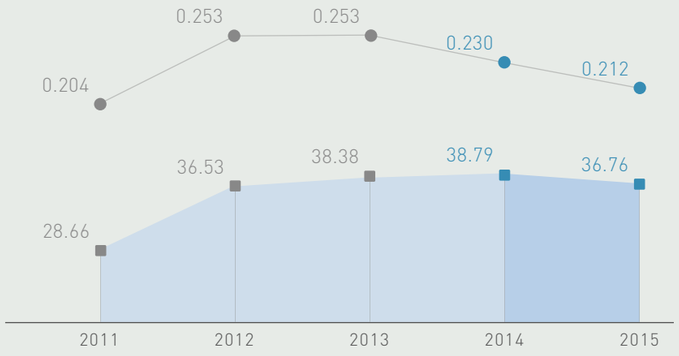
Stage 1: Installed tail gas treatment device in machine chamber (L / S) to treat toxic, flammable, Perfluorinated compounds (PFCs) and other process gases.
Stage 2: After end treatment by a central exhaust treatment system, gas is released into the atmosphere via a stack.

Volatile Organic Compounds

Volatile organic compounds exhaust (Solvent Exhaust) is treated using VOC Zeolite carousel wheels, which treat and release gases using low temperature adsorption and high temperature desorption.

Total Hydrocarbon Reduction

In 2015, the efficiency of UMC's volatile organic compounds (VOC) treatment was maintained at an average of 95. 14%, which exceeded the 90% legal standard. Total emission of hydrocarbon pollutants was 36.76 tons / year, which was a reduction of 719.63 tons / year.



Note 1: In 2015, the emission for HJTC (8N) was 0.4 tons / year

Other Air Pollutant Emissions

UMC uses natural gas and only a small amount of low sulfur diesel fuel. Based on regular stack inspection and air pollution expense calculation, estimated nitrogen oxide (NOx) and sulfur oxide (SOx) emissions in 2015 are listed in the table below.

UMC Emissions in 2015

SOx(kg)	NOx(ton)
4	64

Toxic Chemical Substance Management

In addition to complying with legal stipulations, UMC also emphasizes hazard assessment and preventive management of chemical substances. Management focus and implementation for 2015 are shown below:

Self-imported Chemicals Management

Established chemical list and usage application procedure in self-imported chemicals management

Chemical Hazard Assessment Management

The electronic management system was used to evaluate the hazardous properties of new chemical substances and the prevention and response capability of the factories. In 2015, a total of 159 chemicals were evaluated, and the response preparedness measures of all the factories were found to be capable of appropriate management.

Strengthen Emergency Response Capacity

Actively strengthened employee emergency response capability, participated in joint toxic disaster prevention and rescue operations and exercises organized by the authorities, and participated in industrial exchanges.

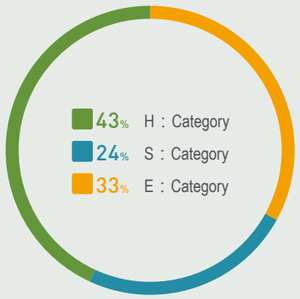
3-1-4 Environmental Accounting

In early January 2001, UMC has already begun implementing the Environmental Accounting system each month, and became the first corporation in the nation to adopt this electronic system in the industry. To ensure data accuracy, UMC referenced the six classification principles used by the Japanese Ministry of Environment. In addition to the environmental protection financial system, UMC also instituted a financial information system for Occupational Safety and Health, which combines with the existing accounting system and uses a matrix and internal control coding to calculate the cost and expense disbursement for environment safety and health related investments to facilitate effective assessment and decision analysis of overall environmental protection and EHS management.

Environment Safety and Health Investment

UMC is committed to environmental protection, safety and health, as evident from its considerable annual EHS funding. Through its Environmental Accounting System and calculations, records of ESH-related expenses are analyzed each month, and based on each year-end aggregate and analysis of Environmental Accounting data, UMC's ESH investment for the following year is planned.

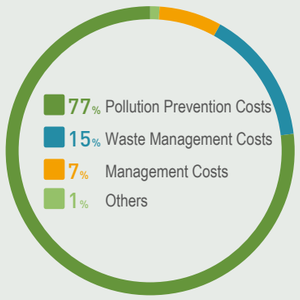
▶ 2015 ESH Expense Ratio (E: Environment; S: Safety; H: Health)



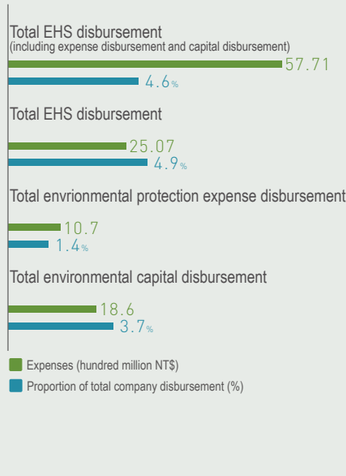
▶ 2015 Environmental Protection Capital and Expense Cost Ratio

Note: EP : Environmental Protectiotn

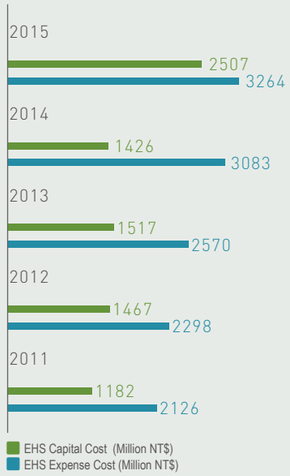
▶ 2015 Proportion of Environmental Protection Costs



▶ EHS Investment in 2015



▶ Past EHS Expenses



▶ Environmental Protection Capital and Expense Cost

Direct cost of reducing environmental impact	Capital cost	1,859,136
		Expense cost
Pollution prevention costs, such as air, water, soil and groundwater pollution control expenses.		831,271
Global environmental protection expenses, such as climate change and other global warming prevention.		3,778
Expenses for enhancing efficiency of resource utilization.		4,306
Industrial waste disposal, treatment and recycling expenses.		158,343
Indirect cost of reducing environmental impact		
Management costs include:		Expense cost
Employee environmental education and training expenses.		55
Management system implementation and certification expenses.		2,432
Environment monitoring expenses		3,934
Human resource expenses for environmental protection.		63,080
Other environmental protection cost		
		Expense cost
customer upstream- downstream connection costs, such as suppliers / customers related environment protection expenses		201
Research and development costs, such as research expenses for reducing/ controlling environmental impact.		5,010
Social activity costs, such as sponsoring environmental groups, communications and information for environmental promotion.		2,108
Loss and compensation costs, such as environmental fines and litigation expenses.		
Capital cost 1,859,136 Expense cost 1,074,518	Total	2,933,654

Unit: NT$1000

3-2 Energy and Greenhouse Gas Management

3-2-1 Climate Change Policy and Low-Carbon Commitment

In the face of global climate and ecological changes, UMC is committed to its environmental protection duty as a member of the global community. In 2010, UMC led the industry by implementing the UMC Climate Change Policy as its highest guiding principle. In addition, the company formulated the UMC Low-Carbon Commitment guidelines for carbon reduction plans.

▶ UMC Climate Change Policy

- Expected to reach carbon neutral
- To be the low carbon solutions provider
- To promote the development of a low carbon economy

▶ UMC Low-Carbon Commitment

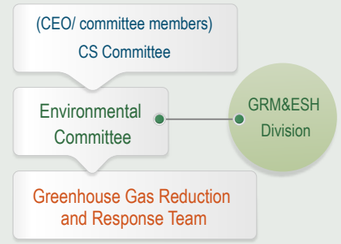
01 Low-carbon design process
02 Energy efficiency optimization
03 Installing high efficiency FCs abatement in new tools
04 Adopting green building standard for new buildings
05 Carbon partnerships with customers and suppliers
06 Complete the carbon footprint inventory for all fabs.
07 Invest in green technology industry

For energy and greenhouse gas management, UMC has recently formulated various environmental protection objectives for various phases and dimensions along with actual implementation plans. These objectives and plans were then jointly discussed with the Corporate Sustainability Committee. Discussion outcomes and resolutions would then be ratified by the Committee Chairperson before implementation.

3-2-2 Climate Management Organization

UMC has a dedicated First-level Department (GRM&ESH) responsible for collecting and identifying greenhouse gas related issues. Through the Corporate Sustainability Committee, the ESH Commission reports annual implementation results and issues to the Executive Director and Management Committee every 6 months.

▶ Climate Management Organizational Chart



3-2-3 Climate Challenges and Opportunities

Temperature rise in the earth's surface has caused the melting of polar ice, rising sea level and decreasing land. The frequency and intensity of abnormal climate changes such as changing ocean current patterns, changing rainfall patterns, floods, droughts and storms have increased. These climate changes caused by global warming have directly or indirectly impacted natural ecosystems, and international governments are attaching great importance to greenhouse gas control. Hence it can be expected that increasingly stringent international or governmental carbon emission control regulations will indirectly create a higher threshold for corporate business, and only low energy consumption, low greenhouse gas emissions, green products and green industry will receive community support.

▶ UMC Climate Risks Challenges and Opportunities

Regulations

Greenhouse gas emissions permit and reporting, cap and trade schemes.	Carbon tax, energy tax	Product labeling and disclosure.
▶ Lower carbon emission voluntarily. ▶ As of 2015, UMC has 3.023 million tons of reduction credits approved by the EPA.		▶ Continue to inventory greenhouse gas emissions and product carbon footprint.

Climate Related Disaster

Natural disasters resulting in job interruption.	Building and facility damage.	Raw material shortage and shipping delays.	Water shortage during the dry season.
▶ Continue to improve AIG Insurance audit. ▶ Promoting business continuity management system. (UMC has received ISO 22301 BCM certification) ▶ Globalize factories and supply chains.			▶ Expanding water recycling and reuse to lower the demand for water. ▶ Implementing effective water-saving measures.

Other Climate-related Issues

Products that are less eco-friendly will be eliminated because of changing consumer demands.

- ▶ Promoting the product life-cycle analysis and certification. (UMC has passed carbon footprint / water footprint certification, and participated in the LCA to go project to help customers acquire information on their products' carbon footprint with minimal time and resources.)
- ▶ Invest in green technology industry. (Green Energy Investment is maintained at NT$ 6 billion.)

3-2-4 Measures for Mitigating Climate Change

Measures for Mitigating Climate Change

01 Introducing ISO 14064-1 greenhouse gas (GHG) inventory program, planning reduction projects, and reviewing the effectiveness of reductions.

02 Participating in the EU FP7 (Seventh Framework Programme) to promote product carbon footprint inventory program. First in the industry to complete GHG scope 3 emission inventory and verification, and identified more opportunities for reduction from the product life cycle.

03 Supporting the government's reduction policies and formulating FCs gas reduction methodology in semiconductors.

04 Income from carbon trading has been used to establish an environmental conservation foundation to promote GHG reductions and ecological conservation outside the company.

Greenhouse Gas Inventory

In accordance to inventory guidelines defined by domestic and international organizations such as the ISO14064-1 and GHG Protocol, UMC established its greenhouse gas inventory standard mechanism. The company regularly inventories the greenhouse gas emissions of all its fabs each year to fully determine the status of its greenhouse gases and verify the effectiveness of its reduction. At present, although there is no legally required reduction, UMC has voluntary instituted greenhouse gas reduction for different stages, conducted annual review and strived for further improvement.

Since establishing an internal management system in 2006, UMC commissions a 3rd party to conduct inspections every year. The following lists the inventory statuses for every facility:

Outcomes of GHG Emission Inventory Program

UMC Taiwan	Implemented annually since 2006 Historical data were also verified for 2000 to 2005
UMC Singapore Fab 12i	Implemented annually since 2009
UMC China subsidiary He Jian Technology Company (HJTC) (Fab8N)	Implemented annually since 2014

UMC Greenhouse Gas Inventory Scope

Scope 1 — Direct GHG emissions

- Direct GHG emissions occurring from sources that are owned or controlled by the company (i.e., sources within the organizational boundary). For example, emissions from combustion of fuel in owned or controlled vehicles.

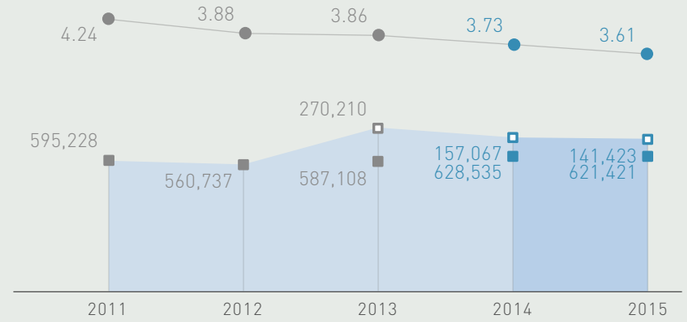
Scope 2 — Energy indirect GHG emissions

- Indirect GHG emissions occurring from the generation of purchased electricity (heat/cool, steam and fossil fuel derived energy products) consumed by the company

Scope 3 — Other indirect GHG emissions

- Other indirect GHG emissions occurring as a consequence of the activities of the company, but generated from sources not owned or controlled by the company.

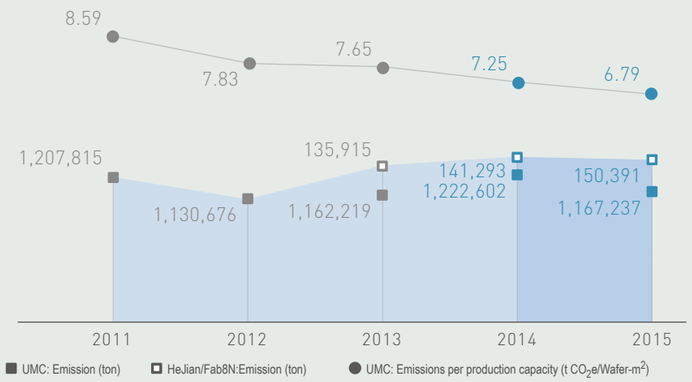
Direct (Scope 1) GHG Emission and Emissions Per Production Capacity



Note1: In 2015, the overall emissions per wafer area for UMC and its subsidiary HJTC fab (8N) was 3.93 t CO_2e/Wafer-m^2

Note2: The 2013 greenhouse gas emissions of UMC's subsidiary HJTC (8N) were not verified by a third party.

Scope 2 Indirect GHG Emissions and Emissions Per Production Capacity



Note1: In 2015, the overall emissions per wafer area for UMC and its subsidiary HJTC fab (8N) was 6.791 t CO_2e/Wafer-m^2

Note2: The 2013 greenhouse gas emissions of UMC's subsidiary HJTC (8N) were not verified by a third party.

Scope 3 (other indirect greenhouse gas emissions)

Purchased goods and services — 943,919 tCO_2e
Upstream (cradle-to-gate) emissions of 85% (by weight) of purchased goods

Fuel-and-energy-related activities — 649,307 tCO_2e
Upstream emissions of purchased fuels (diesel and NG) and electricity

Upstream transportation and distribution — 546,540 tCO_2e
Transportation of 85% (by weight) of purchased goods

Waste generated in operations — 237 tCO_2e
Transportation and disposal or treatment of waste.

Business travel — 2,991 tCO_2e
Transportation of employees for business-related activities

Employee commuting — 13,805 tCO_2e
Transportation of employees (in vehicles operated by the Company and employees)

Downstream transportation and distribution — 8,624 tCO_2e
Transportation of products sold by the Company

Downstream leased assets — 217 tCO_2e
Operation of assets owned by the Company: Crystalwise Technology Inc.

Investments — 348,604 tCO_2e
Operation of investments: Wavetek Microelectronics Corporation, NexPower Technology Corp., and HeJian Technology (Suzhou) Co., Ltd.

In 2015, UMC began referencing carbon footprint calculation methods and technical documents provided by WRI and WBCSD for inventory checks, in order to estimate scope 3 GHG emissions listed in the following. UMC also passed DNV verification, making us the first semiconductor company in Taiwan to complete scope 3 GHG emission verification.

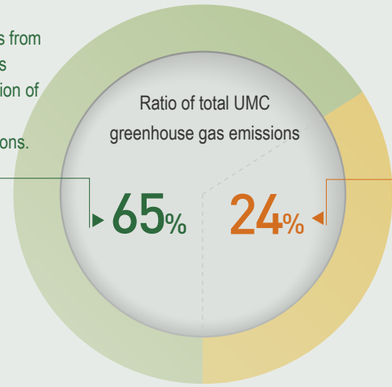
Greenhouse Gas Reduction

Results of UMC carbon footprint and greenhouse gas inventory found that carbon emissions from manufacturing is the primary source of carbon footprint, and that the main sources of the process emission are fluorinated compounds (FCs) and electricity, which account for about 90% of UMC overall greenhouse gas emissions. Therefore, FCs and electricity reduction are UMC's priority.

UMC Primary Sources of Greenhouse Gas Emissions

Greenhouse gases from electricity providers during the generation of electricity for the company's operations.

CO_2



Greenhouse gas generated by the use of FCs during the company's manufacturing process.

CF4、C2F6、C4F6、C4F8、C5F8、SF6、NF3、CHF3、CH2F2、CH3F etc

Fluorinated Greenhouse Gas Reduction

Long-term Goal
Compared to 2010, reduce unit fluorinated greenhouse gas emissions by 36% in 2020.
36%

2015 Reduction Goal
>35%

2015 Actual Reduction
37.6%

In addition to carbon reduction each year, UMC established the Fluorinated Greenhouse Gas Reduction Taskforce in 1999 to promote greenhouse gas reduction. Moreover, the company set greenhouse gas reduction goals for the various phases of the program, and currently, the reduction program is in Stage 3. UMC shall continue to implement FCs and Fluorinated GHG reduction projects. FCs reduction in 2015 reached 977,000 tons which was a 37.6% reduction compared to 2010. Such results showed that UMC managed to achieve Phase 3 objectives ahead of schedule. UMC has already attained the reduction goal for 2020, which is 30% lower than 2010 levels, as stipulated by the World Semiconductor Council.

Reduction Plans and Objectives for Each Phase for Fluorinated GHG (FCs)

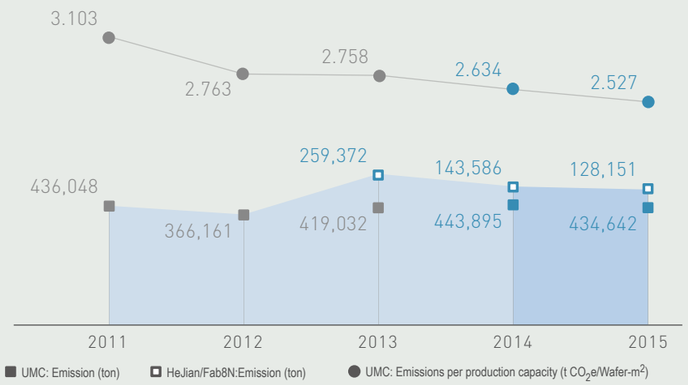
1998 — Phase 1
Comply with TSIA commitments
Decrease total annual FCs emissions in Taiwan fabs by 0.216MMTCE
Achieved target

2010 — Phase 2
UMC's voluntary reduction plan
Compared to 2009, reduce FCs emissions per wafer surface area by 33% in 2012.
Achieved target

2012 — Phase 3
Surpass WSC reduction objectives
Compared to 2010, reduce FCs emissions per wafer surface area by 36% in 2020

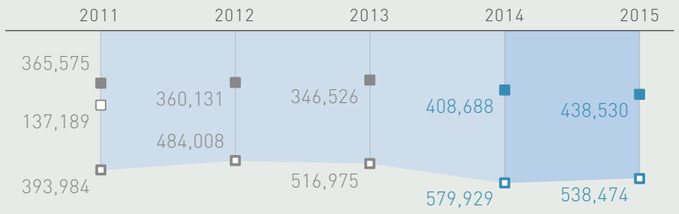
Goal attained successfully ahead of schedule

Fluorinated Greenhouse Gas Emissions



Note1: In 2015, the overall emissions per wafer area for UMC and its subsidiary HJTC fab (8N) was 2.90 tCO_2e / Wafer-m^2
Note2: The 2013 greenhouse gas emissions of UMC's subsidiary HJTC (8N) were not verified by a third party.

FCs Reduction Results (ton CO_2e)



3-2-5 Carbon Disclosure and Communication

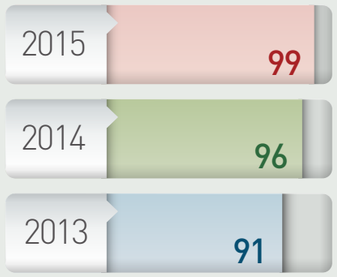
In response to international Carbon Disclosure issues, carbon emissions management and carbon emissions disclosure & communication have become important issues for UMC. In 2006, UMC was invited to participate in the international Carbon Disclosure Project (CDP), and to date, has participated for 10 consecutive years with progressive results. In 2015, UMC was named in the Climate Disclosure Leadership Index (CDLI) , earning the highest Carbon Disclosure Score among Taiwan semiconductor companies for the third consecutive year and the highest ranking for Carbon Performance Band among all Taiwanese enterprises.

CDP CLIMATE DISCLOSURE LEADER 2015

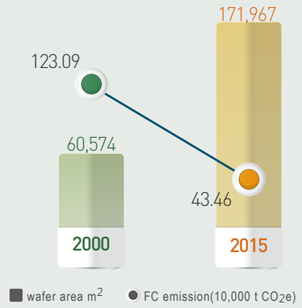
Disclosure Score **99**

Performance Band **A-**

UMC CDP Disclosure Score



FCs Reduction Results (2000 VS 2015)



Production capacity increase **2.84** fold

FCs emission decreased by **64.7**%

Future Reduction Practice

01 All new equipment shall be installed with a high performance local scrubber for FC gases.

02 All new CVD equipment in new facilities shall utilize NF3 gases

Communication Channels

Symposiums

- Sharing practical experiences in managing energy and GHG at the Center for Corporate Sustainability (CCS).

World Semiconductor Council (WSC)

- UMC participates in the WSC biannual meetings on behalf of TSIA.

Semiconductor Industry Association

- FCs gas reduction methodology in semiconductors jointly established by UMC and Taiwan Semiconductor Industry Association (TSIA) member companies were submitted to the Environmental Protection Administration (EPA) for review.

Government Agencies

- Disclosed greenhouse gas emission amount and reduction information on MOPS
- Submitted the company's annual greenhouse gas reduction implementation and outcome to government agencies for review and statistical analysis (for each factory)
- Participated in the EPA' Energy Conservation Action Logo award (Fab 8S and Fab 12A)

Annual Report / Webpage / Questionnaires

- In addition to completing yearly CSR disclosure, the company also discloses its yearly financial summary
- Disclosed on UMC webpage
- Provide customers with greenhouse gas management/emission and carbon footprint information
- Assess suppliers' carbon footprint management

3-2-6 Carbon Assets and Carbon Trading

UMC is a long-time participant in the Taiwan Semiconductor Association (TSIA) discussion on greenhouse gas emissions reduction, and also participates in reduction policies promoted by the government. When the EPA announced "greenhouse gases early reduction project and trade-in allowance principles" and "semiconductor industry greenhouse gas emission intensity announcement" in 2010 and 2011 respectively, UMC commissioned a third party inspection agency to verify its past greenhouse gas reduction outcomes. At the same time, the company also collaborated with other members of the TSIA on FC gas reduction methodology for the semiconductor industry.

From 2013 to 2014, UMC supported the EPA early reduction project and acquired a carbon reduction allowance of 3.02 million tons. In 2014, a 2 million ton carbon trading deal was signed with Dragon Steel. This was the first carbon trading transaction recognized by the EPA and marked an important milestone for the carbon trading market in Taiwan. Revenue obtained from this carbon trading transaction was wholly used by UMC to establish the UMC Eco-Echo Ecological Conservation Hope Project that was exclusively dedicated to environmental protection, promote environmental protection measures, and contribute towards environmental sustainability.

3-2-7 Energy Management

Energy use not only consumes the earth's resources, but also produces carbon dioxide that causes greenhouse gas emissions. To effectively reduce the environmental impact of the greenhouse effect, reducing energy consumption is the key issue for UMC's sustainable development. Currently, to conserve energy, UMC is targeting electricity and natural gas, and promotes the implementation of energy management in its offices and public areas with promotional activities, education and training to cultivate a mindset and habit of energy conservation and greenhouse gas emission among its employees.

Vision

Enhance energy efficiency to minimize impact on the earth as a result of energy use.

Electricity Usage Reduction Objectives

Cumulative reduction of 3% for a 3-year period from 2013 to 2015 (Base Year: 2012)

Natural Gas Reduction Objectives

3.38% reduction in 2015

Outcome

Achieved total cumulative power usage reductions of 5.42% from 2013 to 2015 (Base Year: 2012)

Natural gas reduction reached 5.33% in 2015

Organization

Through the CS Committee's company-wide carbon reduction goals and development plans, coordinate/ integrate departmental energy saving and carbon reduction strategies and programs. Hold regular committee meetings to review the implementation outcome, and continue to introduce energy conservation technologies and implement energy efficiency improvement programs in relevant facilities.

Measures

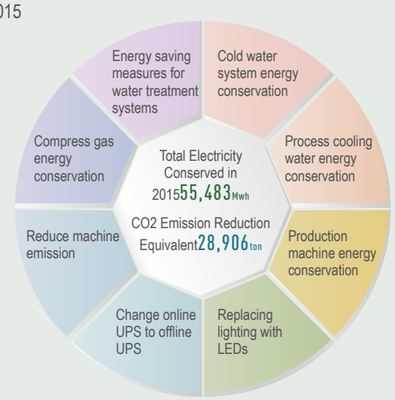
Fab 8A introduced ISO 50001 management system standards with systematic procedures and PDCA-based continuous improvement approaches. This model was promoted in other fab sites as well.

Electricity Reduction

Electricity Conservation Measures in 2015

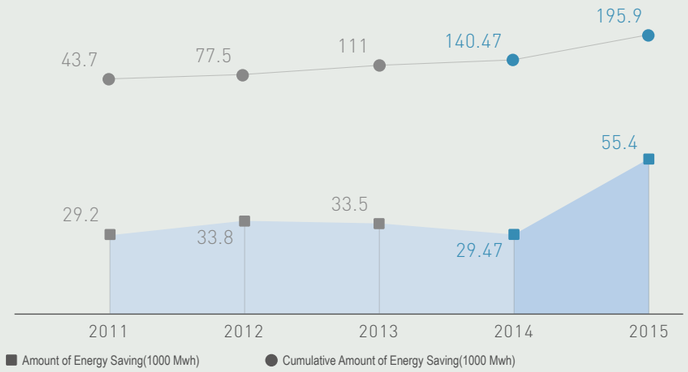
Implementing Fab

- 6A,8A,8C,8D,8E,8F,8S,12A, 12i,HJTC(8N)
- 8A,8C,8D,8F,12A
- 6A,8A,8C,8D,8E,8F,8S,12A, 12i,HJTC(8N)
- 6A,8A,8C,8D,8E,8F,8S
- 8A,8C,8D,8E,8F,8S,HJTC(8N)
- 6A,12A
- 8E,8F,12i,HJTC(8N)
- 6A,8A,8C,8D,8E,8F,8S,12A, 12i,HJTC(8N)

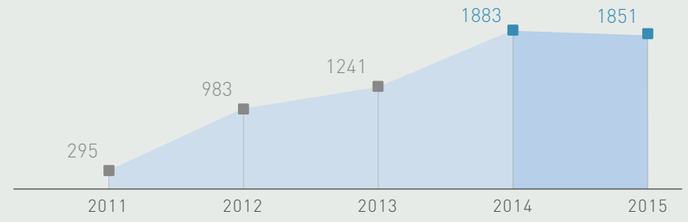


Note1: CO2 emissions are calculated using the power coefficient of 0.521 Kg CO_2e / kWh.
Note2: The information above includes energy savings for factory sites 8N and 6A but does not include factory sites that have yet to start mass production.

Past Energy Conservation Outcome

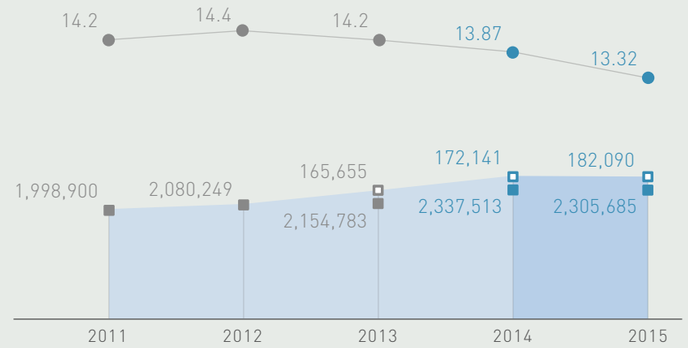


Past Solar Generated Electricity



Note: Energy generated by solar power does not include fab sites that have yet to start mass production.

Past UMC Electricity Usage



Note1: In 2015, the overall electricity usage per wafer area for UMC and its subsidiary HJTC fab (8N) was 12.75 MWH / Wafer-m^2
Note2: UMC electricity usage does not include UT or factory sites that have yet to start mass production.

Energy Saving Plans for 2016

Energy saving plans shall cover about 141 energy saving measures such as the complete introduction of equipment energy saving features, provision of inverters, replacing online uninterruptible power supplies (UPS) with offline UPS systems, and ice water system energy saving measures. Reduction goals for 2016 would be 48,729 MWh, which would be equivalent to carbon dioxide emission reductions of about 25,300 tons.

Energy Conservation Improvement for 2016

Energy Saving for Reverse Osmosis Pump
Implementing Fab : 8A,8C,8D,8F,12A

Replace Online UPS with Offline UPS
Implementing Fab : 8A,8C,8D,8E,8F,8S

Use Energy Saving Production Machine
Implementing Fab : 8A,8C,8D,8E,8F,8S,12A, 12i,HJTC(8N)

Use Energy Saving Cold WaterSystem
Implementing Fab : 8F,8S,12A

Use Energy Saving Air Compressor
Implementing Fab : 8C,8D,8F,12i

Install High Temperature Heat Pump
Implementing Fab : 8A,8S,12A

Adding Inverters
Implementing Fab : 8E,12A

Energy Saving for High Temperature Heat Pump

Energy Saving for Reverse Osmosis Pump

Natural Gas Reduction

Natural Gas Conservation Measures in 2015

Add high and moderate temperature heat pumps
Implementing Fab : 8A,8C,8D,12i
Estimated Outcome 9,532Mwh

L/S retrofit & RFB upgrade to ULF
Implementing Fab : 12A
Estimated Outcome 422Mwh

Converting VOC system from RTO to RCO
Implementing Fab : 12i
Estimated Outcome 94Mwh

Reducing HDI usage
Implementing Fab : 12A
Estimated Outcome 1,581Mwh

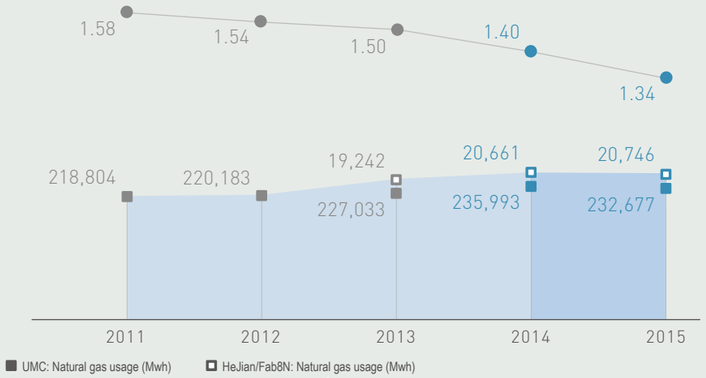
Natural gas saving during Fab annual maintenance
Implementing Fab : 8F,12A
Estimated Outcome 23Mwh

Total gas conservation in 2015: 11,652Mwh
CO2 emission reduction equivalent: 2,292ton

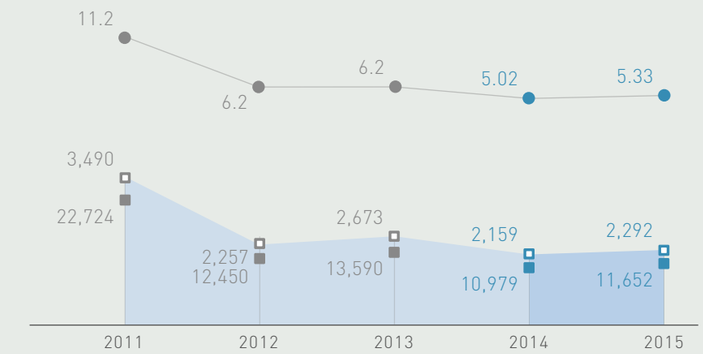
Natural gas reduction objectives:	Natural gas reduction reached:	Cost savings in 2015:
3.38% reduction in 2015 Base Year:2012	5.33% in 2015	About 18 million

Note1: For newly added improvements, performance was only calculated for 12 months. Projects that span multiple years shall be counted towards performance for 2016.
Note2: The gas conservation amount estimated by the energy conservation measure is a theoretical amount. The CO_2 emission coefficient of the 2006 IPCC fixed and mobile resource (gas) and gas caloric value from the various local factories are also incorporated into the carbon emission calculation.
Note3: The gas carbon equivalent for Taiwan's fabs = 1.879 $KgCO_2/M^3$
The calorific conversion coefficient for Singapore's (12i) Town Gas = 0.2021 $KgCO_2$/KWH

Past UMC Natural Gas Usage



Past UMC Gas Conservation Outcome



Note1: In 2015, the overall natural gas usage per wafer area for UMC and its subsidiary HJTC fab (8N) was 1.37 MWH / Wafer-m^2
Fabs in Hsinchu Science Park (6A, 8A, 8CD, 8E, 8F, 8S): natural gas calorific conversion coefficient = 0.010354 Mwh / m^3
Fabs in Southern Taiwan Science Park (12A): natural gas calorific conversion coefficient = 0.011284 Mwh / m^3
Fab in China (8N): natural gas calorific conversion coefficient = 0.008725 Mwh / m^3
Fab in Singapore (12i): LPG calorific conversion coefficient = 0.012695 Mwh / kg
Note2: Town Gas calorific conversion coefficient = 0.001 Mwh / Kwh(the unit gas calorific conversion coefficient is calculated according to the caloric value provided by the local fabs)

Energy Conservation for 2016

Add high and moderate temperature heat pumps
Implementing Fab : 8S,12A,12i
Estimated Outcome :
6,779Mwh

Natural gas usage reduction plans for 2016: 2.68% (according to 2015 standards).

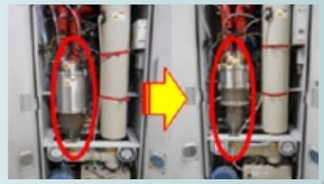
UMC shall continue to promote heat recycling and energy saving projects for high & medium temperature heat pumps which are expected to reduce gas usage by 6,779 MWh, which would be equivalent to carbon dioxide emission reductions of about 1,333 tons.

Energy Conservation for 2016

Introducing high temperature heat pump for the ultrapure water system in Fab 8A

Introducing medium temperature heat pump for the ultrapure water system in Fab 8CD

L/S retrofit & RFB upgrade to ULF in Fab 12A



Converting VOC system from RTO to RCO for Fab 12i

3-3 Water Risk Management

Recent climate changes have led to severe fluctuations in precipitation with more frequent floods and droughts. External stakeholders are also increasingly concerned about issues related to water resources. To respond to complex water resource issues on a timely basis and effectively integrate preventive, consumption reduction, contingency response, and other management concepts, UMC has successfully completed water risk factor identification and response measures. The UMC Water Resource Management Policy and Commitment was announced in 2015 to serve as our highest guiding principles for water resource management.

Water Management Policy and Commitment

Policy

Maximize water efficiency, increase ability of valuable downstream chains to withstand water risk, and promote the importance of water resources and conservation.

Commitment

- Introduce water risk management system
- Develop and utilize diverse water sources
- Use active management indicators to promote water conservation
- Cooperate with supply chains to reduce water footprint
- Provide open and transparent water information
- Widely promote water education

Identifying Water Risk Factors and Response

Regulations	▶ Regulations and control for wastewater quality / water discharge quantity ▶ Water charges	▶ Participate in government, unions and association seminars to share practical experience and advice ▶ Implement wastewater source diversion to enhance quality of wastewater ▶ Continue to assess new wastewater treatment technology ▶ Upgrade production efficiency to reduce water consumption and improve water recovery
Disaster	Heavy rainfall and flooding	▶ Improve flood potential and risk assessments ▶ Improve AIG Insurance audit ▶ Promote Corporate Sustainable Operations Management System (was awarded ISO 22301 certification) ▶ Globalize fabs and supply chain
	Global shortage of water resources	▶ Reduce pressure of water demand by increasing water recovery and reuse ▶ Use limited water resources efficiently ▶ Evaluate and introduce new water sources ▶ R&D of water resource warning devices
Others	Consumers, customers, investors and other stakeholders demand green products from businesses, and due to expanding influence to suppliers, energy consuming commodities are indirectly eliminated.	▶ Promote analysis and certification of life cycle of product environmental impact, and implement source reduction (UMC has been awarded water footprint certification, and continues to promote water conservation programs)
	Shortage of raw materials due to disrupted supply caused by floods.	▶ Assess suppliers' water risk

3-3-1 Factory Water Source

UMC uses water risk assessment tools developed by the World Resources Institute (WRI), and cooperates with Taiwan's water resource distribution to identify current proportion of factories located on water scarce regions and further water risk management strategies.

UMC's Main Source of Water for Each Plant

Hsinchu Science Park

6A,8A,8C,8D,8E,8F,8S

Water Source :
Baoshan Dam
Baoshan No. 2 Dam
Longen Weir

In addition to the existing water supply, the Shihmen Reservoir and Yongheshan Reservoir provide support mechanisms. Each year before the dry season, the Water Resources Agency convenes meetings to discuss the coming water risk to minimize the risk of water shortage.

Water Scarcity : Low

Tainan Science Park

12A

Water Source :
Nanhua Dam
Zengwen Dam

Water is mainly supplied by the Nanhua Reservoir. Between November to May of the following year is the annual dry season, and the Water Resources Agency regularly reviews risks and schedules water supplies when necessary.

Water Scarcity : Moderate-High

Singapore

12i

Water Source :
Singapore Newater reclaimed water

Newater reclaims and treats public waste water for reuse, and hence has a more stable source of water supply with lower risk.

Water Scarcity : Moderate

China

Subsidiary HJTC
8N

Water Source :
The main water sources for Suzhou's Taihu Lake are the Shaoxi in Tianmu Mountain in Zhejiang Province, and Jingxi in Liyang Mountain in Jiangsu Province

Taihu Lake has a water storage capacity of 2.72 billion tons, and is an abundant water source that provides stable water supply.

Water Scarcity : Low

Note: The WRI (Water Resource Institute) Aqueduct Tool is used to assess water risk.
http://www.wri.org/our-work/project/aqueduct/aqueduct-atlas

Review and Analysis Showed that UMC Fabs Use Less than 5% of the Water in Their Respective Regions, and Hence have no Significant Impact on Water Resources.

	UMC water consumption	Regional water consumption	Impact of UMC consumption
Hsinchu Science Park	17,900 tons/day	520,000 tons/day	3.40%
Tainan Science Park	12,400 tons/day	820,000 tons/day	1.50%
Singapore	8,600 tons/day	450,000 tons/day	1.91%
China	5,400 tons/day	1.1million tons/day	0.49%

Note1: Fabs in Hsinchu Science Park, Tainan Science Park, China Suzhou: provided by water company.
Note2: Singapore fab: Based on PUB website information. Water meter readings are recorded daily, and based on average monthly water usage, annual water consumption is calculated.

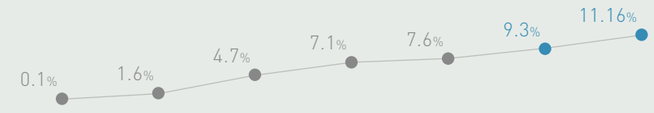
3-3-2 Water Quality Risk Control

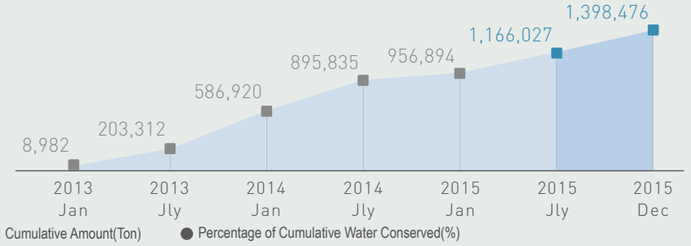
Before entering the fabs, water is first tested with pH devices and continuously monitored with a conductivity meter to ensure stable quality. Each stage of the water purification is tested with relevant devices to ensure reliable water quality.

3-3-3 Water Conservation During Manufacturing

UMC's first principle of water consumption is designing a water conservation process, followed by recovering water for reuse and implementing highly efficient water management. To effectively reduce water resource consumption, all three principles must be integrated. In addition to conserving water, the company also actively participates in the Science Park Administration's water management indicator formulation and annual manufacturer water conservation counseling and technology exchanges. To ensure a secure water supply, the company also participates in the Water Resources Agency's water shortage contingency measures for water source stabilization and eutrophication. Impacted by global climate change, UMC strives to promote energy conservation and carbon reduction activities, and include them in its management policy. Hence water conservation and improvement activities are ongoing to provide further opportunities for company growth.

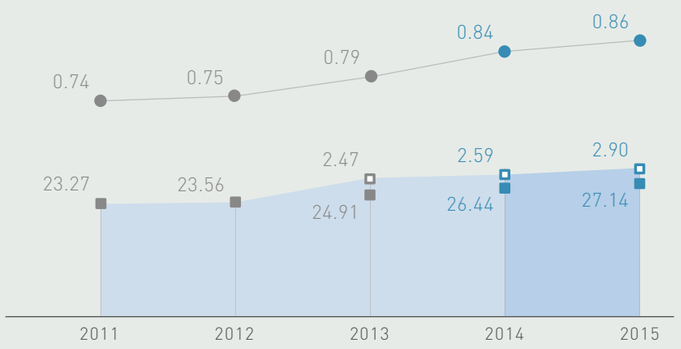
UMC 2013-2015 Water Conservation





As shown in the diagram below, in 2015, UMC company-wide recovered water that totaled 27.14 million tons, which is equivalent to conserving 0.86 of Baoshan Reservoir 2:

UMC and Its Subsidiary HTJC Water Conservation in the Last 5 Years.



Note: 1. In 2015, total recycled water of UMC, including its subsidiary HJTC fab (8N) was equivalent to conserving 0.95 of No. 2 Baoshan Reservoir
2. No. 2 Baoshan Reservoir is the main water source for the Science Park. Its full water storage capacity is 31,471,800 tons. (Source: Ministry of Economic Affairs Water Resources Agency February 2016 Water Storage Report)

Percentage and Total Volume of Water Recycled and Reused

Using 2012 as the base year, UMC set 6% as the 2013-2015 working target for water conservation.

In 2015, new improvement measures resulted in 454,000 tons of conserved water, which is a gain of NT11 million (note 1), and represents 3.6% of the total water consumption in 2012. Totaling the 1,398,000 tons of water conserved from 2013 to 2015, which is a gain of NT$34.9 million, the cumulative water conserved represents 11.2% of the total water consumption in 2012. In 2015, the subsidiary HJTC (8N) conserved 6,800 tons of water, which is a gain of about RMB¥ 23,800.

Note: Gain Calculation
UMC: water charge + wastewater charge = NT$25/ton
Subsidiary HJTC: Water cost: RMB¥ 1.91 / ton
Wastewater cost: RMB¥ 1.59 / ton

Due to its past promotion of water conservation, reduction and recycling measures, and its high recovery rate in the manufacturing process, UMC's current water recovery has exceeded the newly increased total water intake. Total water recovery and reuse could reach more than 180% of water intake.

Percentage of Water Recovery and Reuse to Total Water Intake.

Note1: Amount of recovered water is calculated using cumulative flowmeter or floating flowmeter
Total water intake includes tap water + rain water + condensate.
Note2: Tap water: Water meter readings are recorded daily, and based on average monthly water usage, annual water amount is calculated.
Rain water/Condensate: Annual water amount is calculated using flowmeters and estimates.

New Improvement Measures and Outcomes in 2015

Expansion LHF System Implementing Fab : 8E	Planned Amount of Conserved Water (ton) 61,200
Increase LSR Supply System Implementing Fab : 12A	Planned Amount of Conserved Water (ton) 60,800
Expansion LSR Supply Piping Implementing Fab : 12A	Planned Amount of Conserved Water (ton) 60,600
SWT (C3 Type CuSOVT) Drain Water Reclaim to LDI Implementing Fab : 12A	Planned Amount of Conserved Water (ton) 34,384
W- Solvent Drain Water Reclaim to LDI Implementing Fab : 12A	Planned Amount of Conserved Water (ton) 28,251
ROR Divert to Raw Water Pit Implementing Fab : 12i	Planned Amount of Conserved Water (ton) 27,600
Expansion LSR System Implementing Fab : 8F	Planned Amount of Conserved Water (ton) 27,550
Stop Washing of CS IPA Scrubber Washing Implementing Fab : 8A/8CD/8E	Planned Amount of Conserved Water (ton) 26,776
Slurry W-water Reuse Implementing Fab : 8E	Planned Amount of Conserved Water (ton) 22,000
Increase Makeup Air Unit Condensate Implementing Fab : 8S	Planned Amount of Conserved Water (ton) 12,476
Others	Planned Amount of Conserved Water (ton) 92,101

Note: Only 12 months of performance are included for the new improvement items. Only outcomes in 2015 are included in multi-year plans.

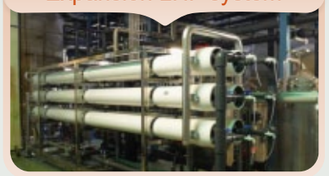
Improvement Activity Photos

Expansion LHF system

Expansion LSR supply piping

Ultra filter- brine water reuse

Expansion LHF system

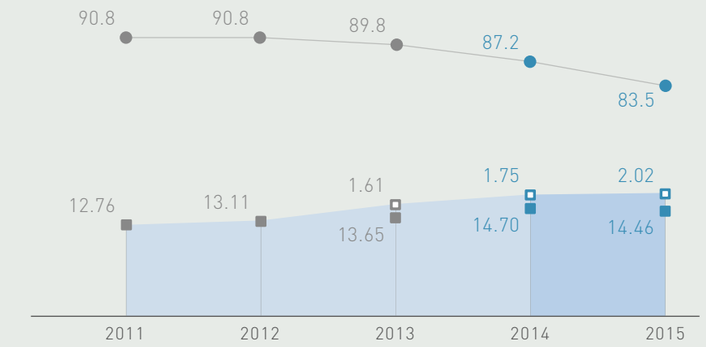


Total Water Intake

UMC strives to improve its water conservation and increase its water efficiency and value, and reduce the environmental impact on water source, reduce water consumption replenishment, and use tap water as the primary source, supplemented by rainwater and condensate.

In 2015, total water usage in UMC amounted to 14.46 million tons, which included public water, condensation water, and acquired rainwater.

UMC and Its Subsidiary HJTC Total Water Intake from Tap Water, Condensate and Rainwater in the Last 5 Years.



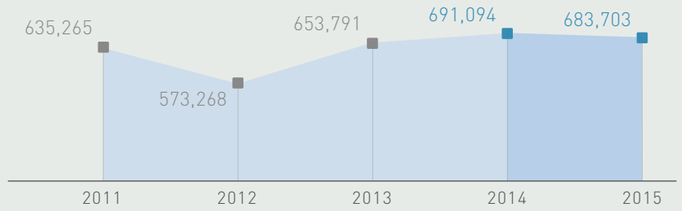
■ UMC: Total water intake amount (Mm^3) □ HeJian/Fab8N: Total water intake amount (Mm^3)
● UMC: Total water intake amount per production capacity (Mm^3 /Wafer-m^2)

Note1: In 2015, the overall water intake amount per wafer area for UMC and its subsidiary HJTC fab (8N) was 84.41 m^3/Wafer-m^2
Note2: 2015 UMC tap water consumption: 13,831,000 tons; condensate + rain: 625,000 tons
Note3: 2015 8N tap water consumption: 1,964,000 tons; condensate + rain: 59,000 tons
Note4: Total water intake includes tap water + rain + condensate:
Tap water: Water meter readings are recorded daily, and based on average monthly water usage, annual water amount is calculated.
Rain/condensate: Adopts methods of flow meter and estimation to calculate annual water amount.

Rain Water and Condensate

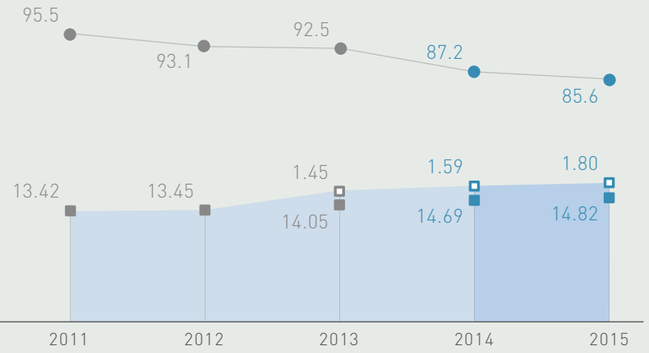
Rain and condensate are precious natural water sources, but are easily subjected to seasonal climate changes, and therefore account for only 5% of total water consumption. If efficiency can be improved, the environmental impact on water sources can be reduced.

UMC Rainwater and Condensate Recovery in the Last Five Years



■ Rainwater and condensate recovery amount (Ton)

UMC and Its Subsidiary HJTC Purified Water Consumption in the Last 5 Years.



■ UMC: Purified water consumption (Mm^3) □ HeJian/Fab8N: Purified water consumption (Mm^3)
● UMC: Purified water consumption per production capacity (Mm^3 /Wafer-m^2)

Note: In 2015, the overall purified water consumption per wafer area for UMC and its subsidiary HJTC fab (8N) was 85.2 m3/Wafer-m2

Water Conservation Improvement for 2016

Water Conservation Measure	Implementing Fab	Planned Amount of Conserved Water (ton)
Low HF Waste Water Reclaim System	8A	100,900
Increase Acid Waste Reclaim System	12A_2	46,560
Upgrade Pump's Capacity of LSR System	8CD	36,600
Purify CMP Reclaim System	8CD	34,240
CMP Waste Water Reuse to Local Scrubber	8S	14,640
Alkaline Drain Reuse to Acid Scrubber	8E	12,250
Stop Washing of CS IPA Scrubber Washing	8CD	11,796
MMF & AC Backwash Recycle	12A_3	10,057
Active Carbon Backwash Recycle	12i	9,200
Others		29,050

Continuing improvements were enacted for potential water saving measures. However, the availability of new water saving measures continued to dwindle which poses an increasingly difficult challenge for water conservation efforts. UMC therefore listed the following Phase 3 Water Conservation Challenge Objectives based upon 2015 levels:
2016 to 2020: Water usage per unit area to be reduced by 10%

Industrial Exchange and Counseling

In addition to actively promoting water conservation within the company, UMC began participating in yearly water conservation counseling organized by science parks in 2002, and as of 2015, the company has handled 161 cases and counseled a total of more than 80 manufacturers. The company shares its valuable water conservation experience with like industries to help reduce water demand, and using 2015 as an example, potential water conservation following counseling was 810,000 tons / year.

3-3-4 Water Pollution Control

Water Pollution Control

Among process reduction, waste diversion and categorization, the priority in UMC's water pollution control strategies are process source reduction, waste liquid diversion, followed by categorization. In its new fab areas, there are up to 27 categories of wastewater diversion, which are further divided into solvent-based and high or low flash point for resource recovery or incineration while inorganic acids are reused. For multiple re-use, wastewater is categorized according to characteristics to maximize water resource efficiency and simplify wastewater composition. Finally, wastewater is treated in the fab's wastewater treatment facilities according to the control standards of the Science Park Administration before being discharged into the science park sewage systems. For real-time monitoring and response, equipment for continuous monitoring of water quality (pH, fluoride ion concentration) and water quantity are installed, and SPC management is adopted for self and early prevention to ensure that the quality of water discharged into park sewage complies with control regulations. In addition, the Science Park Administration conducts monthly unscheduled and random quality inspection of water discharged by the different companies to reaffirm the quality of discharged water.

UMC and Its Subsidiary HJTC Wastewater Discharge

Hsinchu Science Park Fabs	Tainan Science Park Fabs	Singapore Fab	China Suzhou Fab
6A.8A.8C.8D.8E.8F.8S	12A	12i	8N
Impact (%) 11.6%	Impact (%) 8.50%	Impact (%) 0.83%	Impact (%) 0.52%
Discharge Amount 1,2400tons/day	Discharge Amount 7900tons/day	Discharge Amount 6600tons/day	Discharge Amount 4700tons/day
Current Treatment Amount 10,7000tons/day	Current Treatment Amount 9,2500tons/day	Current Treatment Amount 800000tons/day	Current Treatment Amount 900000tons/day
Discharged into drainage Ke-Ya River	Discharged into drainage Yanshuei River	Discharged into drainage Industrial re-use	Discharged into drainage Wusong River
Treatment Department Hsinchu Science Park Administration sewage treatment plant	Treatment Department Tainan Science Park Administration sewage treatment plant	Discharged into drainage South China Sea Treatment Department Public Utilities Board (PUB)	Treatment Department Suzhou Industrial Park, Hua Yan Water Ltd.

Note1: Treatment Amount(10,000 tons/day)
Hsinchu Science Park fabs / Tainan Science Park fabs : Ministry of Science and Technology Statistics and Data Bank
Singapore fab : Based on PUB website information.
China Suzhou fab : Hua Yan Water Ltd. sewage treatment plant data

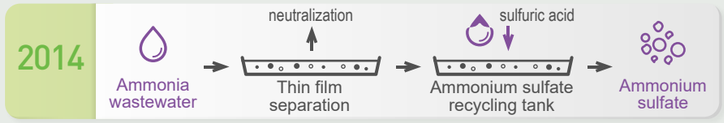
Note2: Discharge Amount(10,000 tons/day)
Hsinchu Science Park fabs / Tainan Science Park fabs : Water meter readings are recorded daily, and based on average monthly water usage, annual water consumption is calculated.
Singapore fab : Based on daily record & accumulation
China Suzhou fab : Water meter readings are recorded daily, and based on average monthly water usage, annual water consumption is calculated.

Sewage Treatment

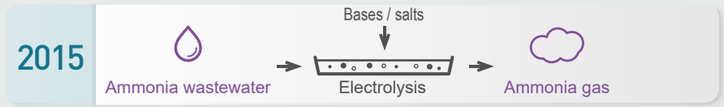
Reducing process source is the first priority in UMC's water pollution prevention strategy, followed by waste liquid diversion, then categorization. The new fab areas have up to 27 categories of wastewater diversion. Wastewater is recovered or incinerated according to high or low flash points while inorganic acids are reused. For multiple re-use, wastewater is categorized according to characteristics to maximize water resource efficiency and simplify wastewater composition. Finally, wastewater is treated in the fab's wastewater treatment facilities according to the control standards of the Science Park Administration before being discharged into the science park sewage systems.

To fulfill our corporate social responsibilities, UMC has continued to invest in the R&D of wastewater treatment technologies. In recent years, we introduced advanced ammonia nitrogen wastewater treatment techniques to reduce pollution burdens of water bodies.

In 2014, STSP Plant 12A introduced thin film separation technologies and a processing system capable of converting ammonia nitrogen in wastewater into ammonium sulfate.



In 2015, UMC successfully developed the latest electrolytic technology capable of breaking down ammonia wastewater into nitrogen gas.



Wastewater Discharge

For real-time monitoring and response, equipment for continuous monitoring of water quality (pH, fluoride ion concentration) and water quantity are installed, and SPC management is adopted for self and early prevention to ensure that the quality of water discharged into park sewage complies with control regulations. In addition, the Science Park Administration conducts monthly unscheduled and random quality inspection of the water discharged by different companies to reaffirm the quality of discharged water.

In addition, each factory also regularly subcontracts wastewater tests for long-term monitoring of wastewater quality to ensure that the quality of wastewater from each plant complies with local effluent standards.

Monitoring Index

Taiwan — Hsinchu Science Park : 6A.8A.8C.8D.8E.8F.8S; Tainan Science Park : 12A

Hydrogen ion concentration index, water temperature, chemical oxygen demand, suspended solids, ammonia, cyanide, total chromium, cadmium, hexavalent chromium, zinc, nickel, copper, total mercury, lead, arsenic, nitrate anion interface active agents, boron, fluoride salt

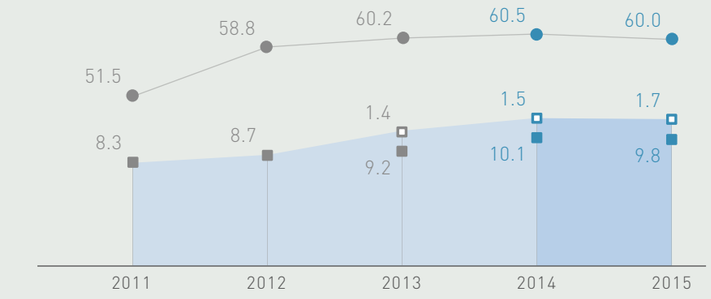
Singapore — 12i

Biochemical oxygen demand, chemical oxygen demand, total suspended solids, total dissolved solids, chlorides, sulfates, sulfides, cyanides, detergents (LAS silver), oils, arsenic, barium, tin, iron, beryllium , boron, manganese, phenolic compounds, fluoride, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, zinc, ammonium, acetone

China — 8N

Hydrogen ion concentration index \ fluoride \ suspended solids \ chemical oxygen demand \ ammonia \ total phosphorus \ volatile phenols \ petroleum

Wastewater Amount and Discharge Per Unit Wafer Surface Area



■ UMC: Wastewater amount (Mm^3) □ HeJian/Fab8N: Wastewater amount (Mm^3)
● UMC: Wastewater amount per production capacity (Mm^3 /Wafer-m^2)

Note:In 2015, the overall wastewater amount per wafer area for UMC and its subsidiary HJTC fab (8N) was 59.0 m^3/Wafer-m^2

3-3-5 Ammonia Wastewater Improvement

Science park bureaus included ammonia and tetramethylammonium hydroxide (TMAH) in wastewater controls. In 2013, various UMC plants in HSP began implementing projects for reducing nitrogenous wastes and achieved remarkable outcomes. To further reduce the concentration of nitrogen in discharged wastewater and reduce the hazards inflicted on the receiving water body, UMC continued to implement HSP / STSP Plant Ammonia Wastewater Source Reduction Project Phase 2 and built an ammonia wastewater treatment facility at the STSP Plant in 2014.

The HSP / STSP Plant Ammonia Wastewater Source Reduction Project Phase 2 was completed in 2015. Major measures undertaken in 2015 included:

- Continuing implementation of Ammonia Wastewater Source Reduction Project Phase 2

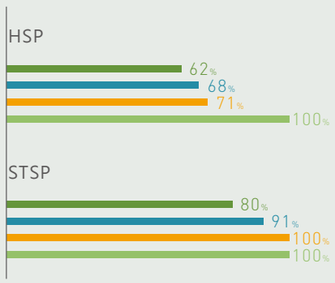
2015 Additional Ammonia Reduction Measures and Outcome

Process source reduction Ammonia Reduction (Kg-NH3-N/day)	
Hsinchu Science Park Fabs	12A
61	65
Total 126	

Second Phase of the Ammonia Source Reduction

This project was mainly conducted to reduce the concentration of aqueous nitrogen used during processing and to shorten rinsing time. Measures included meticulous changes to processing, long-term observation and verification, and validation to ensure that products are not affected by the revised process before it was officially released and used as standard practice. The project took 18 months (from January 2014 to June 2015) to complete. The scope of reduction efforts was also expanded to include the 12-inch wafer fab at STSP (Fab 12A). Ammonia Wastewater Source Reduction Project Phase 2 was completed in 2015. HSP and STSP plants achieved reductions of 38% and 20% respectively when compared to levels used in 2012.

Reduction of Ammonia Wastewater



■ June 2015 (after Phase 2 improvements)
■ 2013 (after Phase 1 improvements)
■ 2014 (Phase 2 improvements ongoing)
■ 2012 (before improvement)

Note: In 2013, the fabs in Southern Taiwan Science Park did not execute the Stage 1 reduction.

Assess and Construct Ammonia Wastewater Treatment Facilities.

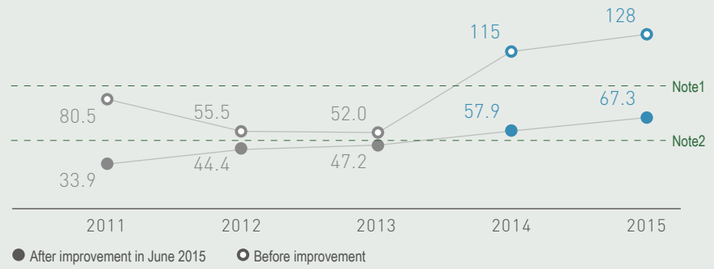
Since discharged wastewater from Fab 12A has a higher ammonia concentration, in addition to promoting ammonia source reduction in 2014, assessment and construction plans for an ammonia wastewater treatment facility were completed. When operation began in 2015, the fab met the Science Park Administration Sewage Management standards for discharged wastewater.

Project Benefits

Economic Benefit	Economic Benefit	Environmental Benefit
Cumulative Gain as of June 2015	Cumulative Gain as of June 2015	Cumulative Gain as of June 2015
Raw Material	Wastewater Charges	wastewater ammonia concentration
Saved NT$ 40 million/year	Saved NT$ 180 million/year	reduction 9%~58%

Note: Includes gains from the Stage 1 reduction in 2013.

Ammonia Concentration in Discharged Water



● After improvement in June 2015 ○ Before improvement

Note1: Tainan Science Park 90mg/L control standard
Note2: Hsinchu Science Park 50mg/L control standard

3-4 Green Product

As a global citizen, UMC must assume its duty and join with suppliers and customers to pursue green products. With today's rising environmental consciousness, the company is professionally committed to providing customers and consumers with more advanced, energy efficient and environmentally friendly products, and strives to reduce resource consumption and unnecessary pollution in its production. As an intermediate producer and trusted partner, and given customer demand for more advanced designs and widespread daily applications in changing products such as computers, communications and consumer electronics and industries, UMC fulfills its contribution and commitment to progress through its products. While pursuing profit and development, UMC also expects to become the nation's green model for sustainable business and a blessing to the people.

To ensure compliance with international environmental regulations such as the EU Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Directives (EU RoHS), and meet customer demand for hazardous substance control, UMC has led the industry in implementing third-party verification of hazardous substance management and regular impartial third-party product testing for harmful content to prove product safety and non-toxicity. In addition, to further fulfill its green product responsibility, UMC has also completed carbon footprint and water footprint verifications to reduce the environmental impact of manufacturing.

UMC Green Product Considerations / Implementation

Environmental impact of product use and maintenance	Developed wafer products with lower carbon emissions and energy consumption.
Environmental impact of products	Installed a variety of effective pollution control equipment in production base.
Environmental impact of raw materials	Assessed environmental impact of raw materials.
Environmental impact of parts procurement	Implemented green procurement.
Reusable design for dismantling assembled products / components	Maintained unity in wafer raw materials and products.
Recyclable design for residual material	Maintained unity in wafer raw materials and products.
Reduction of hazardous substances	Promoted clean production.
Weight reduction	Continue to research and develop advanced processes.
Use of recycled components	Promoted recycling.

3-4-1 Hazardous Substance Management

Through the QC 080000 Hazardous Substance Management System, UMC ensures that its products not only comply with the EU list of controlled substances (such as the EU RoHS) and global chemical regulations and standards, but also meet customer needs. Several years ago, UMC established the inter-departmental Hazardous Substances Process Management committee (HSPM committee) to enhance the effectiveness of green product management.

Hazardous Substance Free Policy

By instilling employee awareness and ensuring control and technological upgrades in design and production, the company produces Hazardous Substances Free Control products that meet regulations and customer demands, thereby fulfilling its duty as a global citizen to protect the environment and human health and safety.

Hazardous Substance Free Goals

1 No products were disposed of as a result of regulation violation or customer demand.

2 Zero VOC and zero violation.

Hazardous Substances Process Management Committee Organizational Chart

UMC Response to Global Standards and Trends on Hazardous Substance Management

EU Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Directives (EU RoHS)

- Able to comply with the requirements

Halogen-free Requirement

- Able to comply with the requirements

EU Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals. (EU REACH)

- Able to comply with the requirements

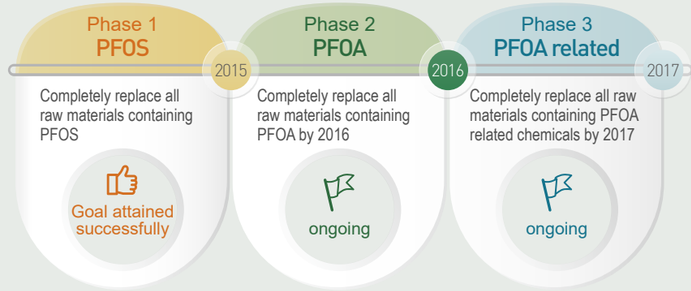
EU Waste of Electrical and Electronic Equipment (WEEE)

- These regulations do not directly apply to UMC as UMC manufactures semiconductor chips which are not end products.
- The end product dealer is the one responsible for recycling end products containing semiconductor components which are discarded as waste after use.

Control of Persistent Organic Pollutants (POPs)

- UMC initiated independent replacement efforts for PFOS, PFOA, and PFOA related chemicals which are areas of concern in both Taiwan and other countries.

Usage Reduction Project and Objectives for PFOS, PFOA, and PFOA Related Chemicals



UMC Hazardous Substances Management

Established a list of controlled hazardous substances

Controlled substances are listed according to international environmental regulations and major customer demand. In response to international regulations, product ranges are gradually modified and expanded, and the list of controlled hazardous substances gradually increased. As of 2015, UMC has compiled a list of about 400 controlled chemical substances.

Constructed a new system for evaluating raw materials

To effectively manage new materials used in newly developed manufacturing, UMC has constructed a sound process for evaluating new materials to determine if they are banned/ controlled toxic or hazardous substances and fully determine their impact on environmental safety and health.

Established a procedure for procuring green raw materials

- The electronic procurement system is an important UMC system for implementing the management of green procurement. Prior to shipping, suppliers upload the test reports of each batch of goods onto this system so that UMC can determine in advance its compliance with regulations and respond accordingly.
- Controlled hazardous substances are included in material testing. Any raw material that violates controlled provisions is disqualified and returned. In addition, suppliers are requested to immediately propose corrective and prevent measures to avoid recurrence.
- Vendor guarantee contract required: Third party test reports must be submitted when necessary to ensure that their products comply with environmental regulations.

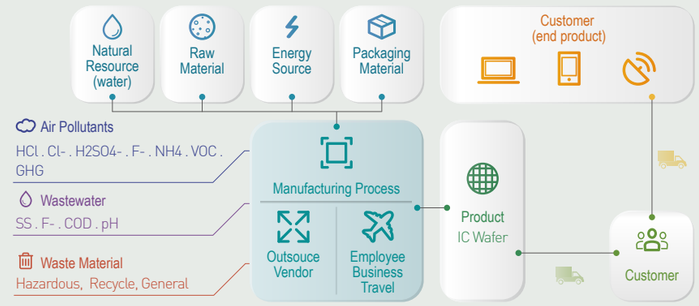
Certification of hazardous material management system and product testing

- Several years ago, UMC established the inter-department Hazardous Substances Process Management committee (HSPM committee) to enhance the effectiveness of green product management
- In 2006, UMC led global semiconductor manufacturers in completing 3rd party verification of the Hazardous Substance Process Management (HSPM), and became the world's first foundry to achieved international QC080000 IECQ HSPM certification for semiconductor manufacturers. Furthermore, its subsidiary HJTC (8N) fab also completed 3rd party verification at the end of 2014.
- An impartial third party laboratory regularly tests products for hazardous substance content to ensure that the products comply with global regulations.

3-4-2 Life Cycle Assessment (LCA)

Since 2005, UMC has fully implemented LCA in all its fabs. Comprehensive cradle-to-gate (UMC shipment) inventoried items include energy, raw materials and environmental pollutant emissions. Using the Simapro software, results of the entire supply chain and manufacturing inventory are analyzed for environmental impact. Attention is kept on the environmental impact of the company's products, and improvements in management of the environmental management system are made accordingly.

Diagram of Semiconductor Product Lifecycle Concept



3-4-3 Carbon Footprint

As an upstream industry, providing customers with quality environmentally friendly products that comply with environmental protection regulations has always been one of the most important UMC operational philosophies. UMC strives to implement a comprehensive carbon management plan. In addition to its internal greenhouse gas emissions inventory and verification, the company also promotes the carbon footprint inventory program.

History for Promoting Carbon Footprint Management

2009

In 2009, delivered the world's first certified carbon footprint wafer product; completed Type III Product Environmental Labels and Declarations verification.

2011~2014

UMC participated in the EU Seventh Framework Programme (FP7) from 2011 to 2014 and worked with both private industries and academia to research and develop approaches and tools for a Simplified Life Cycle Assessment (SLCA) system, allowing our clients to quickly and conveniently predict product carbon footprints.

2015

In 2015, the carbon foot print was promoted according to the UMC LCA-to-go Project implementation content.

3-4-4 Water Footprint

UMC recognized the importance of water as a natural resource very early on. Water resources are particularly important in Taiwan due to its mountainous topography, heavy rainfall along the mountain slopes, dense population, and extensive industrial and commercial developments. UMC complies with the Business Water Footprint Accounting standards developed by Water Footprint Network, an international NGO. In 2010, we completed business water footprint verification for our 8-inch and 12-inch wafer fabs and identified that water usage during direct processing was greater than that of the indirect supply chain. Blue water and gray water were the main sources of water used. In 2015, UMC began working with our suppliers to complete ISO 14046: Water Footprint Assessments of various products manufactured by UMC plants.

Assessment Outcomes of 2015

Water usage / wastewater generation of UMC was **90%**

suppliers were responsible for **10%**

Future Directives

01 Continue to improve water usage efficiency (WUE) within the plant, and reduce both water usage / wastewater generation to directly reduce water footprint of our products.

02 Work with suppliers to improve overall WUE of the entire supply chain to achieve joint water conservation and protect our planet.

Diagram of Water Footprint Concept

Note: Green Water: Rain and condensates are water sources that can be directly used.
Blue Water: Surface or underground fresh water source
Gray Water: Dilute contaminated production gray water to a level exceeding water quality standard.

3-5 Green Concepts

UMC Global Green Day was held on April 20, 2015. Every business location of UMC celebrated the event by initiating green activities as well as an Environmental Protection Month that was filled with educational activities.

UMC Fab 12A's tree planting event was a key activity of this celebration. Concepts of greenhouse gas (GHG) reduction and carbon neutrality were promoted. Peripheral activities included preparations before the event, the event itself, and post-event processing. The trees provided a biological component for supporting various GHG emission controls implemented by UMC while allowing UMC to transfer its carbon credits and achieve carbon neutrality.

Strategies for Reducing Carbon Emissions in this Event

01 Make maximum use of natural lighting in order to reduce energy consumption from artificial illumination.

02 Promote carpooling or use of public transportation systems for guests wishing to attend this event.

03 Prepare meals using seasonal and local produce to reduce carbon emissions from production, packaging, and transportation of food.

04 Reduce the use of décor and other setup props. Use existing plants grown in the company to decorate event venues.

05 Promotional materials and letters of invitation were delivered digitally.

Cover Page for the Declaration and Verification of Carbon Neutrality

Contents and Results of Various Activities

Primary Earth Day Event - Tree Planting and A nnouncement of Green 2020 goals.

UMC initiated its carbon neutrality management plan where the CEO led upper management and fellow employees to plant saplings that symbolize green hope in the surrounding areas of the Fab 12A Phase 5 site while announcing UMC Green 2020 objectives. These activities not only demonstrated our commitment to sustainable environment, but also achieved actual reductions to carbon emissions.

Eco-tours

Hsinchu and Tainan fabs each organized an eco-tour, with the HSP Plant working with The Society of Wilderness (SOW) while the TSP fab worked with eco-tour education guides at various villages. A total of 97 individuals participated in the event which was designed to improve awareness for ecological and environmental conservation.

Green Finger

The theme of the course is to encourage employees to Grow Your Own Wholesome Vegetables, teaching fellow employees to plant small potted plants to support environmental protection while caring for their own health. 3 training sessions were held for a total of 135 participants.

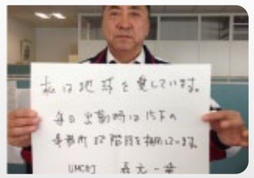
Recycling Station

The Station was established in support of the resource recycling activity implemented by the Hsinchu County Environment Protection Bureau and encouraged fellow employees to recycle domestic trash, prevent environmental pollution, and achieve direct and substantial benefits to environment protection. A total of 275 kg of used batteries and used CDs were collected. Prizes obtained in the event were donated to the UMC Science and Culture Foundation.

Various Activities and Their Respective Outcomes in Overseas Affiliated Companies and Branches

Singapore 12i Plant - Earth Day Beach Cleaning Activity

Japan Office - Earth Day Global Protection Pledge Event



China Subdiary He Jian Technology Fab 8N Plant - Earth Day tree planting activity

US Office - Earth Day low carbon vegetarian activity

4 Sustainable Development-Society

4-1 Labor Rights

4-2 Recruitment and Cultivation

4-3 Health and Safety Workplace

4-4 Community Service

93.1%

overall satisfaction with the courses.

In 2015, a total of 9,725 courses were held that were attended by a total of 281,732 individuals. Overall satisfaction for these training courses was 93.1%, while satisfaction for the lecturer and teaching materials attained 93.2% and 93.0% respectively.

100%

Holistic Health Management Program.

Created a safe working environment, and protected health and work-life balance of employees.

0

labor dispute

Actively promoted harmonious labor relations to reduce the likelihood of labor conflict. In 2015, there was no case of labor dispute.

100%

communication meetings were completed

By the end of 2015, a total of 120 sessions of company-wide forums (4 sessions), fab communication meetings (71 sessions), secretary forums (8 sessions), labor-management conferences (33 sessions), and Benefits Committee Meetings (4 sessions) were conducted.

89.3%

of the employees identified with cohesion.

In 2015, up to 89.3% identified with a sense of cohesion.

93%

satisfaction with health promotion activities.

On the average, 93% satisfaction with health promotion activities such as health seminars, relaxation series and health check activities.

Major Material Social Issues

There were three major categories of material social issues in 2015: (1) Occupational Safety and Health (2) Employee Communication (3) Training and Education

Indicator	2015 Goal	Compliance for 2015	2016 Goal
Occupational Safety and Health			
Number of Incidents Company-wide	0 major incidents. ≦ 11 minor incidents	● 0 major incidents and 11 minor incidents across the company.	0 major incidents≦11 minor incidents.
Pass the OHSAS 18001 Management System Certification.	Pass annual certification.	● Passed the annual OHSAS 18001 Management System Certification.	Pass the annual OHSAS 18001 Management System Certification.
Employee Communication			
Organizational Identity and Cohesion.	85% achievement in employee identification and cohesion.	● Achieved 89.29% employee identification and cohesion.	Implement corporate cohesion and identity. 87% achievement in employee identification and cohesion.
Strengthen Diversity of Communication Mechanisms to Ensure Harmonious Labor Relations	100% achievement in communication Feedback closure rate for employee opinions: 100%	● Achieved the annual goals for various occupational health indicators. Won CommonWealth Magazine's Corporate Citizenship Award for 4 consecutive years, and listed in DJSI for 8 consecutive years.	Maintaining an open and transparent communication channel to promote employer-employee harmony. 100% achievement in communication. Feedback closure rate for employee opinions: 100%.
Ensure Compliance with the Spirit and Standards of International Human Rights.	Ensure compliance with the spirit and standards of international human rights. 100% achievement EICC labor/code of conduct training.	● Dedicated EICC organization has continued to support the spirit and conventions for human rights. Results of quarterly reviews showed zero incidents of ethical violations. Achieved 100% EICC labor/code of conduct training.	Ensure compliance with the spirit and standards of international human rights 100% achievement EICC labor/code of conduct training. Promote the spirit of EICC amongst subsidiaries.
Implement Responsible and Customer-oriented Behaviors to Fulfill Organizational Mission.	100% achievement in the formulation of team cooperation incentive mechanism.	● Completed the standardized incentives mechanism. Implemented the Responsibility and 7 Habits programs. The 7-Habits program is ongoing (82.3% of managers and 95.0% of employees have completed the 7-habits training)	Continue to strengthen the implementation of core values and training.
Training and Education			
Training for Professionals with Potential.	Course training completion rate: 100%. Subsequent action plan completion rate: 100%.	● Course training completion rate: 100% Subsequent action plan completion rate: 100%.	Course training completion rate: 100%. Subsequent action plan completion rate: 100%.
Quality Improvement Team (QIT)	Establish 108 QITs	● Established 125 QITs	Establish 138 QITs.
Knowledge Management (KM)	90% achievement in KM reading. 70% achievement in writing penetration. 12% achievement in three stars KM document .	● Achieved 90 % in KM reading. Achieved 72.5% in writing penetration Achieved 15.1% in three stars KM document.	90% achievement in KM reading. 72% achievement in writing penetration. 12% achievement in three stars KM document

● Compliant ○ Non-compliant

Note1: Three stars KM document: Refers to KM document with large contribution and approved for inter-department sharing.

Note2: The various annual indicators are included in the company's and Corporate Sustainability Committee's KPI (Key Performance Indicator) and policy development, integrated with major company policies, and continually reviewed and improved.

4-1 Labor Rights

4-1-1 Human Rights

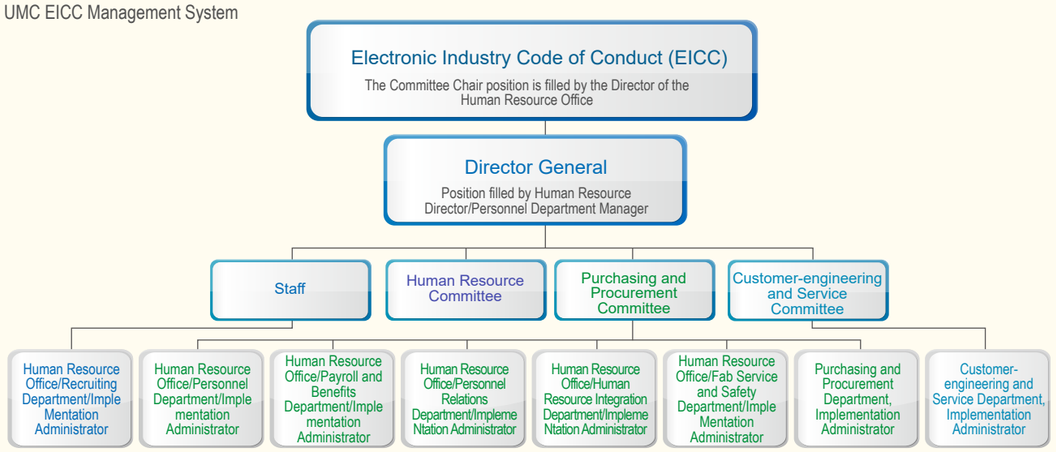
UMC Supports and Respects International Labor and Human Rights Regulations

- International Labor Office Tripartite Declaration of Principles
- The OECD Guidelines for Multinational Enterprises
- UN Universal Declaration of Human Rights
- The UN Global Compact
- Electronic Industry Code of Conduct, EICC

EICC Committee

To ensure a safe working environment and the basic labor rights of supply chain enterprises in the global electronics industry, UMC established the EICC Committee in 2013 to address issues pertaining to labor, health and safety, environment, ethics and management systems. The EICC Committee defines the tasks, authority and responsibilities of its members, develops relevant policies and performance goals, follows up on implementation, and conducts regular assessments and reviews.

UMC EICC Management System



Note: Please refer to the ISO & OHSAS 18001 14001 management systems and the UMC Environmental Safety and Health Management Committee operations for environment, health and safety.

UMC has established a comprehensive management system in compliance with EICC requirements and accepted 3rd party EICC audits commissioned by our clients. We also took the initiative to conduct internal reviews every year to achieve full compliance to EICC regulations for the purpose of ensuring that the rights of our employees are protected and continued to promote EICC and its core essences amongst our subsidiaries. To improve awareness for EICC-related regulations amongst fellow employees, EICC regulations were included as part of practical training courses for new employees. Every employee is also required to undergo self-training and assessments every year. Training courses and tests in Taiwan and Singapore were also completed in 2015. Additionally, UMC suppliers shall be subject to annual questionnaire surveys as well as site audits every year for compliance to EICC regulations. Suppliers are also required to demonstrate full compliance to EICC labor rights, health, safety, environment, ethics, and management system guidelines and standards.

EICC Mission

EICC Committee Tasks

- Promote EICC labor, business ethics and management system.
- Develop and approve policies and performance goals for labor, business ethics and management system.
- Ensure that labor, business ethics and management systems comply with local EICC regulations.
- Discuss and approve priorities for EICC labor, business ethics and management system implementation plans.
- Track and assist in implementation of EICC labor, business ethics and management system plans.
- Regularly assess and review EICC labor, business ethics and management system committee reports.

2015 EICC Implementation Outcome

- 100% of new staff completed the EICC labor / ethics training.
- 100% completion for annual EICC labor/ ethics training.
- 0 Number of cases of ethics non-violation in the quarterly reviews.
- 5 Scored less than 5 on the annual EICC labor /ethics Safety Threat Risk Index Note1

Note1: Safety Threat Risk Index=Consequence Level (1-5) X Likelihood Level (1-5); the higher the index, the greater the risk.

Human Rights Promotion

UMC places great emphasis on promoting EICC labor and business ethics policies. Through the company employee handbook and regular employee compliance inspections, the core content of labor, ethics and integrity, child labor, labor relations, forced labor, working hours and non-discrimination principles are emphasized. To protect labor rights and ensure that each employee receives fair humane treatment and respect, the "Complaints and Disciplinary Measures for Workplace Sexual Harassment Prevention" is compiled to provide a complaint channel and safeguard the rights and interests of women employees. In 2015, 100% of employees received a total of 8,463 hours of training in human rights.

UMC processes major job changes according to relevant provisions in Taiwan's Labor Standards Act, Singapore's Employment Act and China's Labor Contract Law. According to Taiwan's Labor Standards Law, to terminate a labor contract, an employer must provide advance notice: (1) 10 days' notice for employees who had worked continuously for more than three months but less than one year; (2) 20 days' notice for employees who had worked continuously for 1-3 years; and (3) 30 days' notice for employees who had worked continuously for 3 or more years.

In 2015, there was no case of human rights issues with UMC's operations, which are subject to required review by the local government.

UMC Emphasis on Core Labor Rights

Human Rights	Prohibition of forced labor and child labor, guaranteed working hours, wages and benefits, protection of human rights, non-discrimination and freedom to form associations
Ethics and Integrity	Honest operation, no improper gains, open information, intellectual property rights, fair trade, advertising, competition, anonymity, no conflict minerals, confidentiality, and no retaliation
Child Labor	UMC policy explicitly declares that children under the age of 16 may not be hired, and any act that may involve child labor is prohibited.
Labor Relations	Each UMC employee labor contract with the company is in accordance with local regulations.
Forced Labor	The employer-employee contract is signed according to labor laws. The contract is based on the premise that the employer-employee relationship is mutually consensual, with no forced labor or illegal human trafficking, and opposition to slavery.
Work Hours	All overtime is voluntary, and the company stipulates against overwork. The attendance system is set up for initiating reminders, and regular reviews and monitoring are also conducted. In addition, the company attends labor committee meetings at various factories to educate supervisors and employees.
Non-discrimination	UMC prohibits any overt or covert act of workplace sexual harassment and discrimination. Hiring, evaluation and promotion will not be based on race, gender, age, marital status, political affiliation or religious beliefs, and the same principles apply to cooperation with vendors.

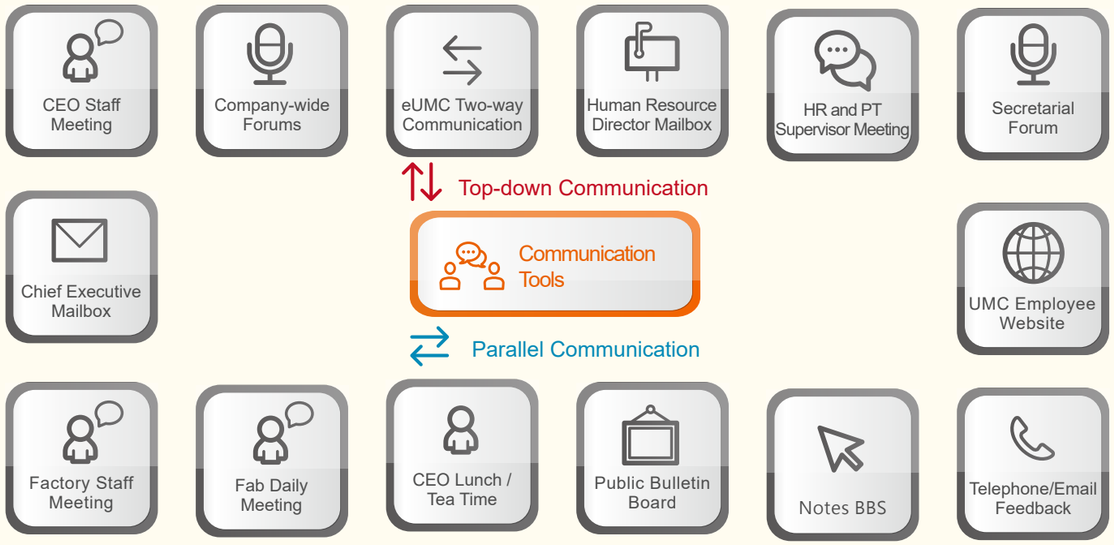
For relevant information, please refer to the UMC Code of Conduct on the company website http://www.umc.com/English/CSR/c_4.asp

4-1-2 Employer-employee Communication

Channels of Communication

Employee compensation and welfare have always been a top priority of UMC. UMC takes an active role in the training of skilled professionals, fulfilling labor laws, protecting the rights and interests of UMC employees, and building a transparent and enjoyable work environment. Communication channels such as employer-employee meetings, departmental meetings, conferences (management conferences and colleague conferences) as well as mail boxes were employed to achieve the goals of providing extensive communication channels to effectively solve any problem that may arise. The employees' rights to the freedom of association shall be based upon those prescribed by local laws. UMC respects the right of employees to choose whether or not to exercise rights without intervention or interference. He Jian Technology Company (HJTC) also established a comprehensive and diverse selection of communication channels in order to respond immediately, properly and positively to employee requests.

Important UMC Communication and Complaint Channel



UMC Communication Meetings

UMC (including Hsinchu and Tainan plants)

Company-wide Conferences (including Singapore)
Interactive, videoconference for 6 sites spanning multiple countries and regions hosted by the CEO himself, allowing UMC colleagues and external parties to review the latest company policies, directives, and performance.
Once every quarter. Implemented after the investor conference. **4**

Fab and Departmental Communication Meetings (including Singapore)
Share overall operational performance as well as developmental highlights of the plants and departments with the entire employee population.
Held every 6 months by each plant and department. **71**

Secretary Conference
The Human Resource (HR) department shall collect key topics and discuss them with the Secretariat. The Secretariat shall then discuss key issues of the meeting with fellow employees to achieve bidirectional communication.
Hsinchu Science Park / Southern Taiwan Science Park Secretariat Conference (4 times each). **8**

Employer-employee Meeting
The HR department shall delegate colleagues and employees familiar with relevant regulations to organize and assemble a multi-departmental and multi-functional inquiry team. The team shall follow-up on specified meeting topics and facilitate subsequent improvements for building harmonious employer-employee relationships.
Once every quarter; held in 9 fabs **33** Note1

Welfare Committee Meeting
The employee welfare activities as well as the usage of welfare funds shall be described to the welfare committee member delegated by each plant / site in the meeting every quarter.
Once per quarter. **4**

He Jian Technology (HJTC)

Employee Conference
Any problem encountered by the employee such as questions during work or challenges in the work place may be raised in the meeting. The supervisor or responsible owner shall provide an answer for the employee.
Once every month. **12**

Union-employee Conference
Communication and discussions with union members on employee welfare and employer-employee topics.
2 times per year. **2**

Secretary Conference
The Human Resource (HR) department shall collect key topics and discuss them with the Secretariat. The Secretariat shall then convey key issues raised during the discussion with fellow employees to generate a dialogue.
Once every month. **12**

Note1: Only held in the 1st Quarter for FAB 6A due to changes in the internal organization.

Promote and Establish Platforms for Communication and Appeals

To optimize and expand the advantages of real-time communication, UMC integrated and established the Communication Area—a platform dedicated to employee communication. The site content includes the Human Resource Director Mailbox, fraud and sexual harassment complaints, e-Suggestions for feedback, company-wide information forum, BBS message boards, IT information service mailbox, industrial safety mailbox, all kinds of forums, and UMC's website so that the various communication channels in the various operational bases can be integrated into a single platform for effective communication and promoting harmonious employer-employee relations. To protect the human rights of fellow employees, UMC also takes measures to protect the identity of employees who raised complaints or were affected by various issues to ensure the freedom and confidentiality of employees who submitted petitions. Among the various communication channels, the e-Suggestion feedback platform is most frequently used, and in 2015, 388 employee comments were received with 100% of the feedback responded to and closed.

"UMCWe Website" is an external website (internet) platform freely accessible to employees. Through this interactive communication platform, families, prospective employees, integrated benefits, associations and participating businesses are linked to strengthen the interaction between the organization and employees.

Employee Satisfaction Survey

Satisfaction surveys employed by UMC can be largely divided into regular surveys, project-focused surveys, or targeted surveys designed for specific issues. The current satisfaction survey system employed by UMC is relatively diverse and targets different goals and objectives. Specialized satisfaction survey systems were employed to ensure that authentic responses from the employees could be collected to initiate effective improvements.

Category of Satisfaction Surveys

Regular	HR satisfaction surveys (once every year), health check-up satisfaction survey
Project-Focused	Team cohesion project satisfaction survey, communication (and communication platform) satisfaction survey, and organizational climate surveys designed and implemented for targeted organizations
Specific Events	Event / topic-based surveys: Family Day, Parent-Child Day, and Art Season satisfaction surveys, training and development satisfaction surveys, and plant site affairs satisfaction surveys designed for various administrative and supporting services.

Implementation of HR Satisfaction Survey Project

84.68
2014 Overall Average Score

85.59
2015 Overall Average Score

Collection and response to various survey feedback will help management identify areas that require improvements in order to effectively resolve employee problems. HR satisfaction surveys were also used in project investigations that cover the aspects of employee hiring, remuneration and welfare, employee relations, plant site services and safety, HR services, training and development, logistics and commercial services. Semi-open questionnaires were used to collect survey responses from the entire employee population. Questionnaire items included quantified assessments as well as open-ended Q&A where employees can provide their own responses. Establishing a diverse selection of communication channels will help UMC to ensure the rights of employees to express their own opinions while ensuring the successful communication of internal feedback and opinions. Employees may also select their preferred mode of communication to express their views and ideas, thereby achieving the ultimate objective of communication.

Comprehensive Appeal and Employee Support Systems and Channels

To achieve effective communication and resolution of issues between UMC and its fellow employees, UMC established the aforementioned communication platforms as well as the following channels and systems for employee appeals. Employees are allowed to independently decide whether or not to exercise employee rights prescribed by statutory regulations. UMC does not intervene or interfere with the employees' freedom of association.

In addition to establishing a comprehensive set of communication channels and platforms, UMC shall continue to improve upon the effectiveness of communication channels and carry out projects to enhance communication of key topics and information throughout the company, ensure the comprehensiveness and depth of communications, and strengthen global communication capacities for every employee. A total of 146 formal and large scale conferences were held in 2015 to effectively communicate key topics on UMC businesses. The diverse and comprehensive selection of UMC's communication systems were used to effectively assess the employee's voice and handle employee issues. Although Taiwan's laws stipulated the rights of employees to freely organize themselves into unions, no requests to organize unions have been received by UMC as a result of the aforementioned measures. However, unions have been established in HJTC. Conferences, departmental meetings, and opinion mail boxes were also used as a means to communicate with fellow employees. UMC did not receive any formal charges related to labor affairs in 2015.

Appeal Systems and Channels Provided by UMC Include

Appeal channels for employees of every rank and case	Report of sexual harassment and unfair treatment: 31995	CHO E-mail: (Send an email report directly to CHO)	Employee Relationship (ER Service) Hotline 12885	Employee relations 12885 helpline	Whistleblower Hot Lines: 31425; email: whistleblower@umc.com

Number of Appeal Cases Received by UMC in 2015

	Total number of appeals received	Cases received	Cases established	Closed cases
Human rights	2	2	0	2
Labor affairs	9	9	0	9

Note: The scope of human rights include: Sexual harassment and illegal violations, forced labor...etc
The scope of labor affairs include: Work hours and salary, occupational safety, education and training, promotion / welfare

4-2 Recruitment and Cultivation

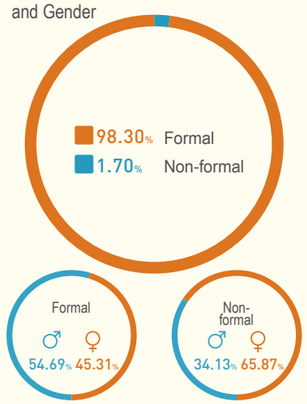
4-2-1 Human Resource

Human Resource Distribution

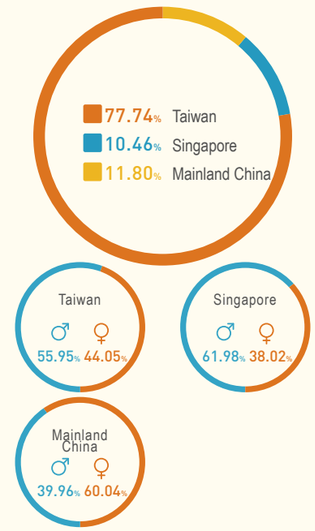
By the end of 2015, the total number of formal employees in UMC and the China subsidiary HJTC (8N) was 16,926, including 1,695 supervisors, 8,434 engineers, 485 managers, 6,305 technicians, and 7 administrators. The working population within UMC can be divided into 2 categories by type of employment, namely formal employees (98.30%) and non-formal employees(1.70%), Formal employees can be further subdivided according to the type of their contracts, namely non-regular contracts (98.12%) and periodic contracts (about 1.88%) (NOTE: periodic contracts refer to labor contracts for foreign technicians). Non-formal employees include contract personnel and dispatched personnel delegated by external vendors to provide services in UMC. Non-formal positions were offered to temporarily stand in for employees taking maternity / paternity leaves. These positions will be kept open for the said employees when they return to UMC. For work area distribution, almost 80% of employees work in the primary business location in Taiwan. For age distribution, 79.20% of total employee population in UMC were between 21 and 40 years of age.

By the end of 2015, UMC's headquarters in Taiwan had a total of 64 aboriginal employees. In terms of gender, 21.87% are males and 78.13% are females. In terms of age, 48.43% are between 20-30 years old, 40.63% are 31-40 years old, and 10.94% are 41-50 years old.

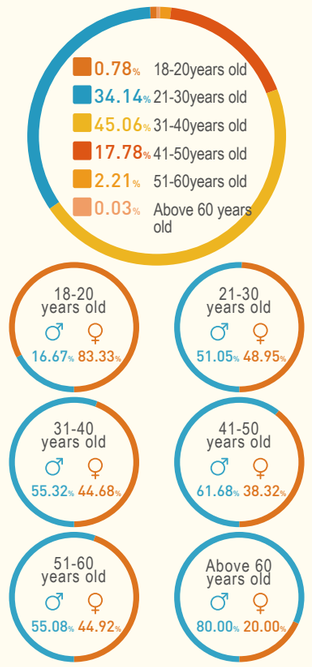
Total Employees - Employment Category and Gender



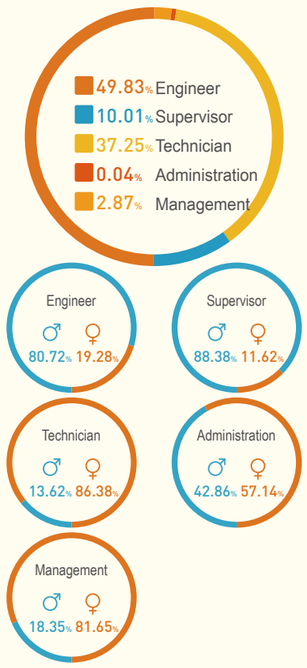
Formal Employee - Work Area and Gender



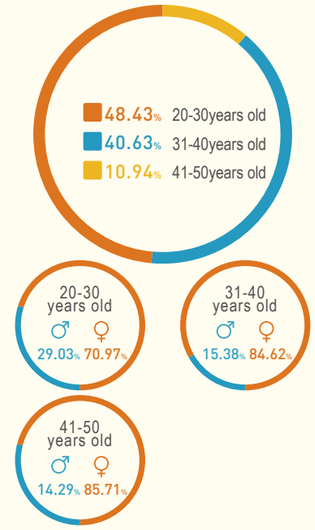
Formal Employee - Age and Gender



Formal Employee - Job Category and Gender

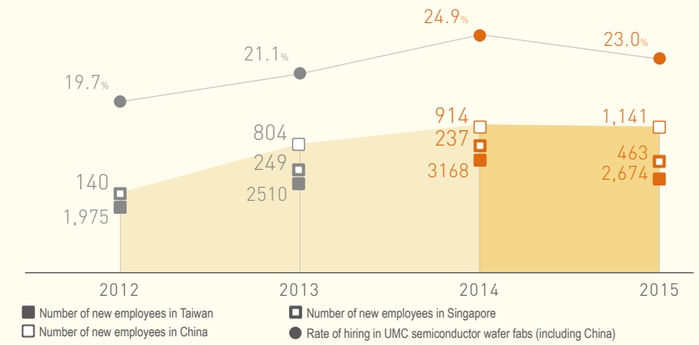


Formal Employee - Aborigines and Gender

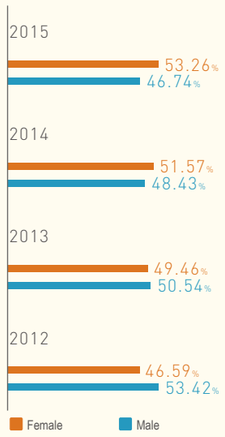


New Employees

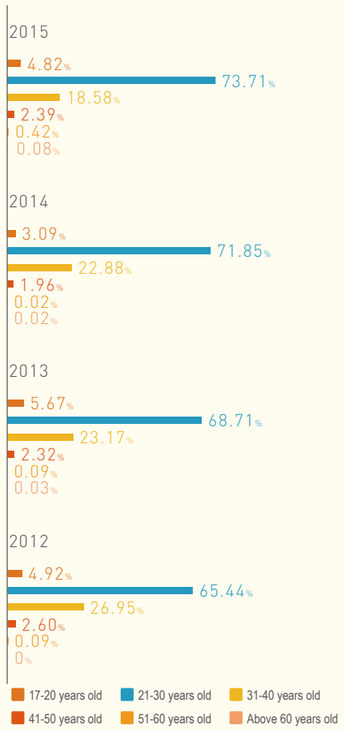
In 2015, the company hired a total of 3,815 new employees. The gender, region and age distributions are as shown below:



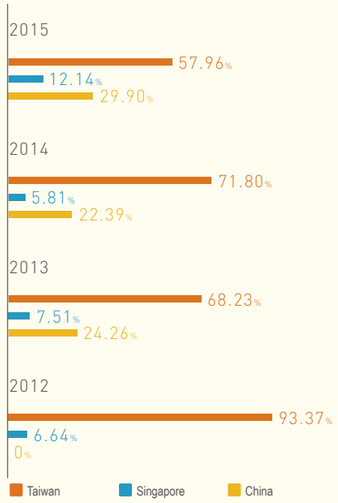
New Full-time Employees—Gender



New Full-time Employees—Age



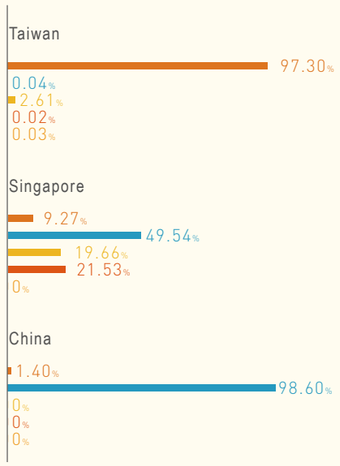
New Full-time Employees—Region



Local Employment

To fulfill social responsibility and create sufficient jobs for local residents, the staff at the UMC headquarters in Taiwan comprised of 97.3% local employees as of 2015, and among these, 99.3% of the high level management is locally hired. Since Singapore is ethnically diverse, 21.53% of the employees are hired locally, and 33.3% of the high level management are locally hired, while in the semiconductor wafer fab in China, 98.6% of the staff are local.

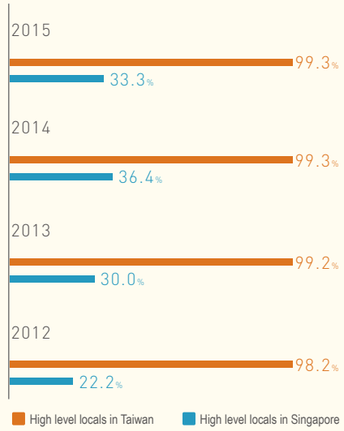
Full-time Employees-Country



Note1: Note: High level directors are defined as Level 1 directors (including deputy directors) and above.

Note2: Note: Locally hired refers to employees who are nationals of the main operating location/region.

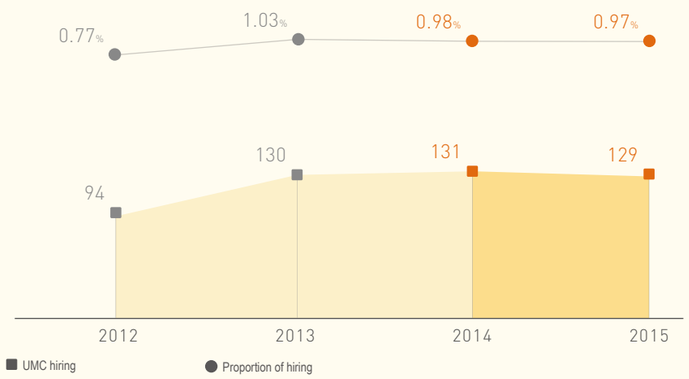
Proportion of Locally Hired High Level Managers in 2012-2015



Employment of People with Disabilities

The UMC headquarters in Taiwan supports the employment of people with disabilities, and has established channels for hiring people with disabilities. Through the Student Ambassador Project, people with disabilities such as physical handicap, visual impairment, hearing impairment, functional loss in vital organs and chromosomal abnormalities are hired. By the end of 2015, UMC headquarters in Taiwan employed a total of 129 employees with disabilities. In terms of Taiwan's hiring laws, the company continues to actively evaluate its internal job expansion and strives toward hiring people with disabilities.

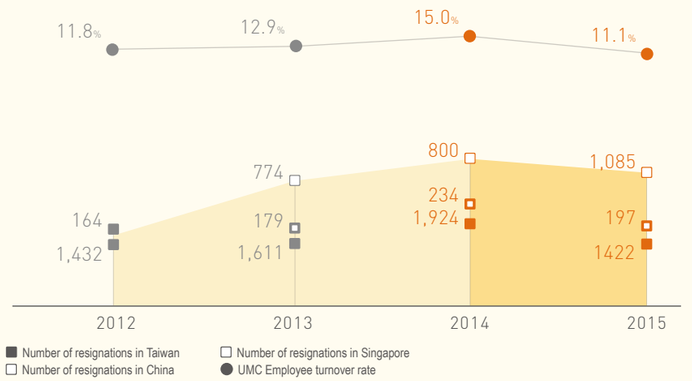
UMC Disability Hiring



Employee Turnover Rate

In 2013, the HJTC semiconductor wafer fab in China was added as a subsidiary of UMC. In 2012-2015, the UMC employee turnover rate was 12.7% due to the higher turnover rate of direct labor in China (including the 16.3% turnover rate in the semiconductor wafer fab in China). When UMC employees apply for resignation, they are individually interviewed by their director and Human Resource Department to understand their reason(s) for resignation. In addition, through assessment of their individual expertise and offers of adjustment in work content, workplace location or internal transfer, attempts are made to retain employees. The UMC Human Resource Department also keeps regular contact with resigned employees, and opportunities are provided for those who wish to return to their employment.

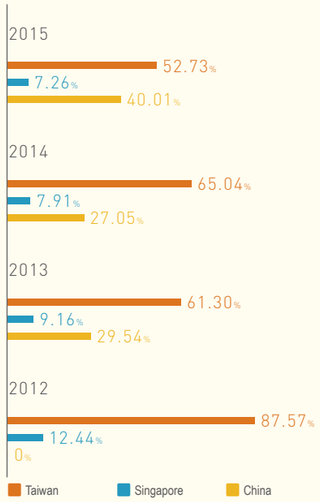
2012~2015Employee Turnover Rate



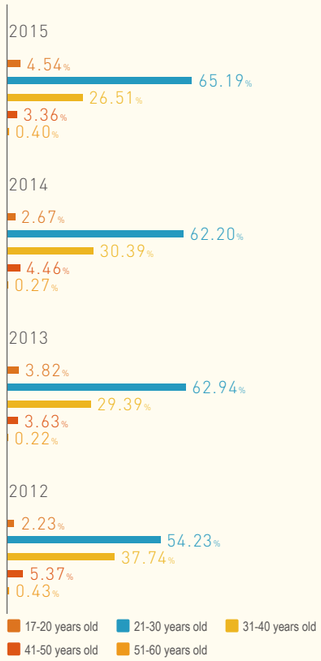
Note: Annual employee turnover rate refers to the total number of employees who resigned/total number of existing employees (Sum of employees at the end of each month/12)

Full-time Employee Resignation—Gender

Full-time Employee Resignation—Region



Full-time Employee Resignation—Age



4-2-2 Wages and Benefits

UMC has always regarded its employees as an important asset, and hopes that by providing a competitive overall wage and benefit package, excellent talents will be attracted to join the UMC team and work together to achieve operational goals and contribute to UMC profits.

Performance-based Wage System

To fulfill company operational plans, department and individual goals, and determine employee work performance for promotion, employee training development and payroll, the company conducts an annual company-wide evaluation (regardless of gender). The focus of the evaluation includes past and future work review and goals, and work attitude and competency improvements. Based on evaluation of current job responsibility, capability and values required for future career plans, employees and their directors share the commitment to prioritize key developments and jointly formulate development plans. Employees who performed poorly are guided through key improvement plans to enhance their effectiveness.

Performance Management Cycle

- Evaluate individual annual performance at year's end
- Plan individual performance and development goals for the new year
- Plan company operational strategies and projects for the next year
- Communicate with employees

- Directors provide feedback, guidance and evaluation
- Employees review personal goal achievements, and seek feedback and guidance
- Evaluate personal performance for first half of the year

UMC employee pay is based on educational level, performance and market prices, and not on gender, race, religion, political affiliation, marital status or differential treatment. In addition to paying higher than minimum wage stipulated by the Labor Standards Act, the company actively surveys the salary of well-known business management companies worldwide to ensure that it provides an overall remuneration that is competitive in the market. In addition, based on individual performance, responsibilities and development potential, salaries are adjusted, and differential reward/ employee compensation and stocks are awarded (employee stock options and treasury shares) to attract, retain and encourage outstanding employees.

Note: For the employee compensation, please refer to Articles of Incorporation of UMC.

Basic Salary and Remuneration for Male and Female Employees

Taiwan

Basic Salary		Remuneration	
High Level Directors			Note1
1	0.97	1	0.94
Mid Level Directors			
1	0.94	1	0.90
Specialist			
1	0.98	1	0.92
Direct Labor			
1	0.98	1	0.96

Singapore

Basic Salary		Remuneration	
High Level Directors			Note2
1	0	1	0
Mid Level Directors			
1	1.02	1	1.02
Specialist			
1	1.01	1	0.91
Direct Labor			
1	0.94	1	0.91

Male Female

Note1: The average salary and remuneration for high/mid-level directors and specialists are based on the standard for engineers.

Note2: Currently, there are no high level female directors in Singapore

Note3: Direct personnel shall be calculated according to the number of technicians.

Leave Policy is Superior to the Labor Standards Acts

UMC offers a comprehensive and superior leave policy.

1 UMC offers 2-days' worth of special welfare leaves for newly hired employees in the same year when they report to the company. Statistics revealed 100% special welfare leave utilization for engineers that were newly hired in the previous year. UMC employs flexible leave policies and regularly reminds employees to use their leave to achieve a better work-life balance. Special leave issued for contract employees are based upon the requirements of the Labor Standards Act. UMC encourages fellow employees to actively contribute towards public charity, and has established the UMC Science and Culture Foundation. Employees can make use of volunteer leave and participate in the company's charity activities during working hours. In 2015, at least 219 employees participated in volunteer activities during work hours.

2 According to law, maternity leave will be provided at half-pay if the employee's period of service is less than 6 months. To provide better care to newly hired female employees, UMC instead gives full-pay for the said employees.

3 To provide support to fellow employees, UMC offers funeral leave welfare that is superior to that prescribed by the Labor Standards Act. Colleagues whose great grandparents, great grandparents-in-law, or grandparents-in-law have passed away shall be given a funeral leave of 24 hours at full-pay.

4 Overseas semiconductor foundry plants, such as the China subsidiary HJTC, are also provided with paid annual leave that are superior to those prescribed in the local Regulations of Paid Annual Leave of Employees. UMC Singapore provides newly hired employees with 14 days of leave in their first year which is better welfare compared to the minimum length of 7 days prescribed by the Singaporean government. Contract or temporary staff who have worked in UMC for 3 months shall also be entitled to these types of leave by the proportion of their length of services.

Comprehensive Insurance and Retirement Policy

UMC provides insurance coverage that is consistent with local laws and regulations to ensure the basic rights and interests of employees. In accordance with the law, the company headquarters in Taiwan also provides labor insurance (including Employment Insurance) and national health insurance. In addition, UMC provides employees with additional group insurance, including life insurance, major illness insurance, health insurance, accident insurance, cancer insurance, and travel insurance for overseas business trips to ensure the work and life security for its employees. The company also provides a selection of group insurance for employee families so that employees can work with peace of mind.

Over 50% of fellow employees chose to include their spouse and family members into UMC's group insurance to provide their family with an additional layer of protection. UMC also provides an insurance company service office inside the company, allowing colleagues to make inquiries on insurance services and apply for claims. Furthermore, the company regularly posts e-newsletters on insurance benefits, and introduces information on insurance and compensation rights so that employees are clearly aware of their actual insurance content and benefits.

Retirement Benefits Plan

UMC complies with local statutory regulations and systems related to retirement to safeguard the retirement rights of our employees. For Taiwan, the Labor Standards Act was used as the basis to stipulate regulations for the calculations and payment rules of retirement pensions. The Labor Pension Act entered into force on July 1, 2005, and the Act is used as the standard for the provision of the Retirement Benefits Plan. Employees may select pension regulations prescribed by the Labor Standards Act or pension systems applicable to the said Act and retain their work tenures before the said regulations apply to them. For the provision of post-retirement welfare and expenses, please refer to previous annual reports released by UMC.

When employees apply for retirement, the company not only provides pension application service, but also awards a medal to show appreciation for their long term effort and contribution. In addition, they are also awarded "UMC Lifetime Membership" which offers a selection of healthful and interesting activities for retirement living.

Pension Contributions in Different Regional Fabs

Taiwan

Pension Plan/Provisions	
Labor Standards Acts	Labor Pension Act
Proportion of remuneration contributed(Employer)	
2	6%
Proportion of remuneration contributed(Employee)	
0	0% - 6%
Proportion of employee contribution to pension plan	
100%	100%

Singapore

Pension Plan/Provisions
CPF Note1
Proportion of remuneration contributed(Employer)
7.5% - 17%
Proportion of remuneration contributed(Employee)
5% - 20%
Proportion of employee contribution to pension plan
49%

China

Pension Plan/Provisions
Endowment Insurance Note2
Proportion of remuneration contributed(Employer)
20%
Proportion of remuneration contributed(Employee)
8%
Proportion of employee contribution to pension plan
100%

Note1: CPF: The government's Central Provident Fund Board policies are applicable to Singapore's citizens and permanent residents.

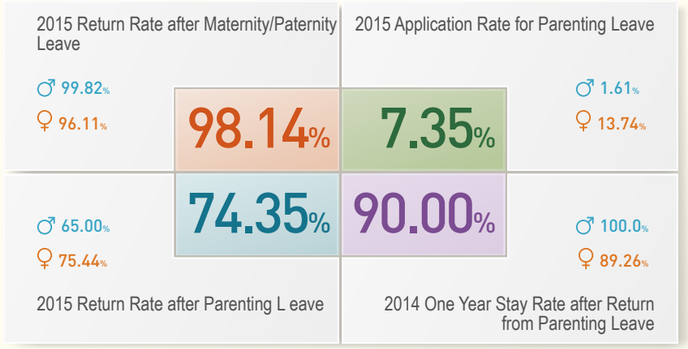
Note2: Retirement insurance in Mainland China: Regulations of the Suzhou Industrial Park Provident Fund Management Center specify that with the exception of Chinese employees who must be insured, insurance coverage would be optional for employees of other nationalities.

Parenting Leave

In 2015, a total of 463 female employees applied for maternity leave. Of these, 96.11% returned to their original positions after their leave while those who did not return voluntarily resigned to take care of family needs. In addition, 560 male employees applied for paternity leave in accordance to the Act of Gender Equality in Employment, and of these, 99.82% returned to their original positions after their leave.

According to the Act of Gender Equality in Employment, employees may apply for parenting leave without pay. When their contract expired in 2015, a total of 129 female employees returned to their positions, indicating a return rate of 75.44% after parental leave. Thirteen male employees returned to their positions, indicating a return rate of 65.0% after parental leave. The work situation of those who returned after parenting leave was observed, while those who did not return after their unpaid parenting leave expired had continuing family needs that required them to voluntarily resign. From 2014-2015, 89.26% of female employees and 100% of male employees that took unpaid parenting leave returned to work.

2015 Maternity Leave/Parenting Leave



4-2-3 Education and Training

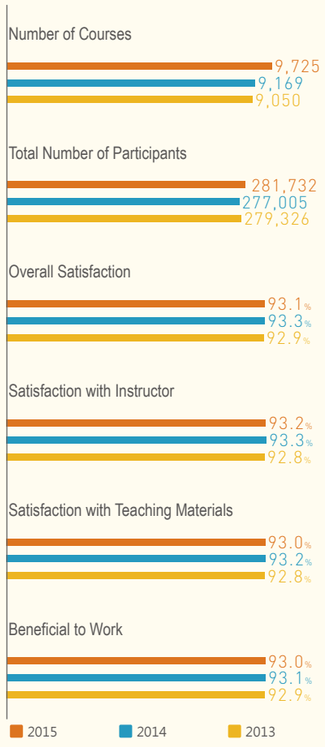
UMC Comprehensive Learning Environment

In UMC, education and training is not limited to classroom instruction or promotion of training courses. Through the integration and use of company resources, employees are provided with a full learning environment

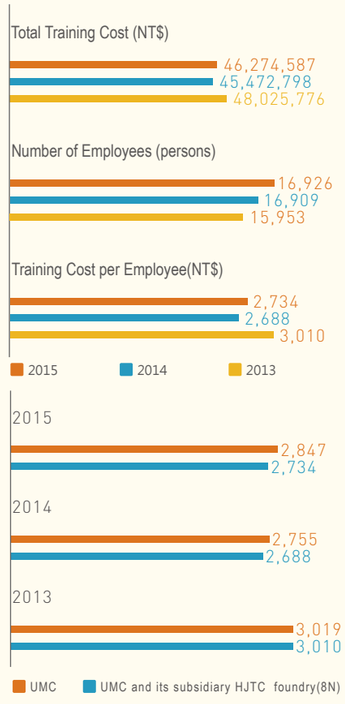
In terms of professional training, complete technical training curriculum is offered. For managerial training, different training programs are designed for different levels of directors. For language, language proficiency tests and courses are offered according to job descriptions and positions. In terms of departmental and inter-departmental On-the-Job Training (OJT), the Education and Training Committee's downward education and training orientation allows department directors and their employees to fully participate in the planning, implementation and learning assessment. Moreover, the diversity of self-learning and development channels, such as e-Learning, creates an atmosphere of mutual peer learning, development and team cooperation, thereby forming a comprehensive environment for learning, sharing and innovation.

In 2015, UMC organized up to 9,725 training courses, with a total number of 540,148 training (persons) hours and 281,732 participants. The total cost of training was NT$ 46,274,587, and satisfaction level with the various courses was more than 90%, gradually increasing with each year.

Course Satisfaction

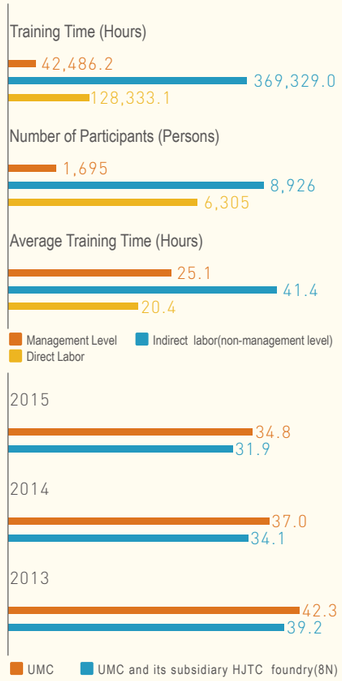


Average Employee Training Cos



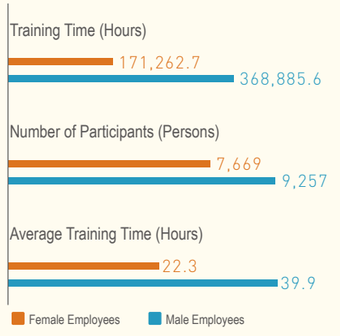
In terms of average education and training hours for the various job levels, comprehensive education and training are provided for different categories of job responsibilities and levels of employees.

Average Training Hours for Various Job Levels



For gender issues, UMC upholds the principles of gender equality and offers equal training opportunities with the purpose of providing professional training for each job grade and function. Most direct employees are women so their training would be largely focused upon technical courses such as machine operation. Hence, average training hours for female employees in UMC are slightly shorter than that of male employees.

Average Gender Equality Training Time



Other types of courses for continuing personnel cultivation and training are based on company guidelines and operational plans.

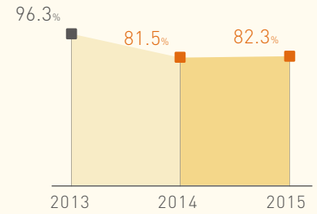
Management Competence Training - Development Plans for Supervisors of Various Levels.

In terms of personnel training and development, UMC defines the managerial competency required for the various levels of directors. Core and professional competencies are also defined for general employees so that they clearly understand the required core competencies for each level of job responsibility. In the curriculum framework for internal training, all corresponding developmental courses are designed according to the competency model. In addition to required training to help employees achieve job performance, employees can also prepare for their career planning and development by participating in other training courses based on their personal needs and future development plans. Furthermore, to fulfill the company's core values, the philosophy and spirit of "accountability" is thoroughly instilled. UMC first introduced the course titled The 7 Habits of Highly Effective Managers in 2011. In 2012, this course was further expanded to include The 7 Habits of Highly Effective Employees. Course contents are constantly promoted and established so that the 7 Effective Habits have become a common language between UMC managers and employees. All supervisors and employees recruited in 2015 were scheduled to complete these courses before the 1st Quarter of 2016 in order to collect course-related data.

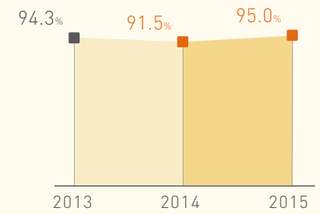
Leadership Development Web

Summary of competencies

2013-2015 Completion Rates for The 7 Habits of Highly Effective Managers Courses



2013-2015 Completion Rates for The 7 Habits of Highly Effective Employees Courses



Technical Training for Engineers

UMC fully realizes that outstanding technicians are the key to enhancing advanced technology and sustaining a company's growth. Therefore, based on the professional needs and competency inventory of the various engineering departments, technical training curriculum are planned, and through a solid system of technical training, the overall professional standard of our engineers and quality of engineering manufacturing are enhanced. In 2012, the company developed the learning passport system to formulate a learning blueprint that is consistent with the developmental needs of the organization, and create a learning platform that is humanized and functional. To effectively track personnel development, the use of this system has been promoted and taught since 2013. Furthermore, based on the job needs of each employee, a learning map is charted, and through the training system's monitoring and statistical analysis, the required training course and hours for each employee is determined to create specific and effective training.

Professional Competency Inventory and Learning Curriculum Planning

Skills Assessment System

Personal Learning Passport

Convenient e-Learning Platform

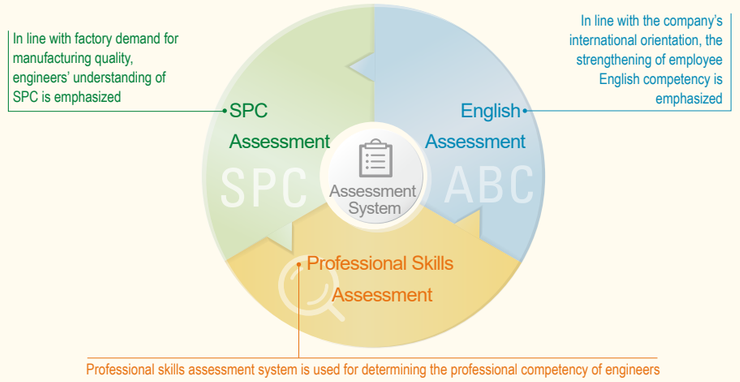
In addition to the various professional skills and management courses, UMC has set up an e-Learning learning platform to provide employees with a convenient and easy environment for spontaneous learning. Information channels allows for convenient lesson preview and review, and together with effective and diverse in-class learning, the cultivation of knowledge and skills is steady and in-depth, thereby sustaining learning interest and exploration of new knowledge.

Learning Platform

Technical Skill Inventory

UMC is a world-class corporation, and in line with international trends, has established a basic and rigorous system for both qualitative and quantitative skills assessment. In terms of strengthening English ability, demand for quality manufacturing, and increasing the professional knowledge of engineers, both internal and external evaluations such as TOEIC English assessment, Technical Skill Inventory and Statistical Process Control (SPC) are used to effectively evaluate the required core competencies of employees and increase production quality to meet and satisfy various customer needs worldwide. For example, in the 3-6-9 SPC Principle, those who fail assessments are not allowed to operate machinery, and are affected in other matters such as promotion. Due to the increase in number of new employees in 2015, the SPC passing rate in Taiwan is 96.1% while in Singapore, it is 92%.

Assessment System



Technical Skill Inventory

SPC : 3-6-9 SPC Principle

Training for Diverse Cultures

Since employees from different countries are employed, training courses have been provided using different languages to help employees quickly settle into the UMC culture and gain familiarity of corporate policy and systems. Additionally, cultural descriptions and festivities are also regularly provided when celebrating traditional Chinese holidays to help foreign employees enjoy local festivities. To improve linguistic skills of foreign employees, routine language courses are offered in UMC, along with regular language skill tests and bonus policies.

Introduction for Newly Hired Staff

To help newly hired employees quickly settle into UMC's environment, gain familiarity in corporate policy and regulations, and shorten learning time, senior personnel or supervisors are appointed as employee mentors when newly hired staff report to their posts. Training is given directly at the job posting to achieve effective on-the-job training (OJT). These instructions also cover routine activities and various specialized fields. A Newly Hired Staff Instructor System was established throughout the entire company. This system includes a training schedule, discussion forms with various supervisors, and feedback surveys. Instructors must complete all instruction procedures within 3 months after newly hired employees report to their post

Corporate Culture Orientation Program for New Employees

To help new employees quickly integrate and shorten learning time, the learning organization particularly emphasizes new employee training to highlight the goals of "Recruit Talent, Cultivate Talent, Retain Talent" in education and training. In particular, "the involvement and support of department directors is the only way to motivate successful education and training." Each director is committed to enhancing the employment and development of new employees, and through the comprehensive UMC new employee training program supplemented by a mentor system, new employees quickly acquire professional skills and develop an appropriate work attitude. In addition to completing required courses, new employees also participate in the orientation program for new employees. The program integrates the organizational characteristic of team building, namely capability and agility. Classes pertaining to company vision, strategies and competiveness are personally taught by high level executives, and workplace stress management and positive thinking courses are also provided to help new employees quickly integrate into the corporate culture. In 2015, 22 sessions of the new employee orientation program were conducted, and a total of 1,094 new employees completed training. (The above figures refer to indirect labor in Taiwan, and include full-time and outsourced employees).

New Employee Orientation Program -- Team Building

4-2-4 Cultivating Prospective Talents

To fulfill the ideal of promoting semiconductor research and technical development, and strengthening UMC global competitiveness by providing the corporation with a source of outstanding and quality talents, UMC is committed to maintaining forward-looking collegiate relationships. In 2015, UMC focused on 2 major orientations in its collegiate relationships: (1) Positioning outstanding R&D talents, and (2) In-depth development of talents from technical colleges. In addition, university-industry collaboration and prospective talent programs are two major directions of development.

UMC continued to strengthen business-education partnerships in 2015. In addition to existing practical programs for semiconductor technologies in key institutions, the Industry-Academia Cooperation / Collaboration Project was also implemented to sponsor full-time instructors for the MS Degree Program and Credit Courses on Nano-Integrated Circuit Engineering offered by National Cheng Kung University (NCKU). Business-education partnerships were also restructured in 2015 to establish the UMC Industry-Academia Program. A series of brand image development activities such as paper discussions, career sharing, practical collaborations, and exhibits of semiconductor products were scheduled, with more than 1,000 individuals participating in paper discussions in 2015. These measures enhanced the academia's support and recognition of UMC and gave a comprehensive demonstration of a successful business-education partnership.

To improve training of professional talents in universities, the Prospective Talent Program (PTP) was expanded to include more candidates and trainees, achieving a total of 894 members in 2015. Through a series of activities and courses, close interaction is maintained with prospective collegiate talents to promote their identification with UMC. By establishing a close relationship and pre-appointments, the program effectively connects UMC with target talents. At the same time, the PTP also effectively markets the corporate image of UMC and exerts considerable influence on campuses and communities, thereby reserving in advance future R & D personnel for UMC.

Deepening Technical University—Engineering Industry Collaboration

Professional Guidance

In its technical university-industry collaboration, UMC schedules practicing lecturers to share their experience to help minimize the gap between academics and practice. In addition, the program also conducts career planning seminars for a number of technical and vocational colleges to offer career planning advice to students.

Senior Internship Program

This program offers 1-year internships for students going into their senior year in collaborating colleges. In addition to facilitating the absorption of theoretical knowledge, the program trains students in actual industrial settings, thereby increasing their competitiveness. From 2013-2015, 49 interns were accepted.

UMC Prospective Talent Program methods

Domestic and Overseas Summer Internship Programs

In 2015, UMC continued to select outstanding talents for domestic and overseas internship at key UMC fabs. During the internship, the interns are instructed by designated mentors so that through actual practice and participation in current UMC projects, prospective talents may experience workplace culture. At the same time, this program effectively allows for closer interaction between prospective collegiate talents and UMC teams, thereby enabling mutual learning and growth through the close exchanges.

Collegiate Talent Development Programs

Exclusively designated for students, this program offers forums, internships and corporate mentoring to help students gain awareness and sensitivity toward the semiconductor industry. In addition, participation in UMC benefit events allows students to visit the fabs and opportunities to advance their understanding of UMC's global operations, corporate culture and a healthy workplace.

Collegiate Career Planning Forum/Instructor Program

UMC has conducted career planning seminars and career coaching programs in its recent collaboration with key schools. Based on professional insight of future trends and career instructor's assessment of student characteristics and knowledge, career plans are recommended to help students find suitable career paths. In addition, practical resume writing advice is offered to help new graduates highlight and market themselves, and capture the attention of companies and executives.

Visit by Faculty and Student from Target Departments

In 2015, about 1204 faculty and students from target schools visited UMC so that students could gain an early understanding of the semiconductor industry work environment. Interaction and exchanges with employees also allow students to better understand the direction of their future learning and employability.

Results for the 2015 Semiconductor Seed Talent Cultivation Campus Program

Equipment Internship Program

Collaboration with Chung Hua University, Southern Taiwan University of Science and Technology (STUST), National Chin-Yi University of Technology (NCUT), National United University (NUU), National Kaohsiung University of Applied Sciences (KUAS), National Formosa University (NFU), and National Kaohsiung First University of Science and Technology (NKFUST). A total of 15 interns were recruited in 2015.

Outstanding Tech Talent Development Program

Training programs for outstanding technological talents were continued in 2015 with the aim of training first-rate R&D personnel. The program provided scholarships for 5 Master's degree and PhD degree students. As of 2015, more than NT$ 35 million in scholarships had been offered to various candidates.

Ambassadors for Disabled Students

Disabled students were employed as part-time student workers to strengthen talent recruitment and encourage other underprivileged students to work harder. Since the end of 2013, part-time student worker opportunities have been offered to a total of 33 students with disabilities. Currently, 16 of these students remain employed by UMC.

NCKU Career Instructor Program

The NCKU Career Instructor Program was continued in 2015. A total of 10 career instructors were supported to provide career guidance and support. The program also helped to build positive relationships between NCKU and UMC while supporting external sales as well as recruitment drives.

Prospective Talent Program(PTP)

Early interaction and potential contracts with prospective talents in universities would build mutual connections with the targeted talents. The establishment of the UMC PTP also improved the influence and spread of the UMC brand image. After first initiating recruitment efforts in 2013, PTP membership reached 894 individuals by the end of 2015.

Developing Campus Relations

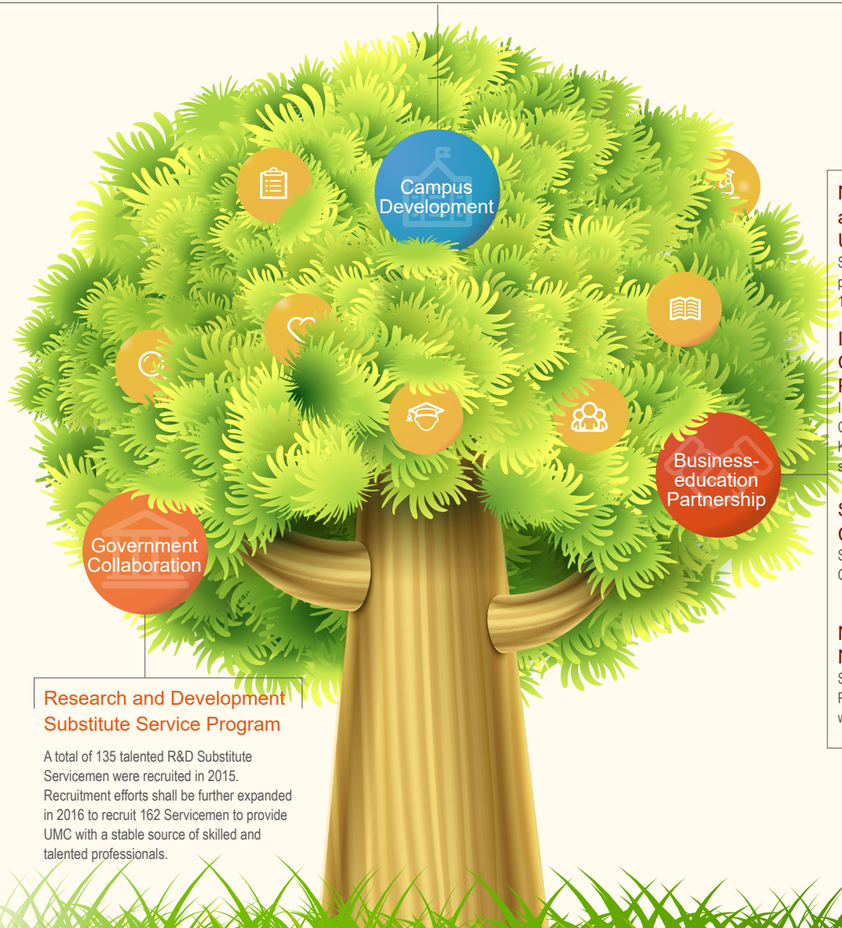
UMC pursues extensive relationships with various campuses and arranges a series of brand image building activities that include paper and journal discussions, career sharing, internship and partnerships, and exhibits of semiconductor products. These efforts are employed via partnerships with administrative resources or instructors in the relevant fields of study. At least one visit is provided every quarter. More than 1,000 individuals had signed up to paper and journal discussions by 2015.

Summer Internship Program

A specific number of internship positions would be offered every summer. A total of 35 interns were recruited in 2015.

Corporate Visits

Corporate visit opportunities were offered to various institutions. In 2015, about 1,204 individuals from institutions such as National Sun Yat-sen University (NSYSU), National Cheng Kung University (NCKU), National Tsing Hua University (NTHU), and National Chiao Tung University (NCTU) participated in these visits.



Research and Development Substitute Service Program

A total of 135 talented R&D Substitute Servicemen were recruited in 2015. Recruitment efforts shall be further expanded in 2016 to recruit 162 Servicemen to provide UMC with a stable source of skilled and talented professionals.

National Central University and Chung Yuan Christian University (CYCU)

Started practical courses on semiconductor production processes which were taken by 146 students in 2015.

Industry-Academia Cooperation / Collaboration Project

Industry-Academia Cooperation / Collaboration Project was conducted with Kuang-Fu Senior High School. A total of 32 students persisted in the program in 2015.

Semiconductor Technology Courses for NCKU

Sponsored the Nano-Integrated Circuit Course offered by NCKU.

Nano-node courses for NCKU

Started the Nano-node Semiconductor Production Overview course in NCKU which was taken by about 150 students in 2015.

4-3 Health and Safety Workplace

Comprehensive Health Care Program

UMC believes that a healthy staff is an important foundation for corporate success. The comprehensive health care program initiated by UMC entered Phase 2 in 2015 and continued to improve upon the spirit of the 2014 program based upon the themes of building a quality workplace and common employee identity. UMC shall continue to pursue the 3 aspects of providing a safe work environment, safeguarding employee health, and encouraging work-life balance to ensure the health of all our employees as well as those of their families.

In addition to dedicated efforts in building a quality and engaging workplace, UMC also referenced the latest amendments to the Occupational Safety and Health Act to initiate a series of activities to promote and improve upon ergonomic factors, health protection for female workers, and overwork-related conditions to protect and support our fellow employees. Extensive planning and preventive surveys were carried out to assess employee requirements, physical health, and mental states from multiple perspectives. Efforts for promoting Healthy Workplace concepts were aimed at improving support and recognition from employees and external agencies as well as encouraging the recruitment and retention of skilled professionals to achieve the final goal of enhancing personal and corporate performance.

4-3-1Healthy Workplace

Stress-free Workplace: Focusing on Work Environment Safety

In 2015, UMC continued its efforts to build a safe and stress-free work environment and was planning and implementing a series of measures that were either compliant or superior to statutory regulations governing employee welfare, education, training, retirement, and other employer-employee issues. Management systems and safe environments were established to eliminate all risk factors in the work place to achieve the Safe UMC objective in a comprehensive manner.

Preventing Verwork

In 2015, UMC referenced the Occupational Safety and Health Act and began actively carrying out investigations related to overwork issues. Results of overwork surveys and mental stress surveys were used to assess the physical and mental state of our fellow employees. Discussions were held with the resident physician to arrange healthcare plans. Groups exposed to high overwork risks were provided with health inquiries, instructions, and follow-up checks. The resident physician also offered instructions, health education courses, and physical, mental, and spiritual health seminars to safeguard employee health and prevent health risks stemming from over-exhaustion. In addition to health management systems, UMC is also using automated systems to achieve effective management and prevention of overwork. Overwork limits and warnings established by UMC were more stringent compared to those prescribed by law. When employee overwork hours approach warning limits established by the company, alert systems would be triggered immediately to notify the relevant supervisor as well as the said employee. Relevant human resources and tasks would be arranged to improve work-life balance and prevent over-exhaustion.

Proactive Vacation Management Mechanism

To truly achieve balance between work and life, UMC has implemented a proactive leave management mechanism. In addition to promotional activities to remind employees to arrange for vacations, directors are required to schedule vacation times for their subordinates. Furthermore, the attendance system is set to initiate reminders, and directors and employees are regularly educated during factory meetings. An exclusive incentive package is also offered by the UMC Park Activity Center. Each employee's labor contract with UMC is in compliance with local regulations, and states that overtime is voluntary. Moreover, company regulations prohibit exceeding overtime limit.

Measures for a Safe Workplace

Establish a Culture of Gender Equality
Measures for gender equality are consistent with or exceed those stipulated by the Labor Standards Act. Positive actions are implemented for employee selection, hiring, education and leave.

Measures for Nighttime Job Safety for Female Employees
Night time car service, parking lot escort, roadside assistance, emergency buttons, other emergency assistance, day and night time shuttle, 24-hour employee hotline, and night time emergency response mechanism

Assistance for Pregnant Women and Special Needs
Priority meal order, designated parking space, cleaning and disinfection notification, no night shift, child raising allowance (for both male and female employees), breastfeeding room, eligibility to pre-apply for maternity leave after 3 months of pregnancy.

Flextime for Work and Vacation to Balance Work and Family
Work flextime, and employees of less than 1 year are offered special leave or vacation flextime.
In accordance with the Act of Gender Equality in Employment, both female and male employees may apply for unpaid parental leave without duress.

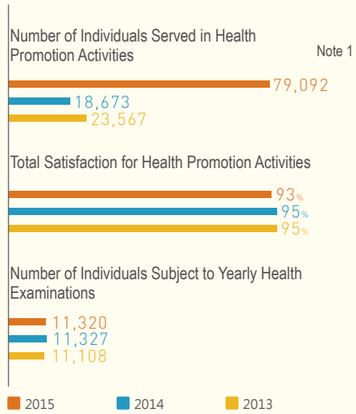
Comprehensive Mechanism for Sexual Harassment Prevention
Reporting and Disciplinary Measures for Workplace Sexual Harassment, mechanism for investigating complaints, procedure for selecting team members, confidential complaint channel, education and training, and internal security service for providing assistance are established.

Note: UMC complies with government regulations such as the Labor Standards Act, Act of Gender Equality in Employment, and Sexual Harassment Prevention Act in its personnel policies, and also promotes related measures.

Healthy Workplace: Safeguarding Employee Physical and Mental Health

A total of 19 projects were implemented in 2015, including annual health promotion program and events, theme-based seminars, yearly health examinations, as well as various testing, stress-relief, and inquiry activities. 4 different major themes and focuses are implemented in every quarter, including Fight Against Muscle Soreness, Love Yourself (maternity protection), Stay Away from the 3 Highs, and Freedom from Exhaustion to ensure comprehensive protection of fellow employees.

Key Results of Health Promotion Activities from 2013 to 2015



Note 1: To provide complete coverage of the company's efforts in promoting a Healthy Workplace, the method for calculating the total number of individuals benefiting from health promotion activities in 2015 were changed to include all event participants. Scope of calculations does not include 12i.

Note 2: Number of individuals served in yearly health examinations only included general health examinations.

Healthy Workplace: Safeguarding Employee Physical and Mental Health

Enjoyable workplace environments and healthy employees are elements necessary for building a happy corporation. To safeguard employee health and promote independent risk control and management amongst employees, in 2015, a series of activities such as health management, health promotion, health seminars, and employee consultation services were established according to the four major themes of Fight Against Muscle Soreness, Safeguarding Maternity, Stay Away from 3 Highs, and Freedom from Exhaustion.

Q1 Fight Against Muscle Soreness
Prevent soreness caused by poor ergonomics by encouraging colleagues to stretch their bodies to eliminate the cause of soreness factors.
Over 30,000 massages were provided by people with vision impairment.
Over 3,800 individuals participated in pain prevention seminars.

Q2 Love Yourself
Regular provision of health information for mothers and screening for gynecological cancers, and implementing workplace safety assessments for pregnant employees.
Satisfaction rate for health screening activities for women: 94.5%
Total satisfaction for parent-child seminars: 94.1%

Q3 Stay Away from Three Highs
Provided the latest slimming tips and information; offered light, wholesome meals with reduced oil and greasy contents in the company's canteens. Health promotion activities were also designed for high risk groups with the three-highs.
Satisfaction rate for the Eat Smart - Health Slimming Seminar: 96.1%
Satisfaction rate for 358 individuals voluntarily participating in slimming activities: 96.37%

Q4 Freedom from Exhaustion
Provided fellow employees with rejuvenation tips according to the season. Tips on wholesome and nutritious information were provided in winter to help employees sustain their health and body. Traditional Chinese Medicine (TCM) practitioners were also engaged to provide seminars on the bodily meridians to safeguard employee health.
Satisfaction rate for TCM ear meridians testing: 87.5%
Satisfaction rate for TCM seminar: >95%

Establishing Health Mindset, Caring for Employee Dependents

UMC provides annual physical examinations with items that exceed legal stipulations. Its Self-Health Management Program is tailor made for employees. Case managers follow up on health examination results by tracking abnormalities, such as making referral appointments, following up regularly and providing health education, maintaining complete records of employee health indicators, and analyzing and classifying health examination results for management. Special operations employees are included in the cases for follow-up. In addition, health promotion activities targeting commonly seen abnormalities are conducted to provide relevant care and ensure employee health. Furthermore, UMC employs doctors to provide employees with health counseling services as well as preventive services such as special examination and out-of-pocket vaccination to help employees take a proactive approach to a healthy lifestyle. In addition, UMC also actively cares for the dependents of employees by offering annual family health examination and massage services as ensuring the health of employees and their families creates benefits and harmony for both society and families. In 2015, a total of 327 employees and their family members underwent health examinations.

Maternity Health Protection

UMC places great importance on motherly care and breastfeeding, and has implemented extensive measures to provide breastfeeding mothers with a safe and comfortable environment. Milk-collecting rooms were also established in various plants for female employees. In 2015, FAB8A, FAB8C, FAB8D, FAB8E, and UT plant sites were successfully rewarded with Excellence Breastfeeding Room Award by the Public Health Bureau of Hsinchu City Government.

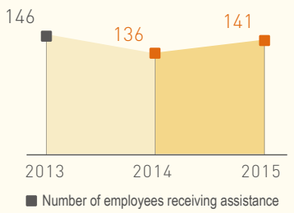
Integrated Mechanisms for Employee Care

To provide timely employee assistance, UMC offers comprehensive care mechanisms such as counseling and employee support, injury and illness care, and a healthcare consultation platform to service the family, work and interpersonal needs of employees. Employees are provided with friendly and practical care, and counseling is available when needed to ensure high work productivity and employee stability. UMC's integrated mechanisms for employee care had a very early beginning, and in recent years, even more effort was invested into integrating and reconstructing the care mechanisms for physical and mental health, and post-injury return to work. The company hopes that by providing the most comprehensive measures and methods of support, a duress free workplace may be created for employees.

In addition to collaborating with dedicated professionals who are familiar with the company's Employee Assistance Program (EAP), UMC is also committed to promoting the EAP. The company has established the "UMC Mental Health" page, an employee webpage for mental health chat and support on its internal site, and also posts the latest information on the company homepage for employees to easily access and use.

In 2003, UMC introduced the "Employee Assistance Program" (EAP) to provide free counseling service to help employees relieve physical and psychological stress. Individual counseling and confidentiality mechanisms are provided to help employees resolve physical and psychological issues. Each employee has access to 6 free sessions per year, paid for by the company, and for those with special needs, additional assistance is provided by the company's professional counseling group. In 2013 – 2015, service was provided to 423 employees.

▶ Number of Employees Receiving Assistance in 2013-2015



Injury and Illness Care

Employee physical, psychological and traffic incidents are followed up by telephone and e-mail contacts from a nurse from the health center, and appointments with house doctors are arranged if necessary. Continuing care and psychological support is provided to help employees return to work as soon as possible, and psychological support is strengthened for unclosed cases from 2011—2014. In terms of return to work following physical or psychological injuries and illnesses, support mechanism and case management procedures are formulated, and with the assistance of house doctors and nurses, relevant department directors, and personnel and legal departments, recovery/work distribution is facilitated to return physically or psychologically disabled employees to the workplace.

▶ Number of injury and illness cases and frequency of support provided in 2013-2015

	2013	2014	2015
Yearly No. of Cases	122	223	328
No. of Cases Closed	125	186	238
Frequency of Support	810	1226	1260

Establishing a Comprehensive Healthy Workplace

Health promotion activities implemented by the UMC Health Center in 2015 achieved total average satisfaction of 93%, while many employees also participated in other activities such as yearly health examinations and visual acuity tests, demonstrating the positive reception and support for these activities. The promotion and implementation of Healthy Workplace in UMC were also praised by external agencies. In 2015, UMC won the Corporate Citizenship Award as well as the Corporate Social Responsibility Benchmark Award 2015 organized by CommonWealth and Global Views Monthly respectively. UMC fab sites FAB8A, FAB8C, FAB8D, FAB8E, and UT also received the Certificate of Excellence for Milk-Collecting awarded by the Public Health Bureau of Hsinchu City Government. All UMC plant sites were also recipients of the Self-Accreditation and Health Promotion Label of the Health Promotion Administration, Department of Health, Executive Yuan. All these rewards testify to the results of UMC's dedication and efforts in building healthy workplaces.

Dedication to Public Charity and Social Responsibility

UMC is also dedicated to charity activities, and introduced massage services provided by those with visual impairments in both Hsinchu Science Park (HSP) and South Taiwan Science Park (STSP). These services not only provide employment opportunities for the disabled, but also professional massage services to help ease discomfort and improve physical and mental health of fellow employees. UMC employees also support blood donation drives held 2-5 times every year, helping to save the lives of other people. A total of 13 donation drives were held in 2015 where over 1,300 employees donated blood to provide about 1,900 units of blood. Since initiating these donation drives in 2011, over 7,800 employees have answered the call and donated a total of 10,760 units of blood.

LOHAS Workplace: Emphasis on Work-Life Balance

UMC believes that employees are its most important asset, and that having healthy and happy employees is key to high productivity in a corporation. In addition to providing a safe and healthy working environment, an employee oriented LOHAS workplace that integrates benefits, vitality and public service is created. Through a diversity of activities, creativity and vitality are nurtured in the work and lives of employees.

Snapshots of Room Escape and variety games

Site Events for Building Team Identities

In 2015, corporate competition events such as Team Up for UMC were held. Teams competed with each other in room escapes and other games to help build corporate identity and inject positive energy into the UMC family. It is hoped that positive competition between different plant sites will help build employee identity and cohesiveness, reduce opposition to new internal measures, and create high performing and effective teams.

Snapshots of the UMC 2015 Jurassic Park Family Day Activity

Family Cohesion

UMC emphasizes work-life balance, and in addition to focusing on employees, UMC also reaches out to their families. In its various themed events, UMC plans activities that are appropriate for employee families, such as the 2015 "Jurassic Park in UMC" family activity, a monthly movie selected by employees for family movie time where movies are shown in the fab after work, and art festivals that are open to employee families. UMC hopes to support employees as well as their families to relieve employee stress and ensure their physical and mental health. At the same time, employee families may also become involved with UMC, get to know UMC and continue to support the employees in their diligent contributions toward the company.

▶ Club Activities

UMC Club Events

2015 Performance

clubs (Taiwan) **24**

club members (Note) **2,442** people

2 rounds of selection - a total of **15** excellent social groups will be provided with support in each round.

- UMC clubs can generally be classified into 6 types, namely ball games, sports, public service, music and dance, arts, and business investment.
- Through the club assessment system, clubs with excellent performance receive subsidies for their operating expenses.

UMC Recreational Facilities and Services

(UMC Center/UMC Park/JinShan)

2015 Performance

Recreation Center in Hsinchu : **170,000** visitors

- Quality Recreation Center in Hsinchu for employees and their families.
- Dormitory in Tainan with integrated recreational facilities.
- Each site (8E, 8F, 8S, 12A) provides fitness equipment for employees.

Inter-factory Competitions and Fitness Festival

2015 Performance

participated in the competitions **42** teams

- A wide range of activities and sports competitions are organized to promote an active culture of exercise from within.

Diversity of Employee Activities

(UMC Center/UMC Park/JinShan)

2015 Performance

participated in the Easy Travel program **432** people

participated in UMC Family Day **8400** people

participated in the Art Festival **1833** people

- Organized regular Easy Travel, Family Day, and Art Festival.
- Jurassic Park theme-based family day event was held in both HSP and STSP in 2015.
- Routine screening and playing of popular movies every month

Note : Does not include one-time or temporary club members

Mid-autumn Festival in Tainan with St. Theresa Opportunity Center

UMC Music Group
Fang Tzu-yin
September 23

I had never performed on stage before this. When I became part of the Music society, I became apprehensive yet excited about the impending performance. I practiced intensively for about 2 months to prepare. My stage performance was not perfect, but it was a thrilling experience nonetheless. Performers must be well-prepared and adjusted to their roles. They must refer to the demographic of the target audience and discuss with fellow members to perform popular pieces or novel songs. This experience taught me that performances are not just centered round the performer but should include a plethora of other considerations. The following lists the songs that we finally decided to include in our performance. [Happy Face] is a morning song often played in kindergartens and is perfect for children who want to dance along with the music. Our young audience also tried to keep pace with our rhythm. [Little Apple] is extremely popular. The children and adult audiences cheered and sang excitedly while we played, once again proving its worth as one of the most widely sung songs of the year. [Contentment] is a warm and touching piece. The audience listened quietly and sang along, generating a cozy atmosphere in the performance hall. [Longing for Spring Breeze] is a very old classic amongst the older generations. This song took senior citizens amongst the audience along a ride of nostalgia, allowing them to reminisce about their younger days. The sequence of songs in the play list is also extremely important and must be arranged in a way to provide layered complexity and different levels of dynamism.

I joined the UMC Music Group 6 months ago and learned to play the guitar as well as improving my singing skills. Most importantly, the group taught me to regard life from an optimistic perspective, living every day to its fullest and using music to move people around me.

UMC Extreme Art

UMC Extreme Art was an art event organized by UMC in 2015, and included a series of activities such as movie screenings, book fairs, photo galleries, musicals and art performances, tap dancing, and celebrity seminars as well as measures that encourage employees to include diverse arts as part of their daily lives. The purpose of these activities is to help UMC employees achieve ideal work-life balances while improving their quality of life.

Events planned for 2015 were designed to highlight the core value of Customer (and Employee) Focus upheld by UMC. Activities were also based upon UMC Extreme Art organized in previous years. 2015 UMC Extreme Art included a total of 59 art events which were attended by about 1,833 individuals. The choice of activities were based upon recommendations from fellow employees and proved to be both enriching and well-received by the entire company.

Health Promotion Activity Photos

Maternity Protection

Ergonomics category

Overwork category

Health examinations for family members

Public charity and blood donation

4-3-2 Safe Work Environment

The Safety and Health Policy formulated by UMC's environmental, safety and health management representative (ESH-MR) shall be reviewed and approved during the company-wide management review meeting before final verification and approval by the Chairperson of the Board. Every employee in UMC shall then be notified about the policy, which will be disclosed to the general public through UMC's official website.
(http://www.umc.com/English/CSR/e_2.asp)

Safety and Health Organization

UMC in Taiwan has a company-wide safety and health committee, chaired by the Deputy General Manager. The Board comprises a total of 9 labor representatives elected from respective fabs, who account for 35% of the 26-member committee. Each fab also has its respective safety and health committee. In the Singapore fab, the safety and health committee is set up in accordance to local regulations, and in compliance with the law, its number of employee representatives is greater than the number of director representatives. Although China has no safety and health committee stipulation, the company's subsidiary HJTC has established a safety and health committee that meets every quarter.

Tasks Reviewed by UMC Company-wide Environmental Safety and Health Committee During Each Quarterly Meeting are

- Review of matters pertaining to company-wide environmental safety and health management
- Review appropriateness of environmental safety and health guidelines.
- Promote relevant environmental safety and health outcomes in fabs.
- In response to environmental safety and health trends, formulate key decisions.
- Important changes in regulations and responses.

Create a Corporate Culture of Work Safety for Everyone

Any safety and health risks could result in major economic or social loss for a company, and undermine its competitiveness. UMC builds its safety and health management on inherent safety, and actively establishes a corporate culture of mutual assistance to create "work safety for everyone". It is hoped that the result of safety and health management promotion can be reflected in the operating outcome.

Key measures for "Work Safety for Everyone" in 2015 include

01 Impact analysis and compliance audits were carried out for 19 new occupational safety and health related regulations promulgated in 2015 to ensure that UMC complies with these legal requirements.

02 Establishment of a potential chronic injury and disease report, follow-up, and review database to achieve real-time assessment of potential injuries and diseases in the work place and prevent the incidence of occupational diseases.

03 Ambient nanoparticle exposure measurements for key machinery / equipment maintenance and repairs. The hazards posed by nanoparticles are yet known. However, as part of the active care program for fellow operators and employees, measures were put in place for early detection of environmental hazards and exposures in work places in order to promptly enact the necessary protection. (October 2014: Started focusing on measurements of environmental nanoparticle exposure during machine maintenance and repairs. February 2015: Initiation of improvements for hazards prevention in various plants.)

04 Establish an Accident Prevention Committee. Routine Committee activities will help increase the scope and depth of accident investigations in order to achieve effective prediction and prevention of potential risks and accidents.

High Risk Jobs and Occupational Disease Management

Statutory regulations in Taiwan, Mainland China, and Singapore were reviewed to identify high risk jobs and employees related to certain equipment and facilities operations.

Special health examinations offered for high risk jobs, including noise, ionizing radiation, dust, organic solvents, specific chemical substances and other operation examinations, were conducted according to law. Health management was also implemented according to the classification of health examination results.

To create a healthier and more comfortable work place, comprehensive health risk classification and management systems would be used for early detection of high risk groups while simultaneously improving on work processes and subsequent healthcare measures.

An occupational healthcare system was formulated for groups experiencing suspected work-related discomfort that was. A healthcare team composed of occupational health physicians, health center personnel, and staff members of the Risk Management and EHS department, shall investigate the root cause of the discomfort and propose improvement measures. As of 2015, a total of 3 cases were handled accordingly.

Employer-employee Communication for Health Issues

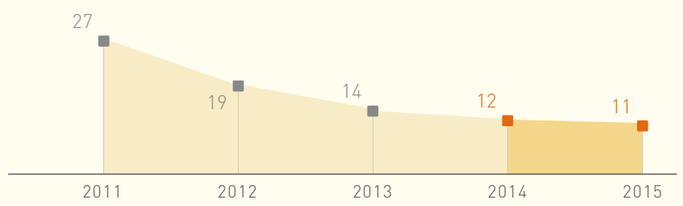
The method for generating labor representatives for occupational safety and health (OSH labor representative) prescribed in the Occupational Safety and Health Act were used as the basis for empowering employees to vote for their labor representatives. With the approval of the labor representatives of the employer-employee meeting, the OSH labor representative shall attend quarterly safety committee meetings, and, be included as a joint participant for amendments to safety and health principles, accident investigations, work environment monitoring, and joint resolutions in related OSH issues.

The employer-employee meeting shall also jointly discuss the penalties for employees who violate the code of conduct and the election process of a labor representative. Any relevant OSH issue and requirements shall be discussed in employer-employee meetings to reach a mutually acceptable consensus.

Accident Management

UMC continues to dedicate itself to reducing the incidence of workplace accidents and aimed to achieve a 10% reduction in accidents with severity rated higher than slight injuries in 2015 (compared to 2014). In order to achieve the objectives of accident management, preventive plans were proposed at the beginning of the year at every plant site. Dynamic root cause analysis was also implemented at different times of the year in response to accidents that occur at any site, in order to propose corresponding solutions. A series of activities such as Plant Site Safety Performance Reward System, established by the Accident Prevention Committee, improvements to employee discipline when traversing the fab cleanroom and elimination of unsafe paths and environments, and Q4 Safety and Discipline Enhancement Season, were implemented to prevent the recurrence of accidents. In 2015, UMC initiated key projects of Work Safety for Everyone to successfully meet reduction goals for work accidents. The 11 incidents that occurred in 2015 were reviewed as follows: personnel falling / collision / cuts when traversing the plant site: 5 incidents; chemical leakage: 3 incidents; burnt or melted electrical component: 2 incidents; and injuries from falling objects: 1 incident. UMC shall continue to propose strategies for the causes of these incidents in 2016 to prevent their recurrence. In addition, UMC also established goals for the 10-year accident management plan to reduce incidents by 75% by 2020 (based on 2011 levels) in order to achieve the final objective of zero-incidents.

Accident Cases



Note1: The target number of accidents in 2016 is 11.

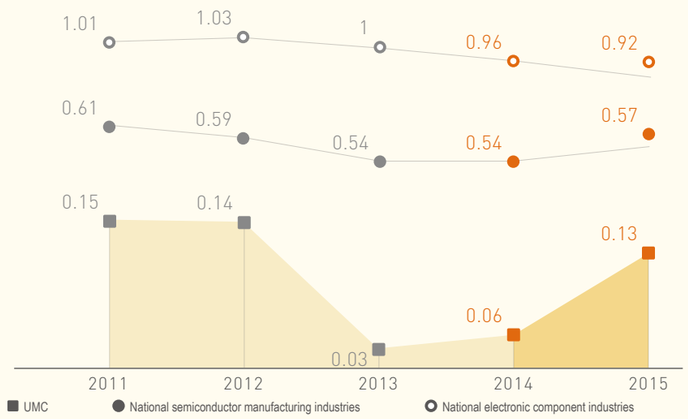
Note2: UMC scores and classifies accidents according to injuries cause by people, production impact, financial loss and involvement of chemical substances, range of impact, fire, or problems due to employee behavior. Not all accidents result in human injury.

Note3: The base year for calculating the rate of accident reduction is defined as the year before.

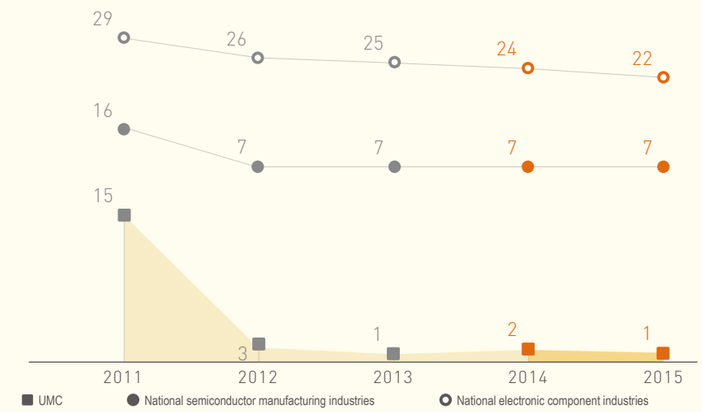
Occupational Disaster Management

In 2015, the Disabling Frequency Rate (FR) for UMC was 0.136, and its Disabling Severity Rate (SR) was 1.698, and both values are far below the average value for semiconductor industries. UMC will continue to promote disaster reduction, and strive toward the goal of zero disasters.

Disabling Frequency Rate (FR)



Disabling Severity Rate (SR)



2015 Relevant Index

	Taiwan				Singapore				China			
	UMC		Contractor		UMC		Contractor		Subsidiary HJTC		Contractor	
No. of people with disabling injuries	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	1	2	0	0	1	0	1	0	1	0	0	0
	3				2				1			
No. of lost days due to disability												
	30	18	0	0	2	0	8	0	155	0	0	0
	48				10				155			
No. of reportable injuries												
	2	3	1	0	1	0	1	0	1	0	0	0
	6				2				1			
No. of work related deaths												
	0	0	0	0	0	0	0	0	0	0	0	0
	0				0				0			
Occupational Disease Rate (ODR)												
	0	0	0	0	0	0	0	0	0	0	0	0
	0				0				0			
Total No. of Work Hours												
	25,558,585				3,886,458				3,862,544			
Injury Rate (IR)												
	0.016	0.024	0.008	0	0.051	0	0.051	0	0.052	0	0	0
	0.047				0.235				0.052			
Lost Day Rate (LDR)												
	0.235	0.141	0	0	0.103	0	0.412	0	8.026	0	0	0
	0.376				0.515				8.026			
Absenteeism												
	0.62%	2.28%	0	0	1.04%	1.6%	0	0	1.22%	0	4.66%	0
	1.34%				1.27%				3.29%			

Total(Taiwan) Total(Singapore) Total(China)

Note: There were no third party illnesses, injuries, disabilities or deaths caused by HJTC operations.

Definition of Terms

Third Party
Refers to non-employees or contracted personnel

Number of People with Disabling Injuries
Refers to the number of deaths, permanent disability, permanent loss of partial function or temporary full disability due to occupational injuries.

Number of Lost Days Due to Disability
Refers to the total number of days lost as the result of injury from a single accident. Calculated as the number of days when the injured person is temporarily (or permanently) unable to resume work, but excludes the day of injury or the day when work is resumed. Includes the number of days elapsed (including Sundays, holidays or company rest days) and the number of inability to work days following return to work as a result of the injury.

Number of Reportable Injuries
Refers to the number of work related injuries that resulted in death, job loss, impairment or transfer, emergency treatment or more, loss of consciousness, or major diagnosis by a physician.

Total Number of Work Hours
Refers to the actual work hours of all workers in the current term.

FR
Number of people with disabling injuries x1,000,000 / Total number of work hours [per million work hours].

SR
Number of lost day due to disability x1,000,000 / Total number of work hours [per million work hours].

ODR
Total number of occupational diseases x 200,000 / Total number of work hours [per 200,000 work hours].

IR
Number of reportable injuries x 200,000 / Total number of work hours [per 200,000 work hours].

LDR
Number of lost day due to disabling injuries x 200,000 / Total number of work hours [per 200,000 work hours].

Absenteeism
Total hours of employee personal leave, occupation injury leave and sick leave /Total number of work hours.

Contractor Management

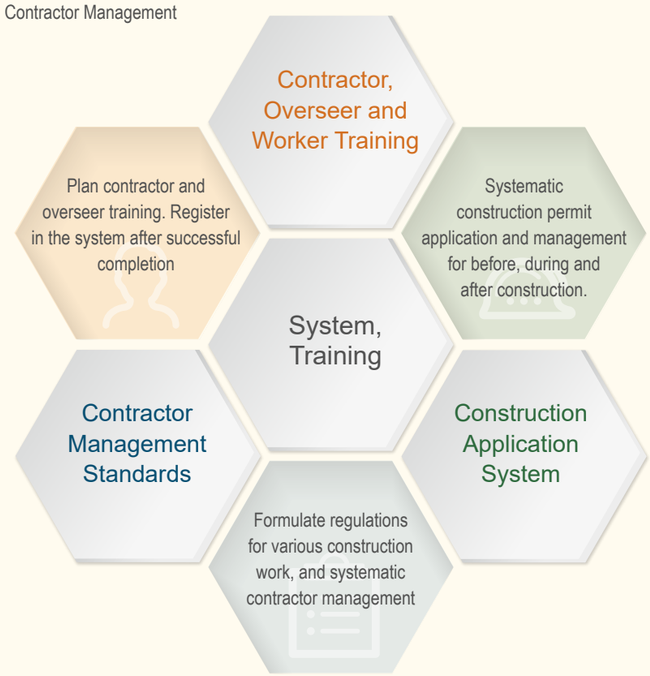
Contractor management is a very important part of safety and health management in UMC. Each cooperating vendor signs the "Environmental Safety and Health Contract" with the company, and is informed of matters such as the work environment, risk factors and safety and health regulations. In addition, existing safety and health management mechanisms such as incident reporting and investigation, inspections and work observation are also applicable to specific contractors. Through the company-wide monitoring mechanism, any unsafe practice or condition found on the part of a contractor is reported to the appropriate director or relevant personal through the various safety and health management mechanisms for systematic follow-up and improvement. To enhance the effectiveness and implementation of construction management, the company has a systematic construction permit application, and prior to any construction work within the factory, a construction permit must be obtained.

UMC requires all contractors to undergo the UMC Environmental Safety and Health Education and Training for Contractors to inform them of potential risks and regulations so that the contractors realize the company commitment to their lives and safety. Company overseers must also complete the Overseer Education and Training program to fully understand supervisory responsibilities, tasks and competency before assuming the position. In addition, to manage contractor entry into the fab and perform the various construction work within the fab, and also to prevent occupational disaster, a comprehensive contractor management standards is developed. The standards include environmental safety and health management regulations for contractors, environmental safety and health instructions for contractors, regulations for operating in confined spaces, regulations for electrical safety, regulations for dismantling dangerous circuitry, and regulations for fire detection and isolation for follow-up training and requirement criteria.

UMC also established a new supplier assessment system and will assemble a professional evaluation team to implement OSH system assessments for new suppliers. Suppliers whose assessment results were less than ideal would be provided with case consultation and support from UMC to strengthen their OSH systems. OSH management standards of both UMC and the said supplier could also be aligned in future partnerships to achieve mutual benefits in improvements of OSH management and prevention of construction accidents.In 2015, UMC successfully provided consultation and inducted 3 new contractors to become UMC partners.

In order to ensure effective integration of work permits and access controls, the Tainan plant introduced integrated access control systems in the second half of 2014. The system became fully operational throughout the Tainan plant in 2015. All qualified vendor personnel who have completed the UMC Contractor Environmental Safety and Health Training would be allowed to apply for Access Passes. These Passes could then be used to provide access to areas listed within the construction work permits, greatly reducing the time and effort required for maintaining company security as well as Pass replacement for vendor personnel. These solutions provided effective improvements to vendor access controls while fulfilling current regulations that govern work permits.

Contractor Management



Environmental Safety and Health Management Regulations for Contractors

- Electrical safety
- Operating rules for interruption of fire protection system
- regulations for dismantling dangerous circuitry
- regulations for fire detection and isolation
- regulations for operating in confined spaces
- Environment safety and health instructions for contractors

4-3-3 UMC Fire Brigade

Semiconductor plants often use a large variety of gases and chemicals while clean rooms tend to be large, enclosed spaces, leading to higher risk of fires. Fire prevention measures used in these facilities also differ from those traditionally employed. In April 1999, UMC established a high tech Fire Brigade under the Group Risk Management & Environmental, Safety and Health Division, making us the only electronics company with a dedicated fire brigade in Taiwan. Rapid expansion of facilities and production capacities in the Southern Taiwan Science Park (STSP) also led to the formal establishment of the STSP Fire Brigade in 2013. This Brigade will be in charge of fire safety, prevention, rescue, and quick response missions in STSP plant sites.

Fire fighters in the Brigade serve 2-year terms, with the 9th cohort serving the term of 2015-2016. Personnel composition included 13 full-time fire fighters and 93 members delegated to specific tasks. Most fire fighters and members of the Brigade are holders of Master's degrees and skilled in semiconductor processes, making the UMC Fire Brigade the best educated firefighting team in Taiwan.

Professional Skill Training

Professional firefighting training: Training themes focus on basic orientation training for new recruits which would then be followed by strategy and tactical training. Every new member must undergo professional disaster relief training and examination which would include professional disaster rescue for simulated fires and response skills to oxidation disasters. In order to improve and maintain firefighting skills and professional competencies of Brigade members, practical training and exercises were carried out regularly every month in order to improve disaster response abilities.

Emergency response training for fellow employees: UMC also organizes emergency response training for the entire company to educate and improve employees' knowledge of safety, protection, and emergency response skills. Practical exercises and examinations including various training courses, building safety evacuation drills, and unannounced day-time / night-time / theme-based fire drills were implemented to establish the concepts of fire prevention, fire safety, and disaster response within the minds of every employee.

A total of 14,995 individuals throughout UMC underwent various emergency response training in 2015.

Professional Simulated Training in Fire Rescue


Sealing chemical leaks


Firefighting training


Decontamination drills


Actual training in fuel fires

Emergency Response Training


Fire extinguishing exercise


Chemical disaster handling


Fire alarm exercise


Escape sling training


Equipment training


Evacuation drill

Unannounced Fire / Chemical Disaster Drills at Different Times of the Day (day-time and night-time)



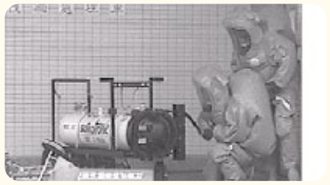



Disaster Rescue Equipment


Chemical fire engine


Chemical leak sealing kit


Infra-red headgear


Leakage control vehicle


Collapse-resistant chemical protective suit


Rescue gear

4-4 Community Service

4-4-1 Community Service Participation

"People orientation, co-existence with the environment and shared social prosperity" are the most important elements of UMC's vision in sustainability policies. UMC upholds the spirit of social co-prosperity and shall contribute its fair share towards social development. Under the leadership of UMC Science and Culture Foundation, more and more employees have started to take notice of the importance of community services, and begun to take an active role in volunteer activities which initiated positive development within UMC. Our growing positive influence would help external agencies recognize UMC while providing assistance to more of those who need help, generating a growing positive feedback cycle that expands from within.

LBG Model

To effectively quantify the benefits brought about by community services, UMC referred to the community investment assessment system established by London Benchmark Group (LBG). Investment time, cost, material donations, and management expenses were carefully recorded to evaluate the positive benefits brought about by these investments. Outputs of community services include reductions in cost, generation of benefits, and intangible influences such as positive corporate image, becoming a benchmark of corporate social responsibility (CSR), establishing positive value systems amongst school children, and helping to compensate for the inadequacy of educational resources for school children living in remote areas.

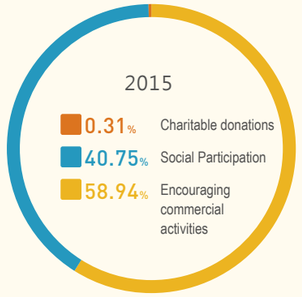
Category and Sums of Community Service Investments from 2013 to 2015

2013	2014	2015
Cash donations		
32,552,841 (0.32%)	47,481,810 (0.58%)	34,435,555 (0.29%)
Time contributions		
3,765,341 (0.04%)	4,622,727 (0.06%)	4,172,045 (0.04%)
Material donations		
10,111,097,404 (99.33%)	8,124,275,019 (99.01%)	11,808,406,852 (99.41%)
Management costs		
32,378,774 (0.32%)	28,799,912 (0.35%)	31,879,268 (0.27%)
Total		
10,179,794,360	8,205,179,468	11,878,893,720

Unit: NT$

In addition to the Spreading the Seeds of Hope Project that was initiated in 2005, UMC also mobilized other agencies such as the UMC Science and Culture Foundation, UMC LOHAS Education Foundation, UMC Fire Brigade, and employee societies and clubs in 2015, using their different skills to target and identify the best means of investing in community services. In 2015, UMC employees provided a total of 12,241 volunteer hours. Charitable donations and the number of beneficiaries also grew significantly and the latter grew to over 25,416 individuals. These results demonstrate continued growth of human resources and kindness of UMC volunteers offering services to the needy throughout Taiwan.

Proportion of Community Service Investments from 2013 to 2015



UMC Community Service Participation and Number of Beneficiaries

2013	2014	2015
Charitable Donations[Note 1]		
More than NT$18 million	More than NT$23 million	More than NT$36 million
No. of Beneficiaries		
More than 7,340 people	More than 10,441 people	More than 25,416 people
Total Employee Volunteer Hours[Note 2]		
More than 8,528 hours	More than 13,442 hours	More than 12,241 hours

Note 1: This table only includes projects carried out by the Science and Culture Foundation, UMC LOHAS Education Foundation, and societies and clubs as well as employee donations.

Note 2: Includes volunteer leave and holiday service hours.

UMC Community Service Department

The UMC Science and Culture Foundation and the UMC LOHAS Education Foundation are UMC's two major foundations. In addition, UMC has also instituted the UMC Fire Brigade. All social involvement and actions are mutually supporting, forming the major force behind UMC's social citizenship in caring for the disadvantaged. Through the integration of UMC resources, employees contribute diligently to society to create a more secure and warmer community.

In 2015, more and more societies and clubs in UMC took the initiative to be a part of community services, including musical groups such as Music Lover, Guitar Club, and Ukulele Club, recreational groups such as Swimming Club and Road Running Club, and art groups such as I-Ching Study Club. The efforts of these groups are growing to become a positive and significant force in promoting community services.

Three Major Social Welfare Groups in UMC

UMC Science and Culture Foundation

Since1996

- Develop education for the disadvantaged
  " Spreading the Seeds of Hope Project "
- Life education
  " Love Storyteller Club"
- Parent Child Education
  sponsorship for Whatever Makes Sense or Voice of IC Teacher Hung Lan

UMC LOHAS Education Foundation

Since2009

- Promote sports
  Open the UMC Park Activity Center to disadvantaged groups
  Provide UMC tours to university students
- Education for the disadvantaged
  Provide basic literacy skill training for new residents (foreign spouses) and expatriates

UMC Fire Brigade

Since1999

- Assist in industrial park and community disaster rescue
- Promote fire safety in elementary schools

Community Service Project - "Spreading the Seeds of Hope "

UMC is committed to enhancing the education of school children from disadvantaged families, and has continued implementing the "Spreading the Seeds of Hope " educational assistance program for school children from disadvantaged families. We hope that corporate strength can be used to remedy the imbalance in educational resources. To date, the company has allocated NT$ 155 million to tutoring programs for school children from disadvantaged families, and with the support of UMC, more than 6,000 school children have continued in their studies, thereby fulfilling the mission of the "Spreading the Seeds of Hope ".

In 2015, in addition to investing in the "Seeds of Hope" educational assistance project for disadvantaged school children, the program also focused on cultivating "Life Education", "Reading Promotion", "Green Energy" and "Basic Science and Technology Talent" to promote a new wave of nurturing that is founded on spiritual, learning, environmental and basic technological perspectives. In addition, the company also realizes that corporate social responsibility cannot be fulfilled only by the company itself, but should involve the joint efforts of employees. It is only through practical personal involvement that individual efforts can unite into a significant strength that becomes a new momentum for Taiwan's growth.

Executive Summary

Item & Implementation	Results & Effects in 2015
Seeds of Hope Educational Assistance for Children from Disadvantaged Families ▸ After-school counseling ▸ Reading class ▸ Ethics class ▸ Long-term care ▸ Organizing festivals and events	▸ 800 hours of after-school counseling services ▸ Sponsoring the Nantou Karate Association ▸ Servicing 150 underprivileged children Volunteers would help provide children with correct perspectives to prevent delinquency, using quality education to bring them out of their impoverished background. Sponsorship is provided to Nantou Karate Association to train karate students, helping underprivileged students to regain confidence and become aware of their strengths.
Seed of Semiconductor Knowledge Cultivating High Technology Talents in Taiwan ▸ Industry-academia classes for the semiconductor industry ▸ Creative R&D projects ▸ Other business-education partnerships ▸ Campus Cultivation Project	▸ Industry-academia classes for the semiconductor industry jointly run by the company and 3 universities. ▸ Initiated multiple R&D projects in multiple universities and secured relevant patents. ▸ Opened industry-academia classes attended by a total of 328 students. Cultivated future talent in the semiconductor industry so that young students could achieve in-depth understanding of semiconductor-related knowledge and technology during their school years.
Seed of Read National Reading Movement ▸ Reading seminars ▸ Reading promotion	▸ Organized 3 reading seminar courses (total of 20 hours) to train storytelling volunteers ▸ Storytelling volunteers to visit remote villages and support school children there. Sponsored newspaper reading education of Mandarin Daily News for schools ▸ that lack resources. Organized 24 reading events in remote elementary schools to benefit a total of ▸ 500 schoolchildren. School children appreciating the fun of learning through various activities.
Seed of Green Energy Promoting environmental education and cultivating green energy technology talents ▸ Implementing environmental conservation activities	▸ Investing NT$ 30 million in the UMC Eco-Echo Conservation Project. ▸ Worked with The Society of Wilderness (SOW) and provided them with a budget of NT$ 3 million for ecological conservation projects for 3 years. ▸ Organized seminars and green market events to promote the concepts of earth friendliness Improve awareness for the importance of environmental protection amongst fellow employees and students, and promote the concept of environmental protection to more individuals so that it becomes the responsibility and way of life of every individual.
Seed of Life Education Promoting Life Education ▸ Assembling Life Education Volunteer Team ▸ Regular visits to remote villages and juvenile delinquency	▸ Completed 4 sessions of Life Education Volunteer Training to train a total of 176 volunteers. ▸ Organized 4 sessions of Mobile Theater and caretaking activities at the House of Miracle. ▸ Sponsored the Whatever Makes Sense show provided by Voice of IC Dr. Hung Lan. ▸ Provided a total of 13 Ukulele community service performances by the Ukulele Society. Made regular visits to youths living in remote villages to convey the message of positive life education in order to help them realize the truth meaning of the living and the purpose of life. Interacting with youths living in the House of Miracle to build a correct system of values.

Community Service Project - "Spreading the Seeds of Hope "

Cultivation and Training of Professionals with Management Potential

In addition to supporting training efforts for high tech professionals, UMC is also leading the way in supporting professionals with management potential. The UMC Business Management Thesis Award was established in 2010 and started offering monetary donations to the Award in 2011 to help further training programs for potential management professionals, encourage academia and industry exchange, achieve effective integration of management practice and theory, and contribute towards sustainable corporate management. In 2015, a sum of NT$ 3 million was invested in the award.

4-4-2 Promotion of UMC Volunteer Culture

Volunteer Services

While focusing upon business growth, UMC is also actively contributing towards community work and social participation. To encourage fellow employees to participate in community service, employees are allowed to apply for official leave and partake in various volunteer services. Under the guidance of the UMC Science and Culture Foundation, the spirit of voluntarism in UMC has begun to spread beyond volunteer teams to include the entire employee population. In 2015, the number of employee societies and clubs taking the initiative to participate in community work increased from 3 (the Candlelight Club, Mountaineering Club, and Ukulele Society) to 7. Total donations and beneficiaries are continuing to grow every year, with societies and clubs providing a total of 159 volunteer services in 2015. Active donations and participation in community services by UMC employees demonstrate their initiative, kindness, and selfless contributions as well as the importance that UMC places upon building a volunteer culture.

To provide employees with greater freedom, UMC not only encouraged employees to participate in various community work and social activities, but also employed comprehensive social group assessment systems to encourage company societies to engage in charity work as well. Societies that attained excellent achievements were provided with additional funding to support both social group activities as well as community participation.

During annual scheduling of events, social groups would be invited to provide support according to the nature and purpose of the event. Many activities were made possible through the assistance and participation of social group members, and these measures help create an inseparable link among community work, corporate-wide event planning and social groups to encourage employees to engage in social work.

Certificate of Gratitude

Employee Feedback After Participation in Community Work

UMC Swimming Club
Lu Hsueh-Wei

I love swimming, and this is why I signed up with a group of "professional" volunteers. I've placed professional in quotes because true professionals must undergo various training by the Chinese Taipei Water Life Saving Association (CTWLSA) and pass assessments organized by the Sports Administration to obtain a certificate. Three members of the Swimming Club in UMC have acquired this certificate.

The CTWLSA provides support to Hsinchu County / City fire department and lifeguard stations every year at locations such as Bazaiku Station (Xinyue Beach) in Zhubei, Neiwan, and Beipu Scenic Area. Members sacrificed their holidays and time together with friends and families in order to provide volunteer services to the general public.

When on duty, people often thank us as they walk past lifeguard stations. The sight of entire families having fun together and going home safely makes this work all the more worthwhile. This opportunity allowed us to contribute our share to the community which supported our company.

Services Provided by Various Societies in 2015

Society Name	Volunteer Services	Partners	Beneficiaries	Sessions Held
Candlelight Club	Offering companionship at the House of Miracles Services provided at Ren'ai Children's Home Services in remote villages Initiating love charity drives Charity sales activities jointly held with the foundation	3 schools in Taitung Pao Shih Elementary School Hsin Hsing Elementary School Lufeng Elementary School Ta Tu Elementary School Nan He Elementary School St. Theresa Opportunity Center Zhubei Senior Nursing Home Veterans' Home in Hsinchu Hsinchu Blind Welfare Association Hsinchu Association for the Visually Impaired Ta Tu Elementary School YanJou Elementary School Hsinchu Where?! Youth Center World Vision Homeless Foundation St. Theresa Opportunity Center	Underprivileged students Underprivileged senior citizens Environmental protection	134
Mountaineering Club	Companionship for children living in aborigine settlements Material collection / donations Christmas wish activities	Underprivileged students	1
Ukelele Club	Services for children living in remote areas Ukulele instructions for children living in remote areas Charity performances	Underprivileged students	13
Music Lover Club	Supporting community work organized by the foundation Engage in community work through music	Underprivileged students	4
Guitar Club	Island tour, charity performances, and volunteer work Supporting community work organized by the foundation	Underprivileged students Hsinchu residents	3
Swimming Club	Promotion of safety concepts Provide lifeguard duties	Hsinchu residents	3
I-Ching Club	Promoting the study of I-Ching Participate in educational activities and parent-child park tours	Hsinchu residents	1

■ Services ■ Music groups ■ Athletic groups ■ Art groups

4-4-3 UMC Science and Culture Foundation

The UMC Science and Culture Foundation continues to promote community service, and currently, its focus is on long-term educational assistance. Promoting the "Spreading the Seeds of Hope Program," the Foundation funds the company's collaboration with universities in Hsinchu and Tainan. The universities provide classrooms and employ part-time instructors to provide free remedial tutoring to students who are economically disadvantaged.

In 2013, in response to the diversified learning needs of the newly instituted 12 year education policy, the Foundation integrated with community resources to establish the "UMC Sacred Heart Learning Center" in Hsinchu. To date, more than 40 professionals comprising of teachers and students from National Tsing Hua University and National Chiao Tung University, engineers from the Hsinchu Science Park and professionals from various disciplines have joined the tutoring and volunteer team. In addition to supporting the existing remedial tutoring, they also help students develop a positive learning attitude and appropriate values.

Since 2013, the Foundation has supported Tainan remedial classes with the National University of Tainan. Efforts have been further expanded to include elementary schools in remote villages in order to provide services for underprivileged children living there. Teaching development projects with National University of Tainan have been initiated to help train more teachers capable of providing teaching services for underprivileged children living in remote locations.

UMC Love Storytelling Club Volunteer

Hu Lan-Wen

Love is ever present in the UMC Love Storytelling Club. Everything, from the script to the performance, was created by UMC volunteers.

We hope that theater is not just about performances, but a means by which we convey love to friends of all ages and letting them know that love is ubiquitous. The tears and laughter of our audience in every performance serve as the best encouragement. The letters we receive from children who viewed our performance revealed the innocence and kindness in their hearts. Some children even illustrated the appearances of every performer, and some even included the cameramen. These works greatly moved our fellow volunteers.

We also derived great happiness from performing, just like a candle burning itself to illuminate ourselves and those around us. We hope that our performances can strike at the hearts of our viewers, using love to kindle the flames of kindness and bring brightness to the world.

Other Community Services by the Foundation are Listed Below

Education for the Disadvantaged

Spreading the Seeds of Hope

Provided a total of **800** hours

remedial classes to **150** students

The "Spreading the Seeds of Hope—Educational Assistance for Children from Disadvantaged Families" program was launched at UMC's 25th Anniversary Celebration to commit corporate resources to improve the education of school children from disadvantaged families. The program offers tutoring to school children from disadvantaged families in Hsinchu and Tainan.

Life Education

UMC Love storyteller club

Through the performances, life education messages were delivered **52** performances in 6 years

total audience of more than **17,000** people

In the 2009 Typhoon Morakot Disaster, UMC sent 600 people to help clean up disaster areas in Pingtung. After the disaster, employees formed the "UMC Love storyteller club" to harness their strength, and gave musical performances in Pingtung, Hsinchu, Tainan and other areas.

Parent Education

IC Voice—"Be Reasonable" program by Teacher Hong Lan

ince its beginning in 2009, the sponsored program is in its **7**th year.

UMC sponsors the IC Voice radio program, "Be Reasonable" by Teacher Hong Lan to promote correct educational perspectives

UMC Drum Club

UMC Drum Club

In 2015, UMC Drum Club not only participated in U-Theatre Yunjiao performance, but also learned different drum beats from the masters of traditional drum performances.

A total of **24** charity performances in the last 3 years given to **18,000** audiences

In July 2013, UMC CEO Yen mobilized employees in Hsinchu and Southern Taiwan to form the Drum Club to reciprocate society through the theme of "Make Friends Through Drums, Move Through Love". In addition, the personal involvement of the CEO helped motivate a spirit of volunteerism.

Volunteer Activities

Storytelling volunteers

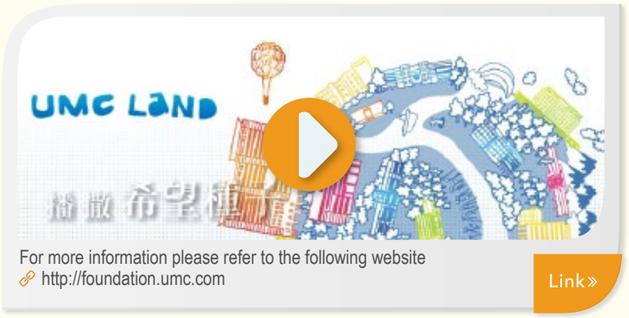
A total of **24** sessions were conducted totaling about **500** participants

Encouraged employees to become storytellers and lead reading activities in Bao Shih elementary school in Hsinchu County. Through a diversity of themes and mediums, extra-curricular cultural materials are used to motivate reading in children.

Letter Writing Volunteers

A total of **110** children were adopted through Children and Families Fund.

Children and Families Fund to adopt school children on behalf of the Foundation. In addition, employees volunteer to write letters to the adopted children to reach out and give encouragement. Such a simple friendship links the chain of love and hope.



For more information please refer to the following website
http://foundation.umc.com

Link»

4-4-4 UMC Fire Brigade and Community Service

In addition to offering assistance to the community, the UMC Fire Brigade actively participates in large-scale drills outside the company, and assists the Environmental Protection Agency in toxic chemical disaster training. Furthermore, the UMC Fire Brigade collaborates with the UMC Science and Culture Foundation to conduct safety education in elementary schools to firmly establish disaster prevention education, and positively influence community attitude and actions.

In 2015, the UMC Fire Brigade supported Hsinchu County / City fire department in promoting awareness for fire safety while working with the UMC Science and Education Foundation to implement various activities, providing a total of 23 services outside the company.

Emergency Response Training

Supporting Hsinchu County fire safety awareness program – Smoke experience chamber

Fire truck & mobile earthquake awareness exhibit and experience

Promoting fire safety at the Shih Guang Educational and Nursing Institution

Supporting the Environment Protection Bureau of Hsinchu City in carrying out practical training in toxic disaster rescue and relief

Excellent performance award and commendation ceremony as well as experience sharing with the National Toxic Compound Joint Defense Organization

Joint Ventures and Subsidiaries

Joint Ventures and Subsidiaries

The ventures of the company and its affiliated enterprises include wafer manufacturing, electronics, optoelectronics industry, investment, insurance and trading industries. In 2015, over 90% of revenue was generated by UMC's integrated semiconductor manufacturing operations, and the remainder generated by the new business department for research and manufacturing of solar energy and new generation light-emitting diodes.

This report is based upon the outcomes of actual sustainable assessments listed in Chapter 1 and discloses the information of 10 joint ventures and subsidiaries according to subsidiary categories and industrial natures, namely: He Jian Technology, United Semiconductor (Xiamen) Co.,Ltd, Wavetek Microelectronics Corporation, NexPower Technology Corporation, UMC Group USA, UMC Group Japan, UMC Capital Corp., Zhenhong Investment Company, Hongding Investment Company, and Hongcheng Investment Company. Information of UMC and its subsidiaries are provided in Page 124 of the 2015 Company Annual Report. Reference website: http://www.umc.com/chinese/investors/Reports/2010-present_report.asp

Basic Information

Company Name	Basic Information			Details
	Time of Establishment	Principal operation or production	Address	
HJTC（Suzhou）Co., Ltd.	2001.11	Semiconductor Manufacturing and Sales	No. 333, Xinghua Street, Suzhou Industrial Park, Suzhou, Jiangsu Province, China	UMC-related information shall be disclosed in various chapters.
United Semiconductor (Xiamen)Co.,Ltd	2014.10	Semiconductor Manufacturing and Sales	No.899,Wan Jia Chun Road,Xiang An,Xiamen,Fujian,P.R.China	As for new investments / companies of 2015, their and UMC's information shall be disclosed in various chapters once their plants become operational for mass production.
Wavetek Co., Ltd.	2010.10	GaAs foundry services	3F.,No. 10, Innovation 1st Road, Hsinchu Science Park, Hsinchu County, Taiwan, R.O.C.	Refer to the list of information on manufacturing subsidiaries
NexPower Technology Corp.	2005.11	Solar cells manufacture and sales	No.2, Houke S. Rd., Houli Township, Taichung City,Taiwan, R.O.C.	
UMC Group（USA）	1997.8	IC marketing	488 De Guigne Drive, Sunnyvale, CA 94085, USA	Refer to the list of information on non-manufacturing subsidiaries.
UMC Group Japan	2013.02	IC marketing	15F Akihabara Centerplace Bldg., 1 Kanda Aioi-cho Chiyoda-ku Tokyo 101-0029 Japan	
UMC Capital Corp.	2001.01	Investment	190 Elgin Avenue, George Town, Grand Cayman, Cayman Islands	
Unitruth Investment Corp.	2004.07	Investment	18F, No. 333,Sec.2,Tunhua S. Rd., Taipei City ,Taiwan, R.O.C.	
TLC Capital Co., Ltd.	2005.10	Venture investment	18F, No. 333,Sec.2,Tunhua S. Rd., Taipei City ,Taiwan, R.O.C.	
Fortune Venture Capital Corp.	1993.09	Venture investment consulting and planning	18F, No. 333,Sec.2,Tunhua S. Rd., Taipei City ,Taiwan, R.O.C.	

Manufacturing Subsidiaries.

Issue	2015 Subsidiary Company Information (Disclosure Index)	Wavetek Co., Ltd.	NexPower Technology Corp.
Economic			
Economic Performance	Operating Revenue/NT$1000	1,488,399	226,665
	Capital/NT$1000	1,623,771	2,218,539
	After tax profit (loss)/NT$1000	(231,227)	(1,711,759)
	Other financial information	Please refer to Page 134 of the Company's 2015 Annual Report on the operations of affiliated companies http://www.umc.com/chinese/investors/Reports/2010-present_report.asp	
	Pension fund allocation	According to local pension regulations	
Compensations and Benefits	Minimum wage standard	According to local regulations on minimum wage	
Product			
Regulations compliance	Product/Service Total Significant Fines /NT$	No significant fines related to violation of relevant regulations in 2015	
Environmental			
Environmental Management	Promote relevant environmental management system certification	1. Has passed the ISO 14001 environmental management systems (EMS) certification. Systematic management is used to reduce the generation of waste gas, wastewater, and waste. 2. Awarded ISO 14064-1 verification on greenhouse gas emissions. For relevant information, please refer to http://www.wtkmicro.com/cht.cc/about/profile.asp	1. Awarded the IEC (61646 & 61730) and ISO (9001 & 14001) certifications 2. Awarded the PAS2050 carbon footprint and ISO/CD14067-1 certifications 3. Passed the WEEE 3R compliance verification. For relevant information, please refer to http://www.nexpw.com/About/About
Regulation Compliance	Environmental regulation violation fines/ NT $	No major fines related to violation of relevant regulations in 2015.	
Resource usage	Energy consumption	58,056 MWh 209,003 Giga Joules	22,306 MWh 80,302 Giga Joules
	Energy intensity	0.14 Giga Joules/1000 NTD	0.35 Giga Joules/1000 NTD
Water resource usage	Total water withdrawal	401,483 m3	87,449 m3
Greenhouse gas emission	Direct greenhouse gas emissions (Category 1)	14,082 ton CO2e	168 ton CO2e
	Indirect greenhouse gas emissions (Category 2)	30,247 ton CO2e	11,867 ton CO2e
	Intensity of greenhouse gas emission	0.030 ton CO2e/1000 NTD	0.053 ton CO2e/1000 NTD
Waste gas emission	Ozone Depleting Substances (ODS) emissions	0 ton	0 ton
	Emissions of air pollutants	Nitrogen oxides (NOx) 1.8052 ton Sulfure Oxides (Sox) 0.189 kg Volatile organic compounds (VOCs) 1.653 ton	Nitrogen oxides (NOx) 681.85 ton Sulfure Oxides (Sox) 0 ton Volatile organic compounds (VOCs) 1.19 ton
Wastewater discharge	Total wastewater discharge	267,765 m3	43,457 m3
Waste	Total weight of waste	353 ton	73 ton

Issue	2015 Subsidiary Company Information (Disclosure Index)	Wavetek Co., Ltd.	NexPower Technology Corp.
Social			
Labor relations	Number and rate of employee turnover according to gender	Male : 66 employees ; 44 % Female : 83 employees ; 56 %	Male : 51 人 ; 37% Female : 14 人 ; 33%
	Gender-neutral return to work and retention rates following maternal and parental leave	Return rate : 100% Retention rate : 100%	Return rate : 100% Retention rate : 50%
Occupational Health and Safety	Occupational injury index	Disabling Frequency Rate (FR) : 0 Disabling Severity Rate (SR) : 0 Injury Rate (IR) : 0 Lost Day Rate (LDR) : 0	Disabling Frequency Rate (FR) : 9.481 Disabling Severity Rate (SR) : 0 Injury Rate (IR) : 0 Lost Day Rate (LDR) : 0
Compensations and Benefits	Female-male basic wage ratio Female-male compensation ratio	Employee salary is based on educational level, performance and market prices, and independent of gender	
Human Rights	Discrimination	No incidence of discrimination in 2015.	
	Child labor	Management mechanism in place; no incidence of child labor	
	Serious incidence of forced or compulsory labor risks in operation base	No incident of forced or compulsory labor risks in operation base in 2015.	
Anti-Corruption	Number of cases	Complaint mechanism in place. No complaints related to human rights issues in 2015.	
Fair Trade	Corruption risk assessment	Promoted according to the UMC Code of Conduct (For relevant information, please refer to the company website http://www.umc.com/English/CSR/c_4.asp) In 2015, there is no incidence of corruption, and no violations of antitrust	
Regulations Compliance	Number of antitrust litigations		
	Significant Fines for violation of regulations /NT$	No significant fines related to violation of relevant regulations in 2015.	

Non-manufacturing Subsidiaries.

Issue	2015 Subsidiary Company Information (Disclosure Index)	UMC Group USA	UMC Group Japan	UMC Capital Corp.	Unitruth Investment Corp.	TLC Capital Co., Ltd.	Fortune Venture Capital Corp.
Economic							
Economic Performance	Operating Revenue/NT$1000	64,702,519	10,063,669	554,693	285,221	962,768	1,213,370
	Capital/NT$1000	524,406	7,875	2,286,264	1,326,600	4,861,502	4,588,000
	After tax profit (loss)/NT$1000	41,801	89,852	(76,019)	113,229	374,637	270,796
	Other financial information	Please refer to Page 134 of the Company's 2015 Annual Report on the operations of affiliated companies http://www.umc.com/chinese/investors/Reports/2010-present_report.asp					
Product							
Regulations compliance	Product/Service Total Significant Fines /NT$	No significant fines related to violation of relevant regulations in 2015.					
Social							
Anti-Corruption	Corruption risk assessment	Promoted according to the UMC Code of Conduct(For relevant information, please refer to the company website http://www.umc.com/English/CSR/c_4.asp) In 2015, there is no incidence of corruption, and no violations of antitrust					
Fair Trade	Number of antitrust litigations						
Regulations Compliance	Significant fines for violation of regulations /NT$	No significant fines related to violation of relevant regulations in 2015.					

Global Reporting Initiative (GRI) Index

Global Reporting Initiative (GRI) Index(General Standard Disclosures)

General Standard Disclosures				External Assurance
Strategy and Analysis				
G4-1 Statement from the most senior decision-maker of theorganization.	From the CEO	p1		○
G4-2 Description of key impacts, risks, and opportunities.	1. Communication with Stakeholders 2-2-2. Business Performance 2-4. Risk and Crisis Management 3-2. Energy and Greenhouse Gas Management 3-3. Water Risk Management	p9 p28 p33 p56 p63		○
Organizational Profile				
G4-3 Name of the organization.	About UMC	p5		○
G4-4 Primary brands, products, and services.	About UMC	p5		○
G4-5 Location of the organization's headquarters.	About UMC	p5		○
G4-6 Number of countries where the organization operates, names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.	About UMC	p5		○
G4-7 Nature of ownership and legal form and markets served.	About UMC	p5		○
G4-8 Markets served (geographic breakdown, sectors served, and types of customers and beneficiaries).	About UMC	p5		○
G4-9 Scale of the organization: employees, operations, sales, capitalization & quantity of services provided.	About UMC 2-2-2.Business Performance	p5 p28		○
G4-10 Total number of employees by employment contract, gender, permanenent employees, region, supervised workers, casual workes & significant variations in employment numbers.	4-2-1. Human Resource	p80	No significant changes occurred during the reporting period.	○
G4-11 Percentage of total employees covered by collective bargaining agreements.			No employee labor unions were formed before the end of the reporting period. No employee to sign a collective agreement.	○
G4-12 Description of the supply chain.	2-5. Sustainable Supply Chain Management	p36		○
G4-13 Significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain.	2-5. Sustainable Supply Chain Management	p36	Invested United Semiconductor (Xiamen) Plant in China.	○
G4-14 Precautionary approach or principle.	2-1-4. Internal Audit 2-4. Risk and Crisis Management	p24 p33		○
G4-15 Subscription to externally developed economic, environmental and social charters, principles, or other initiatives.	3-2-3. Climate Challenges and Opportunities 2-5. Sustainable Supply Chain Management 4-1-1. Human Rights	p56 p36 p76		○
G4-16 Memberships of associations (such as industry associations) and national or international advocacy organizations.	About UMC	p5		○
Identified Material Aspects and Boundaries				
G4-17 Entities included in the consolidated financial statements.	About UMCAppendix: Joint Ventures and Subsidiaries	p5 p107	For more information, please refer to the 2015 Annual Report (page 124).	○
G4-18 Process for defining the report content and the Aspect Boundaries and, implementation of the Reporting Principles for Defining Report Content.	Principles for Report Compilation 1. Communication with Stakeholders	p2 p9		○
G4-19 List of all the material Aspects identified in the process for defining report content.	1. Communication with Stakeholders	p9		○
G4-20 Aspect Boundary within the organization for each material aspect.	1. Communication with Stakeholders	p9		○
G4-21 Aspect Boundary outside the organization for each material Aspect.	1. Communication with Stakeholders	p9		○
G4-22 Effect of any restatements of information provided in previous reports, and the reasons for such restatements.				○
G4-23 Significant changes from previous reporting periods inthe Scope and Aspect Boundaries.	Principles for Report Compilation	p2		○
Stakeholder Engagement				
G4-24 List of stakeholder groups engaged by the organization.	1. Communication with Stakeholders	p9		○
G4-25 Basis for identification and selection of stakeholders with whom to engage.	1. Communication with Stakeholders	p9		○
G4-26 Approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.	1. Communication with Stakeholders	p9		○
G4-27 Key topics and concerns that have been raised through stakeholder engagement. How the organization has responded to these key topics and concerns, including through reporting. Stakeholder groups that raised each of the key topics and concerns.	1. Communication with Stakeholders	p9		○

General Standard Disclosures

General Standard Disclosures	Location	Page	Note/	External Assurance
Report Profile				
G4-28 Reporting period for the information provided.	Principles for Report Compilation	p2		O
G4-29 Date of most recent previous report.	Principles for Report Compilation	p2		O
G4-30 Reporting cycle (such as annual, biennial).	Principles for Report Compilation	p2		O
G4-31 Contact point for questions regarding the report or its contents.	Principles for Report Compilation	p2		O
G4-32 'In accordance' option chosen. GRI Content Index for the chosen option. Reference to the External Assurance Report.	Principles for Report Compilation	p2		O
G4-33 External assurance for the report.	Principles for Report Compilation	p2	Appendix: Assurance Statement	O
Governance				
G4-34 Governance structure of the organization.	Sustainable Development Strategy and Organization 2-1-1. Board of Directors	p6 p21		O
G4-35 Process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees.	Sustainable Development Strategy and Organization	p6		O
G4-36 Executive-level position or positions with responsibility for economic, environmental and social topics, and whether post holders report directly to the highest governance body.	Sustainable Development Strategy and Organization	p6		O
G4-37 Processes for consultation between stakeholders and the highest governance body on economic, environmental and social topics.	Sustainable Development Strategy and Organization	p6		O
G4-38 Composition of the highest governance body and its committees.	2-1-1 Board of Directors	p21		O
G4-39 Report whether the Chair of the highest governance body is also an executive officer.	2-1-1 Board of Directors	p21		O
G4-40 Nomination and selection processes for the highest governance body and its committees, and the criteria used for nominating and selecting highest governance body members.	2-1-1 Board of Directors	p21		O
G4-41 Processes for the highest governance body to ensure conflicts of interest are avoided and managed and whether conflicts of interest are disclosed to stakeholders.	2-1-1 Board of Directors	p21		O
G4-42 The highest governance body's and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental and social impacts.	Sustainable Development Strategy and Organization	p6		O
G4-43 Measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental and social topics.	2-1. Corporate Governance	p21	For more information, please refer to the 2015 Annual Report (page 36).	O
G4-44 Processes for evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics. Frequency and independence of the Evaluation. Report whether such evaluation is a self-assessment. Actions taken in response to the evaluation.	Sustainable Development Strategy and Organization 2-1. Corporate Governance	p6 p21		O
G4-45 The highest governance body's role in the identification and management of economic, environmental and social impacts, risks, and opportunities. The highest governance body's role in the implementation of due diligence processes. Report whether stakeholder consultation is used to support the highest governance body's identification and management of economic, environmental and social impacts, risks, and opportunities.	Sustainable Development Strategy and Organization	p6		O
G4-46 The highest governance body's role in reviewing theeffectiveness of the organization's risk managementprocesses for economic, environmental and social topics.	Sustainable Development Strategy and Organization	p6		O
G4-47 Frequency of the highest governance body's review of economic, environmental and social impacts, risks, and opportunities.	Sustainable Development Strategy and Organization	p6		O
G4-48 The highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material Aspects are covered.	Sustainable Development Strategy and Organization Principles for Report Compilation	p6 p2		O
G4-49 Process for communicating critical concerns to the highest governance body.	Sustainable Development Strategy and Organization	p6		O
G4-50 Nature and total number of critical concerns that were communicated to the highest governance body and the mechanism(s) used to address and resolve them.	Sustainable Development Strategy and Organization	p6		O
G4-51 Remuneration policies for the highest governance body and senior executives.	2-1-2. UMC Functional Committee	p23		O
G4-52 Process for determining remuneration. Involvement of remuneration consultants in determining remuneration and whether they are independent of management. Other relationships which the remuneration consultants have with the organization.	2-1-2. UMC Functional Committee	p23		O
G4-53 How stakeholders' views are sought and taken into account regarding remuneration, including the results of votes on remuneration policies and proposals, if applicable.	2-1-2. UMC Functional Committee	p23		O
G4-54 The ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees (excluding the highestpaid individual) in the same country.	2-1-2. UMC Functional Committee	p23		O
G4-55 The ratio of percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees (excluding the highestpaid individual) in the same country.	2-1-2. UMC Functional Committee	p23		O
Ethics and Integrity				
G4-56 Description of the organization's values, principles, standards and norms of behavior.	2-1-5.Code of Ethics and Anti-Corruption	p25		O
G4-57 Internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity.	2-1-5.Code of Ethics and Anti-Corruption	p25		O
G4-58 Internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity.	2-1-5.Code of Ethics and Anti-Corruption	p25		O

Global Reporting Initiative (GRI) Index(Specific Standard Disclosures (DMA and Indicators))

Economic

Specific Standard Disclosures (DMA and Indicators)	Location	Page	Note/	External Assurance
Economic Performance				
G4-EC1 Direct economic value generated and distributed.	2-2-2.Business Performance 4-2-2. Wages and Benefits	p28 p83	For more information, please refer to the 2015 Annual Report (page 140).	O
G4-EC2 Financial implications and other risks and opportunities for the organization's activities due to climate change.	3-2-3. Climate Challenges and Opportunities 3-2-6. Carbon Assets and Carbon Trading	p56 p60		O
G4-EC3 Coverage of the organization's defined benefit plan obligations.	4-2-2. Wages and Benefits	p83		O
G4-EC4 Financial assistance received from government.			For more information, please refer to the section on "income tax" in the 2015 Annual Report on pages 180~182 of the instructions.	O
Market Presence				
G4-EC5 Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.	4-2-2. Wages and Benefits	p83		O
G4-EC6 Senior management hired from the local community at significant locations of operation.	4-2-1. Human Resource	p80		O
Procurement Practices				
G4-EC9 Spending on local suppliers at significant locations of operation.	2-5. Sustainable Supply Chain Management	p36		O

Environmental

Specific Standard Disclosures (DMA and Indicators)	Location	Page	Note/	External Assurance
Energy				
G4-EN3 Energy consumption within the organization.	3-2-7. Energy Management Appendix: Joint Ventures and Subsidiaries	p60 p107		O
G4-EN4 Energy consumption outside of the organization.	3-2-4. Measures for Mitigating Climate Change	p57		O
G4-EN5 Energy intensity.	3-2-7. Energy Management	p60		O
G4-EN6 Reduction of energy consumption.	3-2-7. Energy Management	p60		O
G4-EN7 Reductions in energy requirements of products and services.	3-4. Green Product	p69		O
Water				
G4-EN8 Total water withdrawal by source.	3-3-1. Factory Water Source	p63		O
G4-EN9 Water sources significantly affected by withdrawal of water.	3-3-1. Factory Water Source	p63		O
G4-EN10 Percentage and total volume of water recycled and reused.	3-3-3. Water Conservation During Manufacturing	p64		O
Emissions				
G4-EN15 Direct greenhouse gas (GHG) emissions (Scope 1).	3-2-4. Measures for Mitigating Climate Change	p57		O
G4-EN16 Energy indirect greenhouse gas (GHG) emissions (Scope 2).	3-2-4. Measures for Mitigating Climate Change	p57		O
G4-EN17 Other indirect greenhouse gas (GHG) emissions (Scope 3).	3-2-4. Measures for Mitigating Climate Change	p57		O
G4-EN18 Greenhouse gas (GHG) emissions intensity.	3-2-4. Measures for Mitigating Climate Change	p57		O
G4-EN19 Reduction of greenhouse gas (GHG) emissions.	3-2-4. Measures for Mitigating Climate Change	p57		O
G4-EN20 Emissions of ozone-depleting substances (ODS).	3-1-3. Clean Production	p50		O
G4-EN21 NOx, SOx, and other significant air emissions.	3-1-3. Clean Production	p50		O
Effluents and Waste				
G4-EN22 Total water discharge by quality and destination.	3-3-4. Water Pollution Control	p66		
G4-EN23 Total weight of waste by type and disposal method.	3-1-3. Clean Production	p50		O
G4-EN24 Total number and volume of significant spills.			No spills occurred during the reporting period.	O
G4-EN25 Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention.	3-1-3. Clean Production	p50		O
G4-EN26 Water bodies and related habitats that are significantly affected by water discharges.	3-3-4. Water Pollution Control	p66		O
Products and Services				
G4-EN27 Extent of impact mitigation of environmental impacts ofproducts and services.	3-4. Green Product	p69		O
G4-EN28 Percentage of products sold and their packaging materials thatare reclaimed by category.	3-4. Green Product	p69		O
Compliance				
G4-EN29 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	3-1-4. Environmental Accounting	p55	No non-compliance with environmental laws and regulations occurred during the reporting period.	O
Overall				
G4-EN31 Total environmental protection expenditures and investments by type.	3-1-4. Environmental Accounting	p55		O
Supplier Environmental Assessment				
G4-EN32 Percentage of new suppliers that were screened using environmental criteria.	2-5. Sustainable Supply Chain Management	p36		O
G4-EN33 Significant actual and potential negative environmental impacts in the supply chain and actions taken.	2-5. Sustainable Supply Chain Management	p36		O
Environmental Grievance Mechanisms				
G4-EN34 Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms.	2-1-5.Code of Ethics and Anti-Corruption 4-1. Labor Rights	p25 p76	There were no cases during the reporting period.	O

Labor Practices and Decent Work

Specific Standard Disclosures (DMA and Indicators)	Location	Page	Note/	External Assurance
Employment				
G4-LA1 Total number and rates of new employee hires and employee turnover by age group, gender and region.	4-2-1. Human Resource	p80		O
G4-LA2 Benefits provided to full-time employees that are not provided to temporary or parttime employees, by significant locations of operation.	4-2-2. Wages and Benefits	p83		O
G4-LA3 Return to work and retention rates after parental leave, by gender.	4-2-1. Human Resource	p80		O
Labor/Management Relations				
G4-LA4 Minimum notice periods regarding operational changes, including whether these are specified in collective agreements.	4-1. Labor Rights 4-1-1. Human rights	p76 p76		O
Occupational Health and Safety				
G4-LA5 Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and saftey programs.	4-3-2. Safe Work Environment	p96		O
G4-LA6 Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of workrelated fatalities, by region and by gender.	4-3-2. Safe Work Environment	p96		O
G4-LA7 Workers with high incidence or high risk of diseases related to their occupation.	4-3-2. Safe Work Environment	p96		O
G4-LA8 Health and safety topics covered in formal agreements with trade unions.	4-3-2. Safe Work Environment	p96	Health and safety issues were discussed by the ESH Committee.	O
Training and Education				
G4-LA9 Average hours of training per year per employee by gender, and by employee category.	4-2-3. Education and Training	p85		O
G4-LA10 Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	4-2-3. Education and Training	p85		O
G4-LA11 Percentage of employees receiving regular performance and career development reviews, by gender and by employee category.	4-2-3. Education and Training	p85		O
Diversity and Equal Opportunity				
G4-LA12 Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.	4-2-1. Human Resource	p80		O
Equal Remuneration for Women and Men				
G4-LA13 Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation.	4-2-2. Wages and Benefits	p83		O
Supplier Assessment for Labor Practices				
G4-LA14 Percentage of new suppliers that were screened using labor practices criteria.	2-5. Sustainable Supply Chain Management	p36		O
G4-LA15 Significant actual and potential negative impacts for labor practices in the supply chain and actions taken.	2-5. Sustainable Supply Chain Management	p36		O
Labor Practices Grievance Mechanisms				
G4-LA16 Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms.	2-1-5.Code of Ethics and Anti-Corruption 4-1. Labor Rights	p25 p76		O

Human Rights

Specific Standard Disclosures (DMA and Indicators)	Location	Page	Note/	External Assurance
Investment				
G4-HR1 Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening.			No significant investment agreements and contracts were signed during the reporting period.	O
G4-HR2 Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	4-1-1. Human rights	p76		O
Non-discrimination				
G4-HR3 Total number of incidents of discrimination and corrective actions taken.	4-1-1. Human rights	p76	None for discriminatory incidents.	O
Freedom of Association and Collective Bargaining				
G4-HR4 Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights.	4-1-1. Human rights	p76		O
Child Labor				
G4-HR5 Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor.	4-1-1. Human rights	p76		O
Forced or Compulsory Labor				
G4-HR6 Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor.	4-1-1. Human rights	p76		O
Assessment				
G4-HR9 Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments.	4-1-1. Human rights	p76		O
Supplier Human Rights Assessment				
G4-HR10 Percentage of new suppliers that were screened using human rights criteria.	2-5. Sustainable Supply Chain Management	p36		O
G4-HR11 Significant actual and potential negative human rights impacts in the supply chain and actions taken.	2-5. Sustainable Supply Chain Management	p36		O
Human Rights Grievance Mechanisms				
G4-HR12 Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms.	2-1-5.Code of Ethics and Anti-Corruption 4-1. Labor Rights	p25 p76	There were no cases during the reporting period.	O

Product Responsibility

Product and Service Labeling				
G4-PR3 Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	About UMC	p5		O
G4-PR4 Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.	2-1-6 Legal Compliance	p25	No non-compliance with laws and regulations occurred during the reporting period.	O
G4-PR5 Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	2-3-2. Improving Customer Satisfaction	p32		O
Customer Privacy				
G4-PR8 Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	2-1-6 Legal Compliance	p25	There were no cases during the reporting period.	O
Compliance				
G4-PR9 Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	2-1-6 Legal Compliance	p25	No non-compliance with laws and regulations occurred during the reporting period.	O

Society

Specific Standard Disclosures (DMA and Indicators)	Location	Page	Note/	External Assurance
Anti-corruption				
G4-SO3 Total number and percentage of operations asessed for risks related to corruption and the significant risks identified.	2-1-5.Code of Ethics and Anti-Corruption 4-1-1. Human rights	p25 p76		O
G4-SO4 Communication and training on anti-corruption policies and procedures.	2-1-5.Code of Ethics and Anti-Corruption 4-1-1. Human rights	p25 p76		O
G4-SO5 Confirmed incidents of corruption and actions taken.	NA		No business units have been analyzed for risks related to corruption.	O
Anti-competitive Behavior				
G4-SO7 Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	2-1-6 Legal Compliance	p25	UMC is not involved in legal actions for anticompetitive behavior, anti-trust, and monopoly practices during the reporting period.	O
Compliance				
G4-SO8 Monetary value of significant fines and total number of nonmonetary sanctions for non-compliance with laws and regulations.	2-1-6 Legal Compliance	p25	UMC is not involved in noncompliance with regulations nor has it been found guilty during the reporting period.	O
Supplier Assessment for Impacts on Society				
G4-SO9 Percentage of new suppliers that were screened using criteria for impacts on society.	2-5. Sustainable Supply Chain Management	p36		O
G4-SO10 Significant actual and potential negative impacts on society in the supply chain and actions taken.	2-5. Sustainable Supply Chain Management	p36		O
Grievance Mechanisms for Impacts on Society				
G4-SO11 Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms.	2-1-5.Code of Ethics and Anti-Corruption 4-1. Labor Rights	p25 p76	There were no cases during the reporting period.	O

Others

Innovation Management			
Other_1. Innovative new products and technologies	2-2. Innovation Management	p27	O
Risk Management			
Other-2. Business continuity, risk management and control	2-4-3. Business Continuity Management	p34	O
Environmental Management			
Other-3. Environmental management system progress and outcome	3-1. Green Factory	p47	O
Chemical Use			
Other-4. Hazardous substance management and reduction outcome	3-4-1. Hazardous Substance Management	p69	O
Employee Communication			
Other-5 Employee communication, support and solidarity	4-3-1 Healthy Workplace	p91	O
Social Welfare			
Other-6.Company charitable and community involvement	3-5. Green Concepts 4-4. Social Commitment and Participation	p72 p102	O

ISO 26000 Index

ISO 26000 Index

Core Subjects and Issues		Related CSR Report Section	Page(s)
Organizational governance	Decision-making processes and structures	Sustainable Development Strategy and Organization 2-1 Corporate Governance	p6 p21
Human rights	Due diligence	2-5 Sustainable Supply Chain Management 4-1-1 Human Rights	p36 p76
	Human rights risk situations	2-5 Sustainable Supply Chain Management 4-1-1 Human Rights	p36 p76
	Avoidance of complicity	2-1 Corporate Governance 4-1-1 Human Rights	p21 p76
	Resolving grievances	4-1-1 Human Rights 4-1-2 Employer-employee Communication	p76 p77
	Discrimination and vulnerable groups	4-1-1 Human Rights 4-4 Community Service	p76 p102
	Civil and political rights	4-1-1 Human Rights	p76
	Economic, social and cultural rights	4-4 Community Service	p102
	Fundamental principles and rights at work	4-1 Labor Rights	p76
Labor practices	Employment and employment relationships	4-2 Recruitment and Cultivation	p80
	Conditions of work and social protection	4-1-1 Human Rights 4-3 Healthy and Safe Workplace	p76 p91
	Social dialogue	1.Communication with the Stakeholders 4-1-2 Employer-employee Communication	p9 p77
	Health and safety at work	4-3-1 Healthy Workplace 4-3-2 Safe Work Environment	p91 p96
	Human development and training in the workplace	4-2-3 Education and Training	p85
The environment	Prevention of pollution	3.1.3 Clean Production 3-3-4 Water Pollution Control	p50 p66
	Sustainable resource use	3.1.3 Clean Production 3-2-7 Energy Management	p50 p60
	Climate change mitigation and adaptation	3-2 Energy and Greenhouse Gas Management	p56
	Protection of the environment, biodiversity and restoration of natural habitats	3-1 Green Factory	p47
Fair operating practices	Anti-corruption	2-1-5 Code of Ethics and Anti-Corruption	p25
	Responsible political involvement	(UMC did not provide any political donations in the reporting year.)	
	Fair competition	4-1-1 Human Rights	p76
	Promoting social responsibility in the value chain	2-5 Sustainable Supply Chain Management	p36
	Respect for property rights	2-1-6 Legal Compliance	p25
Consumer issues	Fair marketing, factual and unbiased information and fair contractual practices	2-1 Corporate Governance	p21
	Protecting consumers' health and safety	3-4.Green Product	p69
	Sustainable consumption	2-5 Sustainable Supply Chain Management 2-5-4 Conflict Minerals Management	p36 p41
	Consumer service, support, and complaint and dispute resolution	2-3 Customer Service	p31
	Consumer data protection and privacy	2-3 Customer Service	p31
	Access to essential services	2-3 Customer Service	p31
	Education and awareness	2-3 Customer Service	p31
Community involvement and development	Community involvement	4-4 Community Service	p102
	Education and culture	4-2-4 Cultivating Prospective Talents 4-4-1 Community Service Participation	p89 p102
	Employment creation and skills development	2-2 Innovation Management 4-2 Recruitment and Cultivation 4-2-4 Cultivating Prospective Talents	p27 p80 p89
	Technology development and access	2-2 Innovation Management	p27
	Wealth and income creation	4-4-1 Community Service Participation	p102
	Health	4-4 Community Service 4-4-2 Promotion of UMC Volunteer Culture	p102 p104
	Social investment	4-4 Community Service	p102

United Nation Global Compact Comparison Table

United Nation Global Compact Comparison Table

10 Principles	Related CSR Report Section	Page
Human Rights		
Businesses should support and respect the protection of internationally proclaimed human rights.	4-1 Labor Rights	p76
Make sure that they are not complicit in human rights abuses.	2-5 Sustainable Supply Chain Management 4-1 Labor Rights	p36 p76
Labor		
Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	4-1 Labor Rights	p76
The elimination of all forms of forced and compulsory labor.	4-1 Labor Rights	p76
The effective abolition of child labor.	4-1 Labor Rights	p76
The elimination of discrimination in respect of employment and occupation.	4-1 Labor Rights	p76
Environment		
Businesses should support a precautionary approach to environmental challenges.	3 Sustainable Development-Environment	p43
Undertake initiatives to promote greater environmental responsibility.	3 Sustainable Development-Environment	p43
Encourage the development and diffusion of environmentally friendly technologies.	2-2 Innovation Management 3-4 Green Product Technologies	p27 p69
Anti-Corruption		
Businesses should work against corruption in all its forms, including extortion and bribery.	2-1-5 Code of Ethics and Anti-Corruption	p25

Assurance Statement

Assurance Statement

SGS

ASSURANCE STATEMENT

SGS TAIWAN LTD.'S INDEPENDENT ASSURANCE REPORT ON SUSTAINABILITY ACTIVITIES IN THE UNITED MICROELECTRONICS CORPORATION's CORPORATE SOCIAL RESPONSIBLE REPORT OF 2015

NATURE AND SCOPE OF THE ASSURANCE/VERIFICATION

SGS Taiwan Ltd. (hereinafter referred to as SGS) was commissioned by UNITED MICROELECTRONICS CORPORATION (hereinafter referred to as UMC) to conduct an independent assurance of the Corporate Social Responsible Report (hereinafter referred to as CSR Report) of 2015. The scope of the assurance, based on the SGS Sustainability Report Assurance methodology, included the text, and data in accompanying tables contained in this report.

The information in the UMC's CSR Report of 2015 and its presentation are the responsibility of the superintendents, CSR committee and the management of UMC. SGS has not been involved in the preparation of any of the material included in the UMC's CSR Report of 2015. Our responsibility is to express an opinion on the text, data, graphs and statements within the scope of assurance set out below with the intention to inform all UMC's stakeholders.

The SGS Group has developed a set of protocols for the Assurance of Sustainability Reports based on current best practice guidance provided in the Global Reporting Initiative (hereinafter referred to as GRI) Sustainability Reporting Guidelines and the AA1000 Assurance Standard (2008). These protocols follow differing options for Assurance depending the reporting history and capabilities of the Reporting Organization.

This report has been assured using our protocols for:

- evaluation of content veracity at a high level of scrutiny for UMC and moderate level of scrutiny for subsidiaries, joint ventures, and applicable aspect boundaries outside of the organization covered by this report ;
- evaluation of the report content and supporting management systems against the AA1000 Accountability Principles (2008);
- evaluation of the report against the GRI Sustainability Reporting Guidelines (G4 2013).

The assurance comprised a combination of pre-assurance research; interviews with relevant superintendents, CSR committee members and the management; documentation and record review and validation with external bodies and/or stakeholders where relevant. Financial data drawn directly from independently audited financial accounts has not been checked back to source as part of this assurance process.

STATEMENT OF INDEPENDENCE AND COMPETENCE

The SGS Group of companies is the world leader in inspection, testing and verification, operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; environmental, social and sustainability report assurance. SGS affirms our independence from UMC, being free from bias and conflicts of interest with the organization, its subsidiaries and stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with ISO 26000, ISO 20121, ISO 50001, SA8000, EICC, GMS, EMS, SMS, GPMS, CFP, WFP, GHG Verification and GHG Validation Lead Auditors and experience on the SRA Assurance service provisions.

VERIFICATION/ ASSURANCE OPINION

On the basis of the methodology described and the verification work performed, we are satisfied that the information and data contained within UMC's CSR Report of 2015 verified is accurate, reliable and provides a fair and balanced representation of UMC sustainability activities in 01/01/2015 to 12/31/2015.

The assurance team is of the opinion that the report can be used by the Reporting Organization's Stakeholders. We believe that the organization has chosen an appropriate level of assurance for this stage in their reporting. The report is the eighth to be assured by an independent assurance team and UMC has taken a bold step by offering the report to evaluation against both GRI G4 guidelines and the AA1000 Assurance standard. This shows a deserved confidence in their reporting process.

In our opinion, the contents of the report meet the requirements of GRI G4 Comprehensive Option and AA1000 Assurance Standard (2008) Type 2, High level assurance.

AA1000 ACCOUNTABILITY PRINCIPLES CONCULSIONS, FINDINGS AND RECOMMENDATIONS

Inclusivity

UMC is committed to being accountable to its stakeholders and to integrating inclusivity into its strategic and management approach. A variety of engagement efforts such as survey and communication to employees, customers, investors, local communities, suppliers and other stakeholders are implemented to underpin the organization's understanding of stakeholder concerns. For future reporting, UMC may proactively consider having more direct involvement of stakeholders during future engagement.

Materiality

UMC has established effective processes for determining issues that are material to the business. Formal review has identified stakeholders and those issues that are material to each group and the report addresses these at an appropriate level to reflect their importance and priority to these stakeholders. It is recommended that the process and criteria applied to assess materiality to be formalized and documented to ensure better consistent result in future reporting.

Responsiveness

The report includes coverage given to stakeholder engagement and channels for stakeholder feedback. Future reporting would benefit from more reporting on the results of stakeholder feedback from this report.

GLOBAL REPORTING INITIATIVE REPORTING GUIDELINES CONCULSIONS, FINDINGS AND RECOMMENDATIONS

The report, UMC's CSR Report of 2015, is adequately in line with the GRI G4 Comprehensive Option. The material aspects and their boundaries within and outside of the organization are properly defined in accordance with GRI's Reporting Principles for Defining Report Content. Disclosures of identified material aspects and boundaries, and stakeholder engagement, G4-17 to G4-27, are correctly located in content index and report. More description on Standard Disclosures show how the highest governance body is involved in monitoring and reacting to the organization's performance for economic, environmental and social topics is encouraged in future reporting.

Signed:
For and on behalf of SGS Taiwan Ltd.

AA1000
Licensed Assurance Provider
000-8

Dennis Yang, Chief Operating Officer
Taipei, Taiwan
19 May, 2016
WWW.SGS.COM

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