

# TABLE OF CONTENTS

**INTRODUCTION**

Letter from the CEO \_\_\_\_\_ 4  
 SunEdison Semiconductor in brief \_\_\_\_\_ 6  
 Our commitments and targets \_\_\_\_\_ 9

**BUSINESS PROFILE**

Our history \_\_\_\_\_ 10  
 Our core business \_\_\_\_\_ 10  
 Our operations \_\_\_\_\_ 14  
 Our customers \_\_\_\_\_ 16  
 Our supply chain \_\_\_\_\_ 17

**GOVERNANCE AND MANAGEMENT SYSTEMS**

Corporate governance \_\_\_\_\_ 18  
 Ethics and transparency \_\_\_\_\_ 20  
 Stakeholder engagement \_\_\_\_\_ 20  
 Strategy, policy and management systems \_\_\_\_\_ 22



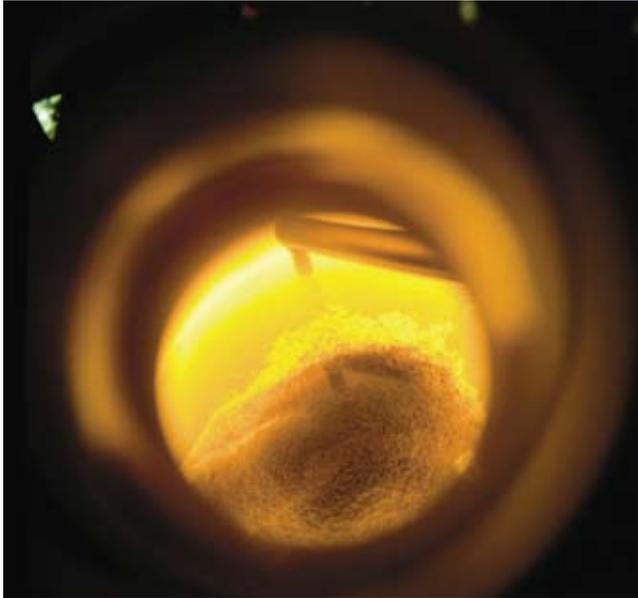
**PEOPLE**

A global workforce \_\_\_\_\_ 26  
 Diversity in the workplace \_\_\_\_\_ 27  
 Labor practices and human rights \_\_\_\_\_ 29  
 Attracting and retaining a skilled workforce \_\_\_\_\_ 30  
 Community outreach \_\_\_\_\_ 31

**HEALTH AND SAFETY** \_\_\_\_\_ 32

**ENVIRONMENT** \_\_\_\_\_ 34

Energy consumption \_\_\_\_\_ 35  
 Water \_\_\_\_\_ 38  
 Greenhouse gas emissions \_\_\_\_\_ 40  
 Air emissions \_\_\_\_\_ 41  
 Waste \_\_\_\_\_ 42  
 Hazardous materials \_\_\_\_\_ 43



**PERFORMANCE DATA** \_\_\_\_\_ 44  
**GLOBAL REPORTING INITIATIVE G4 INDEX** \_\_\_\_\_ 46  
**GLOSSARY** \_\_\_\_\_ 50  
**ABOUT THIS REPORT** \_\_\_\_\_ 51  
**INDEPENDENT ASSURANCE STATEMENT** \_\_\_\_\_ 52  
**CONTACT AND FEEDBACK** \_\_\_\_\_ 54



# INTRODUCTION

## LETTER FROM THE CEO



Welcome to the SunEdison Semiconductor Sustainability Report 2013/2014, our first as an independent company. As well as bringing more focus on our core business, our recent separation from SunEdison Inc. has also brought an opportunity to review our approach to sustainability and target the most relevant issues for our industry, customers and partners. Innovation has always been the core of our company, and our strong product and advanced process technologies continue to offer new possibilities to our customers. Since 2012, we have continued to strengthen our R&D and Manufacturing Engineering organizations and we currently hold 422 patents with a further 209 pending.

A safe, sustainable operation support continues to be the foundation on which we build the long-term financial success of our business. We also believe in an industry-wide approach to sustainability. As a member of the Electronic Industry Citizenship Coalition (EICC), we are aligning all aspects of our business with the EICC Code of Conduct. Having completed EICC self-assessment across all sites, we can report an overall 'low risk' ranking for our business.

External requirements have remained a key focus since 2012. As well as attaining ISO/TS16949 quality certification for all facilities, we have secured ISO 14001 certification for environmental management and OSHAS 18001 certification for health and safety management systems at all sites. We are also on target to complete ISO 50001 at our Italian facilities by the end of 2015 and plan to implement the ISO 50001 management system across all facilities by the end of 2016.

The health and safety of our people continues to be a key priority of how we manage the business. We reduced our incident rate to well below the top quartile for our industry group and we are building safer working practices into our culture through an innovative Behavioral Accident Prevention Process.

The environmental goals we set in 2012 were ambitious and we made great strides forward in many areas, but did not achieve them all. Our focus on efficient resource use has resulted in total reductions in our energy and water consumption since 2010. In this reporting period, we secured a 3% saving in energy consumption per unit compared to 2012. However, our water consumption per unit increased slightly in 2014 due in part to product mix changes and technical problems affecting the volume of recycled waste water at some facilities.

Our ongoing efforts to reduce, reuse and recycle the byproducts of our business have continued to pay off. Since 2012, we have reduced the amount of waste we generate by 3.6%. We have also increased our waste recycling ratio by 5 percentage points in the same period, mainly as a result of our increased focus on recycling spent slurry, and have expanded our recycling initiative for shipping box materials.

We believe that diversity brings strength, but we acknowledge the opportunity exists to foster an inclusive culture. To strengthen this aspect of our business we launched a Winning Culture, Winning Team, Winning Company culture transformation.

We owe it to ourselves, and to all our stakeholders, to ensure the great work being done to make our industry more sustainable continues.

We will maintain our ambitious environmental targets and ramp up our efforts to meet them over the next two years. We will continue investing to build the most talented, inclusive organization in our sector and we will support all our suppliers and external partners to reach our high standards.

I thank every SunEdison Semiconductor employee for their persistence during our transition, our customers for their confidence, our partners for their collaboration in building a more sustainable industry, and our shareholders for their support.

**Dr Shaker Sadasivam**  
President and CEO

## INTRODUCTION

### SUNEDISON SEMICONDUCTOR IN BRIEF

#### ABOUT SUNEDISON SEMICONDUCTOR

SunEdison Semiconductor is a global leader in semiconductor wafer technology. Our core competency is manufacturing advanced silicon wafer solutions that forms the foundation for creating a connected world. Our technical leadership continues to deliver the building blocks for the greater than USD 1 trillion-and-growing electronics market, and our products support the intelligence of the world's smartest devices. We drive innovation in every aspect of our business, including R&D, manufacturing, and customer relations and services.

Established as MEMC in 1959, our company has pioneered semiconductor silicon wafer research for over half a century. In May 2014, we completed our formal separation from SunEdison to become a stand-alone public company focused on semiconductors. Today, we employ around 4,000 people worldwide and operate facilities in the US, Europe and Asia. In 2014, we recorded sales of USD 840 million and grew our production output for the fourth consecutive year.

Shares of our common stock are listed on NASDAQ OMX under the symbol SEMI.

#### ABOUT THIS REPORT

This Sustainability Report is designed to provide in-depth insight into our semiconductor business activities, with a focus on our responsibilities in three strategic dimensions: economic, social and environmental. We include selected performance highlights below.

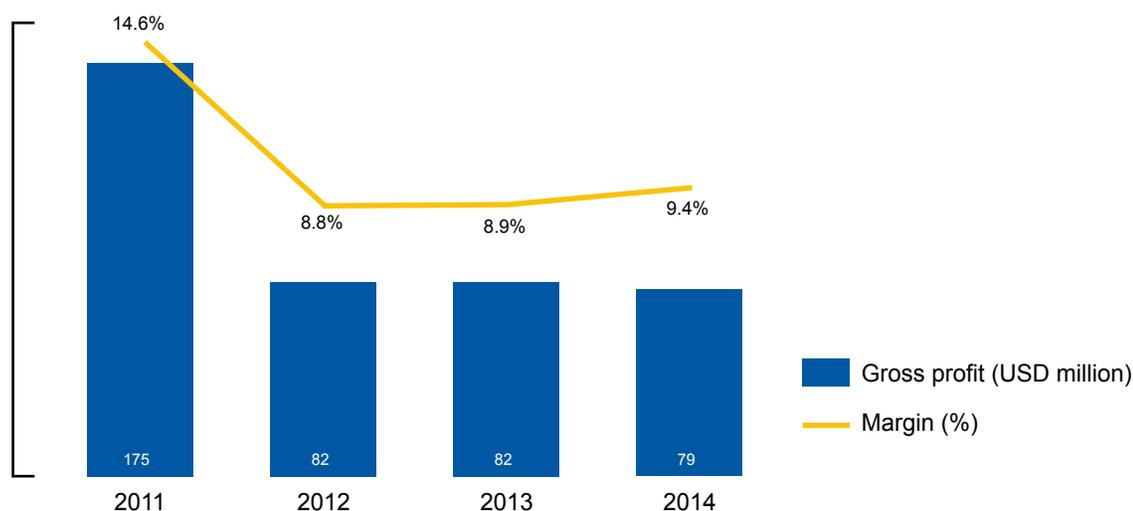
#### ECONOMIC PERFORMANCE

Good financial performance enables us to attract and retain talent and to offer an attractive return to our investors. Additional financial information, including our SEC filings, can be accessed under the Investors menu option at [www.sunedisonsemi.com](http://www.sunedisonsemi.com).



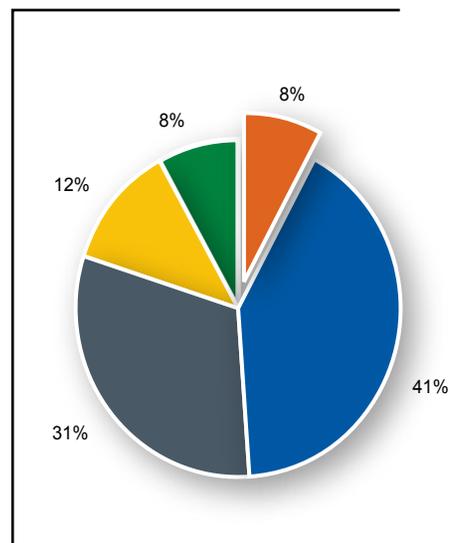
**LEANER BUSINESS IMPROVES GROSS MARGIN PERCENTAGE SINCE 2011**

**Gross profit and margin**

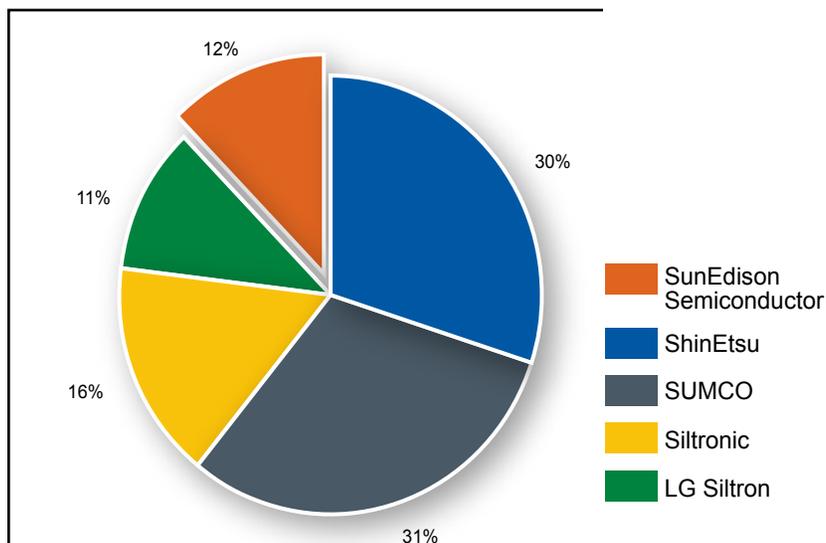


**Growing Our Market Share – 8% To 12%**

**2009**



**2014**



**Source:** Public filings and FactSet

The combined financial metrics for annual periods prior to the completion of our initial public offering on May 28, 2014 were derived from the consolidated financial statements and accounting records of SunEdison and included allocations for direct costs and indirect costs attributable to the operations of the semiconductor materials business of SunEdison.

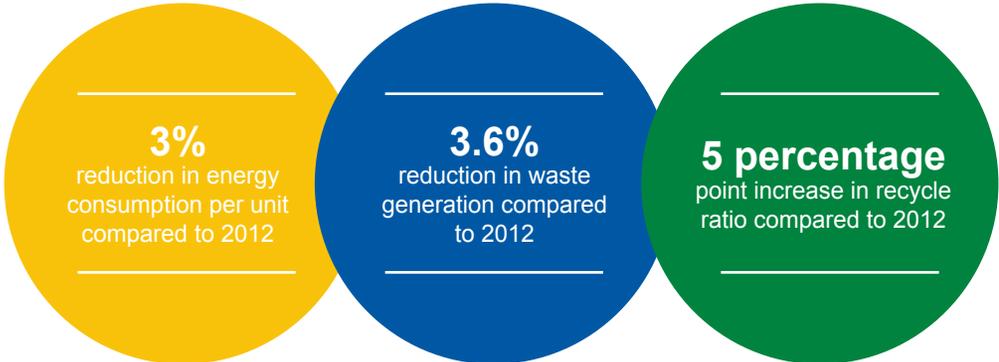
# INTRODUCTION

## HEALTH AND SAFETY PERFORMANCE

We are committed to providing a safe and healthy workplace for our employees, and to ensuring the safety of our community, neighbors, contractors and visitors.

## ENVIRONMENTAL PERFORMANCE

SunEdison Semiconductor is focused on efficiency and waste reduction. In 2014, we reduced the impact of our operations on the environment while making our customers' operations more efficient as well.



## Awards and Recognition 2013-2014

2013	TSMC	Best Silicon Supplier
2013, 2014	Samsung	Best Partner Award
2014	Taiwan Government	Golden Merchant Award
2014	Infineon	Supplier of the Year
2014	SSMC	Best Improved Supplier Award

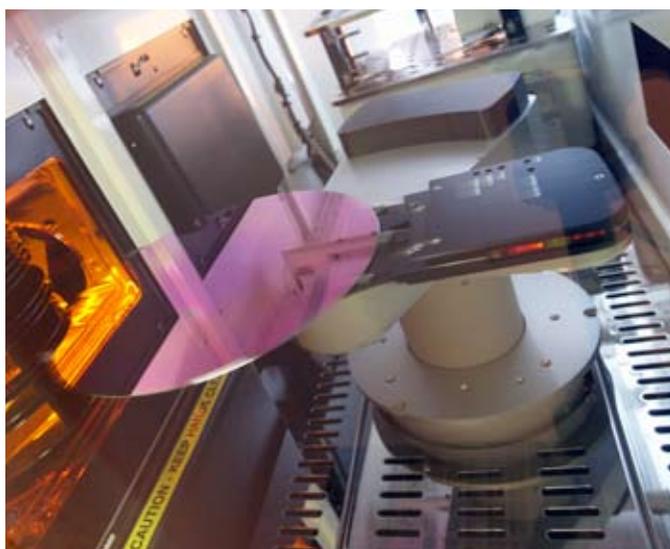
## OUR COMMITMENTS AND TARGETS

Our business strategy is anchored in a commitment to driving positive change in every aspect of our operations. We believe that our innovative solutions lay the foundation for a connected world and bring value for our customers, our communities and the environment. We therefore set ourselves ambitious sustainability targets and commit to measuring and reporting on our progress.

### SUSTAINABILITY ACHIEVEMENTS 2014

In 2014, we made significant progress toward becoming a more sustainable company:

- Completed EICC self-assessment for all sites, achieving an overall 'low risk' ranking.
- Deployed our BAPP behavioral safety program at 6 production sites and reduced our Total Recordable Injury Rate versus the 2012 baseline.
- Grew our R&D expenditures from USD 33.4 million in 2012 to USD 34.8 million in 2014 – resulting in leaner production and reductions in the carbon footprint of downstream electronics.
- Began consolidation of our semiconductor crystal operations to our facilities in Korea, Taiwan and Italy to create more efficient sustainable scale operations.
- Expanded our recycling initiative for FOSB (Front Opening Shipping Box) materials, pushing returns rates higher across entire customer base.



### SUSTAINABILITY TARGETS 2015-2016

- 3% year-over-year reduction in energy consumption, water consumption and waste generation on a per unit basis.
- 3% year-over-year increase of recycling ratio.
- Launch new SunEdison Semiconductor mission and values by end 2015.
- Onboard Women in Leadership members at each facility.
- Secure ISO50001 certification for all sites by the end of 2016.



# BUSINESS PROFILE

## OUR HISTORY

Established as Monsanto Electronic Materials Company (MEMC) in 1959, our company has been a pioneer in the development of silicon wafers, key components in the fabrication of integrated circuits which today power an enormous variety of electronic devices. We have been responsible for key industry breakthroughs, including the chemical-mechanical wafer polishing process and the 300mm epitaxial (EPI) wafer, and we continue to sustain a strong pipeline of innovation.

In 2013, MEMC changed its name to SunEdison to better reflect its commitment in the solar and semiconductor markets. In May 2014, on completion of an initial public offering (IPO), SunEdison Semiconductor became a stand-alone public company.

Today we are a global leader in semiconductor technology, providing innovative solutions to leading electronics manufacturers worldwide. Our customers include integrated device manufacturers and pure-play semiconductor foundries, and we supply all of the top 25 semiconductor companies worldwide.

Headquartered in St. Peters, Missouri, USA, we have an established global manufacturing network that currently consists of eight manufacturing and R&D facilities in Taiwan, Malaysia, South Korea, Italy, Japan and the United States. We employ over 4,000 people across our global organization.

## OUR CORE BUSINESS

Our core business is the production of advanced silicon wafers for the electronics industry. Our silicon wafers are the foundation for intelligent electronics in devices ranging from televisions to smart phones, from gaming devices to GPS systems, and from domestic appliances to satellites.

SunEdison Semiconductor's continued innovation in wafer technology has coincided with long-term growth in semiconductor markets. This growth has in turn been driven by key developments in consumer and industrial electronics, from the rise of personal computing and cell phones in the 1980s and 1990s, to smartphone, tablet and wireless technologies since 2000.

The demand for advanced semiconductor wafers is growing as we move into an era of greater connectivity – the so-called 'internet of things.' More devices require

advanced integrated circuits baked into their design, and our customers face continuing challenges with decreasing transistor sizes, increasing degrees of integration and ongoing pressures for cost reduction. Our leading edge design and manufacturing is already evolving to meet these needs.

## POLYSILICON: THE BUILDING BLOCK OF OUR BUSINESS

Polysilicon is the fundamental building block for semiconductor wafers. It is a highly pure form of silicon, one of the most common elements on earth.

As the starting point of the silicon wafer manufacturing process we use polysilicon in two forms, granular and chunk. Granular polysilicon is manufactured through a Fluid Bed Reactor process at a couple of SunEdison Inc. majority owned facilities and chunk silicon is manufactured through the Siemens production process and obtained through third parties.

## SILICON WAFERS FOR ELECTRONICS

The first step in our manufacturing process is to melt the granular or chunk polysilicon in a crucible and pull a silicon crystal. The silicon crystals produced by this process are shaped like round cylinders and are called 'ingots.'

These ingots are cut into thin slices as part of the wafering process. Each 'slice' undergoes a number of processes, including etching, polishing and cleaning, before becoming a finished wafer. Some wafers intended for specialized devices undergo further processes to enable enhanced performance for particular applications.

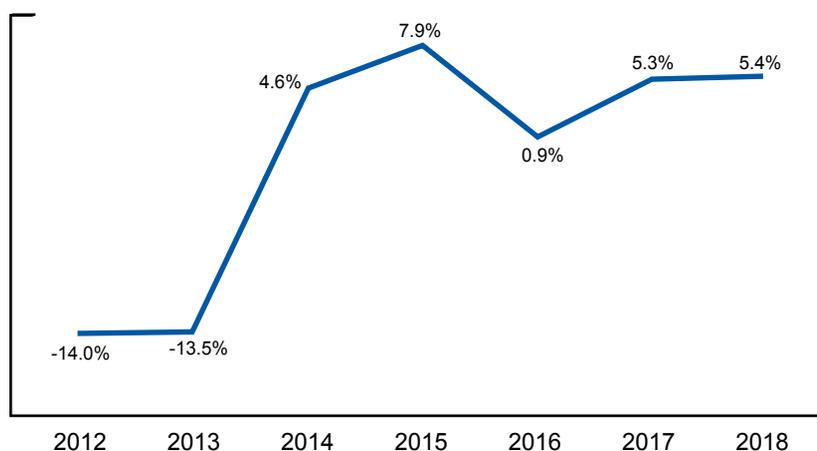
Semiconductor manufacturers require wafers of specific diameters and with stringent technical specifications in order to produce complex semiconductor devices. Our process technologies can deliver wafers with enhanced features to fit the requirements of any application, including flatness, uniformity, and resistivity. Our silicon wafers fall into one of four general types: Prime Polished, Epitaxial (EPI), Silicon-On-Insulator (SOI) and Test/Monitor wafers. They are further differentiated by process type and diameter: 150mm, 200mm and 300mm.

Whatever the application, our high standards ensure we deliver on our customers' strict quality requirements, enabling them to produce highly efficient electronics with maximum yield at a lower cost.

**OUTLOOK: A GROWING MARKET**

According to Gartner, the global semiconductor wafer market was worth approximately USD 8.3 billion in 2014, and is expected to grow to approximately USD 10 billion by 2018. This growth is being driven by the proliferation of mobile devices such as smartphones and tablets. Mobile devices depend on high performance semiconductors that are energy efficient, low cost and highly integrated into a small footprint, and EPI and SOI wafers are now the gold standards for delivering these benefits. We believe that our unique expertise and process technology in EPI and SOI wafer manufacturing, combined with our capital efficiency, will give us a significant edge as markets for these types of advanced wafers expand.

**Forecast: Potential for worldwide merchant silicon wafer growth**



Source: Gartner (December 2014)

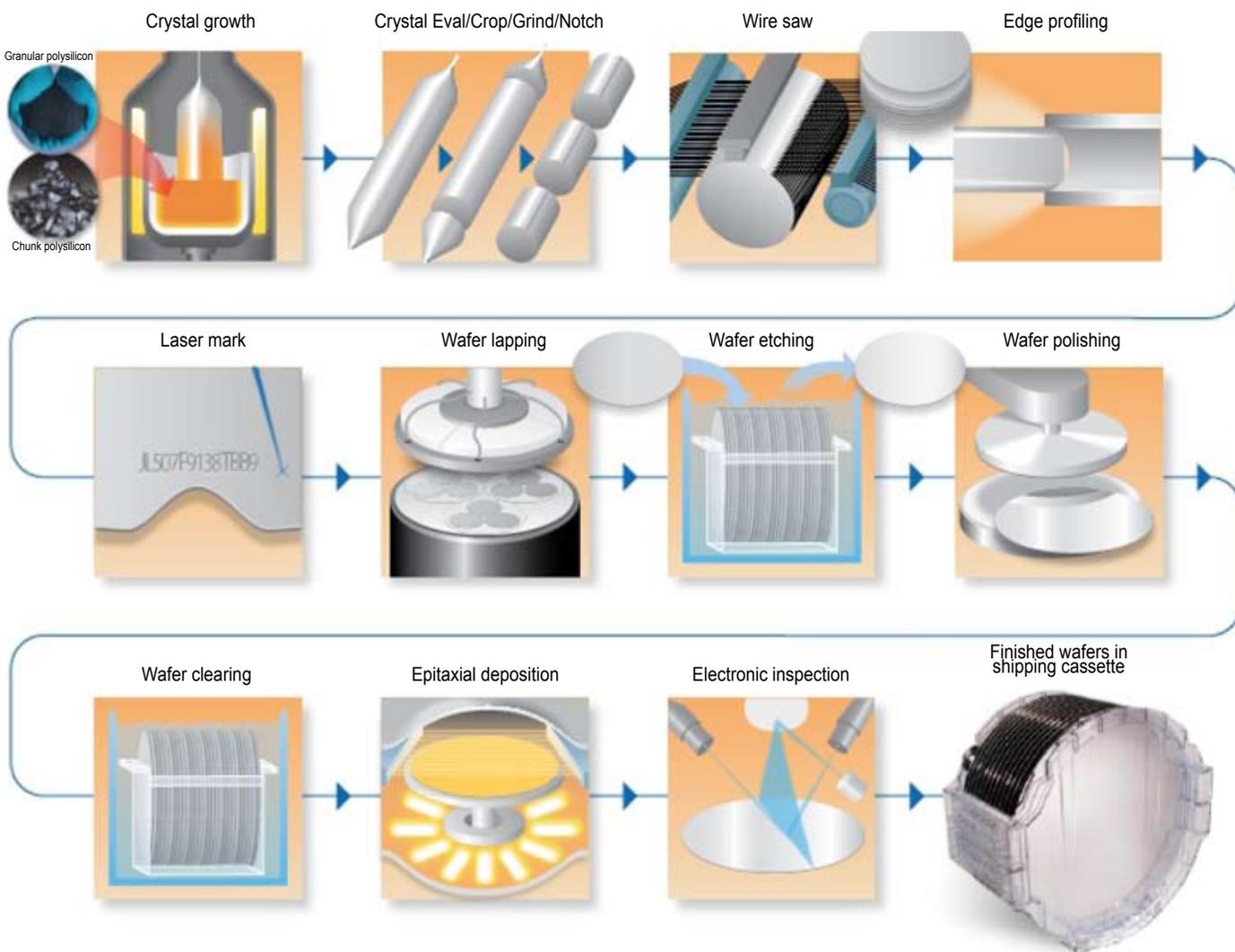
**EPITAXIAL (EPI) WAFERS**

Epitaxial wafers consist of a thin film of single crystal silicon grown on the silicon wafer. Typically the properties of the thin film of silicon are different from the bulk wafer. These wafers are used for advanced logic applications like microprocessors for laptops, servers and Power Management devices. Today, our pioneering 300mm epitaxial wafers are considered state-of-the-art among leading device manufacturers and are increasingly used in the fabrication of mobile devices and to support cloud infrastructure.

## SILICON-ON-INSULATOR (SOI)

We are one of the only two vertically integrated manufacturers in the world of Silicon-On-Insulator (SOI), a new base material for integrated circuits. SOI wafers have two layers: a thin surface layer of silicon where the transistors are formed and a layer of insulating material that is buried in a support or 'handle' bulk silicon wafer. Transistors built within the top layer switch signals faster, run at lower voltages, and are much less vulnerable to signal noise from background cosmic ray particles. SOI circuits are driving the performance of high-speed network servers, advanced wireless applications and new designs for devices with longer battery life.

### A simple overview of our manufacturing process



**INNOVATION AND INTELLECTUAL PROPERTY**

As a global leader in the semiconductor industry, we are committed to continuous innovation. As of April 30 2015, we had 422 patents granted and 209 patents pending.

We respect the intellectual property rights of others and expect the same in return. We take all measures to ensure transfer of technology and know-how is conducted in a manner that protects intellectual property rights, and that our customers' information is safeguarded. We protect our intellectual property rights based on patents and trade secrets.

**Patents held and pending as of 30 April 2015**

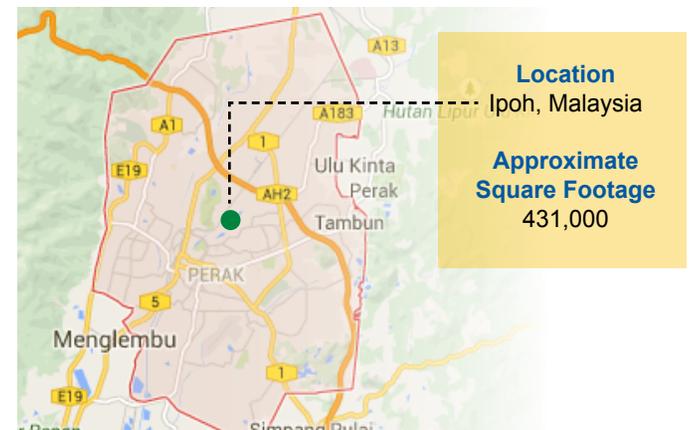
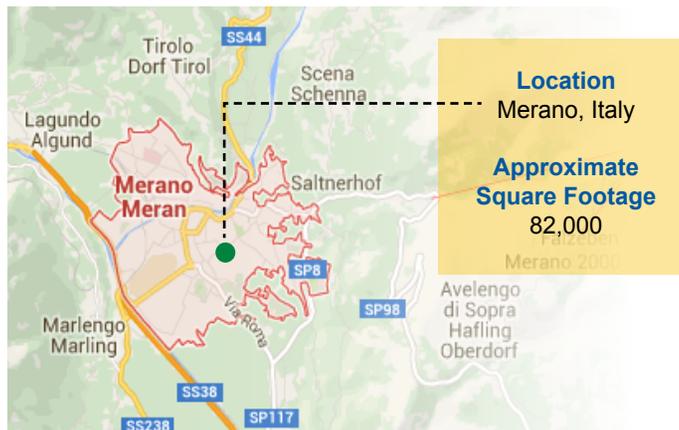
Tech Area	Number of patents granted	Number of patents pending
Polysilicon	10	36
Crystal	169	29
Wafering	151	67
EPI	71	18
SOI	21	59
<b>Total</b>	<b>422</b>	<b>209</b>

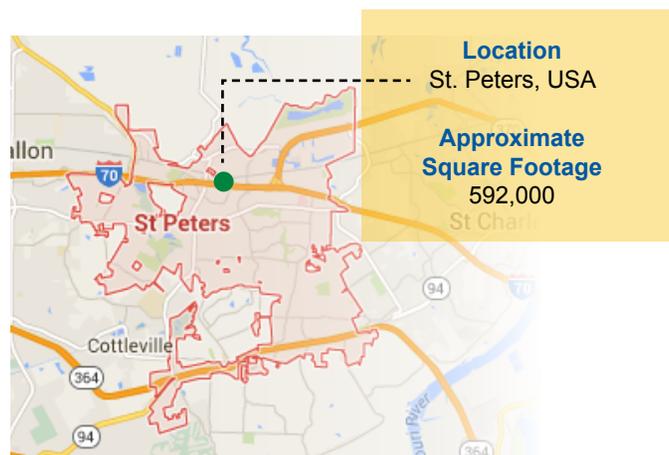
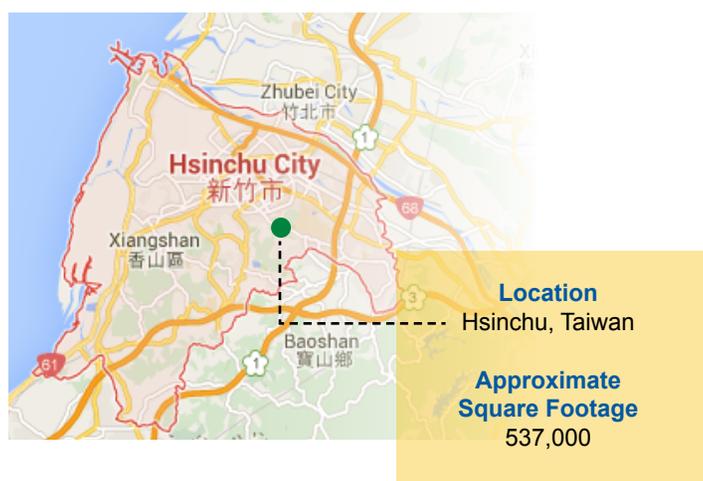
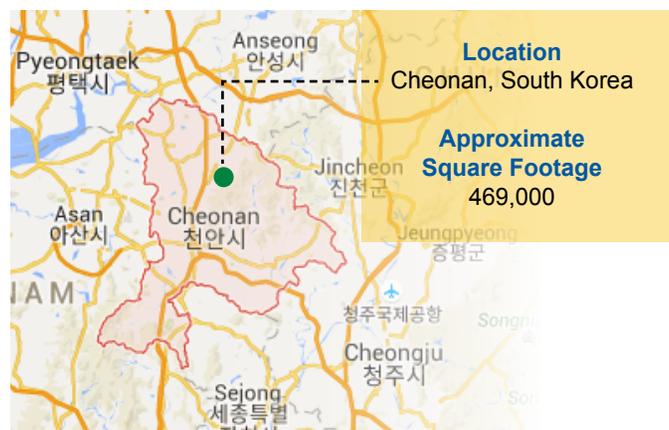
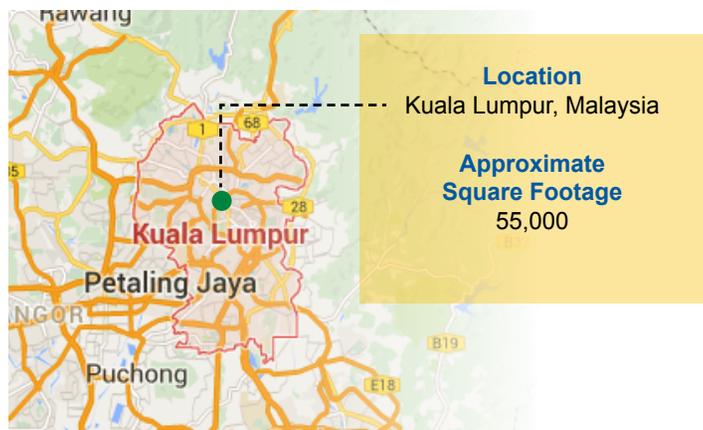
## BUSINESS PROFILE

### OUR OPERATIONS

We operate facilities in major semiconductor manufacturing regions throughout the world, including Taiwan, Malaysia, South Korea, Italy, Japan and the United States. We have chosen to locate our manufacturing facilities in regions that offer both low operating costs and close proximity to our customers to facilitate collaboration on product development activities and shorten product delivery times.

#### Eight manufacturing sites in six countries





**CHANGES IN OPERATIONS 2013-2014**

Following the 2012 restructuring of our production in the US, which included ramp down and closure of wafering operations in St. Peters in 2014, we are now building SOI production capacity at the St. Peters site. St. Peters also continues to serve as our research and development headquarters.

We have also invested significantly in our existing operations, and we continue to expand our 300mm production capacity across our manufacturing facilities worldwide.

We previously announced the decision to shutter our polysilicon plant in Merano, Italy and completed the sale of the polysilicon plant portion of the site at the end of 2014. We retained our crystal growing facilities at Merano and operations continue to provide feedstock crystal for the wafering plants. For the purposes of this report, the Merano site is excluded from the environmental and safety metrics.

In 2015, we announced our intention to close the Ipoh, Malaysia facility to further consolidate our 200 mm wafering operations due to pricing pressures in the market. We expect the facility to cease operations in 2016.

## BUSINESS PROFILE

### OUR CUSTOMERS

We primarily sell our products to all of the major semiconductor manufacturers in the world, including integrated device manufacturers and pure-play semiconductor foundries. We also, to a lesser extent, supply leading companies that specialize in wafer customization.

#### Manufacturing Co-Located Near Key Customers

Most Diversified / Cross-Qualified Base



#### USA

200mm / 300mm  
SOI



#### Italy

150mm / 200mm  
Ingots / Wafering / Epi



#### Malaysia

150mm / 200mm  
Wafering / Epi

#### South Korea

200mm / 300mm  
Ingots / Wafering /  
Epi / SMP Polysilicon

#### Japan

300mm  
Wafering / Epi

#### Taiwan

200mm / 300mm  
Ingots / Wafering /  
Epi

### OUR SUPPLY CHAIN

Our highly optimized supply chain has enabled us to maintain a leading position in the semiconductor industry. Having multiple facilities in the key semiconductor manufacturing regions in the world also makes us an extremely secure supplier. Our diverse global footprint enables us to mitigate risk in the event of natural disasters or other occurrences that can disrupt manufacturing.

As evidence of our continuous improvement in supply chain management, between 2010 and 2013 our customer complaints decreased by approximately 70%, our customer on-time delivery improved by 13 percentage points and our facility disruptions were reduced by over 90%.

And supply chain optimization brings more than just lower costs and better service for our customers, it also ensures we operate in a sustainable and secure way. Through innovative technology, strict management standards and strategic sourcing, we continue to reduce our raw material use, energy consumption, water use, and waste. This means that while we consistently deliver high value products at a competitive price, we are also playing a vital role in driving sustainability throughout the electronics sector.

### ZERO USE OF CONFLICT RESOURCES

In strict conformance to US Conflict Minerals Law, we have undertaken an analysis of the products we manufacture to determine if any material we use could have been mined or otherwise sourced in conditions of armed conflict or human rights abuse.

We conclude that none of the minerals commonly mined in the Democratic Republic of the Congo, or any covered country – including the '3Ts' (cassiterite for tin, wolframite for tungsten, coltan for tantalum) and gold ore – are used in the manufacture of our products.

# GOVERNANCE AND MANAGEMENT SYSTEMS

## CORPORATE GOVERNANCE

SunEdison Semiconductor's governance documents are accessible at [www.sunedisonsemi.com](http://www.sunedisonsemi.com). A summary of selected documents is provided in this section.

### GOVERNANCE STRUCTURE

SunEdison Semiconductor operates with a two-tier management structure consisting of the Board of Directors and Executive Management.

Our Board of Directors is made up of six directors. One of the Board's functions is to guide the development of our company as a world leading, sustainable semiconductor manufacturer. The Board determines our company's overall strategy, ensures this strategy is implemented and supervises performance. The Board of Directors also supervises the decisions and actions of our Executive Management.

The authorized number of directors on the Board may be changed from time to time by resolution of the Board of Directors. Vacancies on the Board can be filled by resolution of our Board of Directors. Subject to any rights applicable to any then outstanding preferred stock, any additional directorships resulting from an increase in the number of directors may only be filled by the directors then in office, unless otherwise required by law or by a resolution passed by the Board.

The term of office for each director will be until his or her successor is elected at our annual general meeting of shareholders, or his or her death, resignation or removal, whichever occurs first.

### AUDIT COMMITTEE

The primary purpose of the Audit Committee is to assist the Board of Directors in its oversight of the Company's accounting and financial reporting processes and the integrity of the Company's financial statements. The Audit Committee oversees audits of the Company's financial statements and the appointment, compensation, qualifications, independence and performance of the Company's independent registered public accountants.

The Audit Committee is also responsible for compliance with legal and regulatory requirements, the performance of the Company's internal audit function, internal accounting controls, disclosure controls and procedures, and internal control over financial reporting.

The policies and procedures of the Committee shall remain flexible in order to best react to changing conditions. The specific duties and responsibilities of the Audit Committee are set forth in the Audit Committee Charter available from [www.sunedisonsemi.com](http://www.sunedisonsemi.com) under the Corporate Information section.

### COMPENSATION COMMITTEE

The Compensation Committee is appointed by the Board of Directors to discharge the Board's responsibility with respect to the compensation of company executives, as well as to make recommendations to the Board regarding the compensation of directors. This information is included in our company's proxy statement in accordance with applicable rules and regulations. The Compensation Committee's charter spells out the Committee's duties, responsibilities and other details and can be accessed at [www.sunedisonsemi.com](http://www.sunedisonsemi.com) in the section under Corporate Information.

### GUIDANCE ON CONDUCT AND STANDARDS

One of our first tasks following the completion of our IPO was to set out, clearly and publicly, how we intend to put our values into practice. Since then, we have not only established a Code of Business Conduct that applies across every level of our organization, we have also anchored our commitments in the industry-wide code of conduct defined by the Electronic Industry Citizenship Coalition (EICC).

### CODE OF BUSINESS CONDUCT

The SunEdison Semiconductor Code of Business Conduct applies to all employees and directors alike. It details specific responsibilities for every employee and director, and covers a variety of topics that include, but are not limited to, discrimination and harassment, environmental management, accuracy of records and reports, conflict of interest and fair competition. In general, the Code requires employees to conduct themselves with integrity by:

- Acting in accordance with our mission statement
- Complying with applicable local, state, and federal laws of the countries in which we operate
- Taking responsibility for actions, making sure that we know what is right before we act – individually and collectively.

The full Code of Business Conduct can be accessed at [www.sunedisonsemi.com](http://www.sunedisonsemi.com) under the Corporate Information section.

### ELECTRONIC INDUSTRY CODE OF CONDUCT

At SunEdison Semiconductor, we believe in the value of industry collaboration. In 2012, we became a member of the Electronic Industry Citizenship Coalition (EICC) and are working to align all our business processes with the principles of the EICC Code of Conduct. We are also working to drive implementation of the initiative throughout our supply chain.

The EICC represents the combined effort of more than 40 companies to improve industry-wide performance and accountability through the adoption and consistent implementation of a set of standards on social, environmental and ethical issues. The EICC Code of Conduct provides guidance in five dimensions of performance:

- Environment
- Ethics
- Health and Safety
- Labor
- Management Systems

The EICC Code of Conduct can be accessed at [www.eiccoalition.org](http://www.eiccoalition.org).



## GOVERNANCE AND MANAGEMENT SYSTEMS

### ETHICS AND TRANSPARENCY

At SunEdison Semiconductor, we believe that a commitment to high ethical standards is not only right in and of itself, but also an important competitive advantage. We commit to always ensure we are open and honest, and to hold ourselves accountable for the decisions and actions we take.

#### ANTI-CORRUPTION

We have implemented a foreign anti-corruption compliance program globally. The program assures adherence to the Organization for Economic Cooperation and Development (OECD) Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, and to the United States Foreign Corrupt Practices Act. The program includes annual training for employees and a risk assessment of new business relationships.

#### BUSINESS INTEGRITY

We have a responsibility to ensure total integrity in all business activities conducted on behalf of SunEdison Semiconductor. We operate a zero tolerance policy targeting all forms of bribery, corruption, extortion and embezzlement, and we comply with all regulations that govern financial transparency in communications to investors and the public. All our business records and reports are prepared and maintained accurately, completely and in compliance with all applicable laws and recognized business standards.

#### DISCLOSURE OF INFORMATION

In accordance with applicable regulations and prevailing industry practices, SunEdison Semiconductor commits to disclose information regarding participant labor, health and safety, environmental practices, business activities, structure, financial situation and performance.

### STAKEHOLDER ENGAGEMENT

Our stakeholders are vital to the ongoing success of our company and we always take their perspectives into account. By doing so we secure their valuable input on our strategic priorities, performance and activities, and thereby strengthen our business. In this section we provide an overview of our engagements with different stakeholder groups, and the topics that they raise.

#### CUSTOMERS

Understanding the needs and concerns of our customers enables us to deliver better products and a better service. We maintain open channels for feedback through our sales teams, and we welcome enquiries and suggestions. This in turn gives us the opportunity to achieve greater transparency in relation to what we do and how we work.

Potential disruption of supply due to natural disasters or industrial action remained the number one concern for customers during the reporting period. Customers from the USA and Europe also sought reassurance that we have a robust policy framework in place to prevent illegal or forced labor, particularly in Malaysia. Environmental issues related to pollution remained of minor interest.

#### EMPLOYEES

We seek and value the opinions of our employees regarding all aspects of our operations. We conduct an interactive Leadership Call with our top 150 senior managers globally every quarter to align our business strategies and provide a platform for local feedback. We also undertake an annual Employee Culture Survey to measure employees' engagement with our values and strategic goals, as well as to better understand and incorporate their perspectives.

The results of the 2014 Culture Survey show growing levels of employee engagement. Our organization generally sees itself as customer centric and quality focused.

#### SHAREHOLDERS AND ANALYSTS

We communicate with our shareholders and analysts on a routine basis through conference calls and other reporting means. Our shareholders' primary concern is the financial health of the industry and our business.

### SUPPLIERS

We engage with all our suppliers to understand their challenges and deal proactively with any labor, health and safety, ethics, or environmental management issues. We conduct an annual executive level meeting with many of our suppliers and quarterly meetings with key suppliers.

During the reporting period, our suppliers' key concerns have been the effects of extreme weather (e.g. winter polar freeze) and costs associated with compliance. Trucking exhaust regulations, for example, have been reported as impacting supplier margins and resulting in trucking shortages. By working together on such issues, we help our suppliers meet our high standards and drive sustainable practices throughout the value chain.

### COMMUNITIES

SunEdison Semiconductor has positive relationships with its neighbors at all facilities. While the semiconductor industry has been linked to local pollution and environmental contamination in the past, we have worked hard to minimize the impact of our operations on local communities.

This impact is further mitigated by the fact that almost all of our production is located in industrial areas. However, we maintain close links with our neighbors to ensure transparency in all relevant aspects of our operations. We also provide a hotline for local community members and groups to report any concerns they have about our activities.

### Stakeholder Engagement Overview

Stakeholder groups	Engagement channel and frequency	Key topics raised
Customers	<ul style="list-style-type: none"> <li>Feedback through sales teams</li> </ul>	<ul style="list-style-type: none"> <li>Potential disruption of supply</li> <li>Labor standards</li> </ul>
Employees	<ul style="list-style-type: none"> <li>Quarterly Leadership Call</li> <li>Annual Culture Survey</li> </ul>	<ul style="list-style-type: none"> <li>Performance management and coaching</li> <li>Improving global communication</li> </ul>
Shareholders and analyst	<ul style="list-style-type: none"> <li>Conference calls</li> <li>Annual report</li> </ul>	<ul style="list-style-type: none"> <li>Financial health</li> <li>Ethics and transparency</li> </ul>
Suppliers	<ul style="list-style-type: none"> <li>Quarterly meetings</li> <li>Annual executive-level meetings</li> <li>Annual audit process</li> </ul>	<ul style="list-style-type: none"> <li>Impact of weather</li> <li>Cost of compliance</li> </ul>
Communities	<ul style="list-style-type: none"> <li>Hotline</li> </ul>	<ul style="list-style-type: none"> <li>Local pollution</li> <li>Safety</li> </ul>

## GOVERNANCE AND MANAGEMENT SYSTEMS

### STRATEGY, POLICY AND MANAGEMENT SYSTEMS

Our company has undergone many changes in the last 12 months. However, what has not changed is our fundamental knowledge that what we do matters. Our products are the foundation for a new era of connectivity and smart electronics, and every day we are empowering our customers to advance possibilities in communication, education and entertainment.

Based on this understanding, we began a process in 2015 to redefine and re-entrench the core principles on which our company culture is founded. In this section we present the current working definitions of our Mission and Values on the understanding that these will be updated through our ongoing culture initiatives and will be finalized by the end of 2015.

### POLICIES

#### *Environmental, safety and health (ESH) policy*

We are committed to provide a safe and healthful workplace for our employees, to minimize effects of our operations on the surrounding environment and to ensure the safety of our community neighbors, contractors and visitors.

We will continuously improve our environmental, safety and health processes and performance through the application of advances in technology and science. SunEdison Semiconductor specifically commits to the following guiding principles:

- **Injuries, Illnesses, and Incidents** – We believe that all workplace injuries, illnesses, and environmental incidents are preventable.
- **Conservation of Energy and Natural Resources** – We will conserve electricity, fuel, water, minerals, and other natural resources in our operations, and provide innovative products and services that enable our customers to do the same.
- **Waste and Emissions** – We will drive toward zero waste generation at the source. Materials will be reused and recycled to minimize the need for treatment or disposal and to conserve resources. Where waste is generated, it will be handled and disposed of safely and responsibly.
- **Employees** – We will ensure that our employees have the skills, training, awareness, and resources to carry out their activities in a manner consistent with this policy.
- **Compliance** – We will meet or exceed all applicable government regulations and company policies in every area in which we operate. Where local laws and regulations do not provide adequate controls we will adopt our own standards to protect people and the environment.
- **Business Integration** – We will incorporate ESH considerations into our business strategy and maintain a global ESH management system integrated into our routine operations.
- **Customer and Stakeholders** – We will maintain an open and factual dialogue with our customers and other stakeholders and work cooperatively to address relevant ESH issues.
- **Suppliers and Contractors** – We will establish and maintain relationships with suppliers and contractors committed to responsible operations and work together to enhance ESH performance.
- **Hazardous Substances** – We will eliminate or minimize the use of hazardous substances in our final products and manufacturing processes. When hazardous substances must be used we will manage the risks associated with their transport, storage, use, and disposal to ensure the protection of human health, the environment and the communities in which we operate.
- **New Products and Processes** – We will review all new products and processes to eliminate or minimize the potential for significant environmental, safety and health impacts, and ensure conformance with SunEdison Semiconductor's ESH policy.
- **Sustainable Development** – We will assess and minimize potential impacts to the community and the environment when planning new sites.

### **Supply chain policy**

In order to assure that there are no abuses or lack of compliance in the areas of labor, health and safety, ethics, or environmental management in the supply chain, SunEdison Semiconductor has implemented a policy defined as the Responsible Suppliers Assessment Program. The program consists of three levels of risk assessment covering the components of the EICC Code of Conduct:

1. **Risk Assessment Level 1 (RA1)** applies to the largest suppliers making up 80% of the applicable business unit spending. This assessment must be completed every three years. The purpose of the RA1 is to evaluate summary information on the vendor's operations and programs to determine if an additional assessment is required.
2. **Risk Assessment Level 2 (RA2)** will be required for all suppliers considered high risk. The RA2 is based on the current version of the EICC self-assessment questionnaire and can be web-based or in spreadsheet form.
3. **Risk Assessment Level 3 (RA3)** will be required for suppliers categorized as high risk in the RA2 assessment that do not have an acceptable corrective action plan. The RA3 is an on-site audit and verification of the same areas as the RA2 but conducted by an EICC certified third party audit firm or SunEdison Semiconductor's auditors. If the supplier has had a previous on-site audit by an EICC certified auditor in the past three years the results of this previous audit will be accepted.

If a supplier categorized as high risk does not have an acceptable corrective action plan, or the results of the RA3 show major non-conformance with significant and immediate impact, the supplier will be put on probation and potentially removed from the supply chain.

### **COMMITMENTS TO EXTERNAL REQUIREMENTS AND INITIATIVES**

We manage and certify all of our facilities in accordance with globally-recognized environmental and safety standards.

#### ***Electronic Industry Citizenship Coalition (EICC) – Electronic Industry Code of Conduct***

As a member of EICC, we are under obligation to complete an annual self-assessment to identify any social, environmental or ethical risks connected to our operations. We are also required to take action on any violations of the EICC Code of Conduct, and put in place systems to prevent violations from occurring in the future.

In 2014, we completed self-assessments at both corporate and facility level across our global operations. With 100% assessment completion at every site, we are graded a 'low risk' across all our facilities. Details of each self-assessment can be found on the EICC website at [www.eiccoalition.org](http://www.eiccoalition.org).

#### ***Certifications worldwide***

All SunEdison Semiconductor facilities have achieved ISO/TS16949 certification. Based on the ISO 9002 standard, this technical specification supports the development of a quality management system that provides for continual improvement emphasizing defect prevention and the reduction of waste.

As well as quality certifications, we have invested in a number of Environmental, Health and Safety certifications. As of 2015, all facilities have ISO 14001 certification, an internationally recognized framework for environmental management systems. Furthermore, all sites are certified for OSHAS 18001, a set of standards for developing effective occupational health and safety management systems. In Europe, we have secured EMAS (Eco-Management and Audit Scheme) registration for our Novara and Merano sites. EMAS builds on OSHAS 18001, adding EU-specific compliance, reporting, and transparency requirements.

## GOVERNANCE AND MANAGEMENT SYSTEMS

### Certifications 2015

FACILITY	ISO9002/ TS16949	ISO14001	OHSAS 18001	EMAS
Merano, Italy	Yes	Yes	Yes	Yes
Novara, Italy	Yes	Yes	Yes	Yes
Utsunomiya, Japan	Yes	Yes	Yes	N/A
Ipoh, Malaysia	Yes	Yes	Yes	N/A
Kuala Lumpur, Malaysia	Yes	Yes	Yes	N/A
Cheonan, South Korea	Yes	Yes	Yes	N/A
Hsinchu, Taiwan	Yes	Yes	Yes	N/A
St. Peters, USA	Yes	Yes	Yes	N/A

#### **RoHS compliance**

The Restriction of Hazardous Substances Directive (RoHS) became effective in 2006 within the EU. This regulation restricts the use of specific hazardous substances in electrical and electronic equipment manufacturing and products. SunEdison Semiconductor carries out regular product sampling to assure compliance with the regulation. However, due to the high-purity requirements of our finished silicon products, the level of restricted substances contained in our products is far below the RoHS threshold.

#### **REACH compliance**

In 2007, the EU enacted the Registration, Evaluation, Authorization and Restriction of Chemicals regulation, known as REACH. This regulation applies to certain chemical materials that our European facilities bring on-site. We use a variety of methods, including policies, procedures, and training, to ensure that all materials brought on-site are registered and REACH-compliant.

#### **Foreign Corrupt Practices Act and OECD Convention**

SunEdison Semiconductor has implemented a foreign anti-corruption compliance program globally. The program assures adherence to the Organization for Economic Cooperation and Development (OECD) Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, and to the United States Foreign Corrupt Practices Act. The program includes annual training for employees and a risk assessment of new business relationships.

## **INDUSTRY ASSOCIATIONS AND ORGANIZATIONS**

### ***Semiconductor Equipment and Materials International (SEMI®)***

SEMI® is a global industry association serving the manufacturing supply chain for the micro- and nano-electronics industries, including semiconductors. Find out more at [www.semi.org/en](http://www.semi.org/en).

## **SUSTAINABILITY MANAGEMENT STRUCTURE**

Following our initial public offering (IPO) and the emergence of SunEdison Semiconductor as an independent company, we are reviewing and updating the way we govern and drive sustainability in our organization. This includes the methods by which we set, achieve and evolve our sustainability targets.

This review will ensure that we continue to target the environmental and social challenges that are most relevant to our new status as an independent and focused semiconductor wafer manufacturer.

At the present time, ultimate responsibility for meeting our sustainability commitments, including the setting and allocation of resources to manage our environmental and social goals, resides with our Executive Management. At the facility level, the head of operations is responsible for overseeing the implementation of all sustainability initiatives, as well as ensuring facility operations are conducted in accordance with all locally applicable environmental laws and regulations.

# PEOPLE

Our success as a company has always depended on the passion, engagement and motivation of our people. As our independence has enabled us to increase organizational focus on our business area, our unique culture has provided the framework to ensure we keep doing what we do best.

However, we know we need to work hard to be an attractive workplace and we remain committed to the personal and professional development of our employees. Because only by investing in our people can we continue to build a customer-driven, diverse, and inclusive culture that creates the foundation of a connected world.

## PERFORMANCE HIGHLIGHTS

- 2% annual turnover
- Culture Transformation Program initiated

## A GLOBAL WORKFORCE

SunEdison Semiconductor is a global organization, employing over 4,000 people across eight facilities in six countries. Because working-condition standards vary significantly across the diverse territories we operate in, we have implemented a global set of standards that ensure we are able to consistently deliver high-quality products and services to our customers worldwide.

We put these global standards into practice through policies and procedures covering working conditions, safety, and the treatment of workers. As a member of the Electronic Industry Citizenship Coalition (EICC), we have voluntarily implemented the guidelines on labor standards defined in the EICC Code of Conduct as a supplement to our internal Code of Business Conduct.

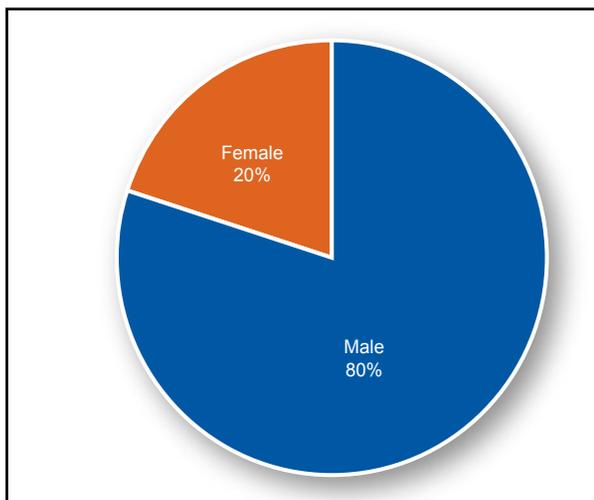
We also understand that attracting and developing local talent is vital for sustaining our credibility as a true global player. Six of our eight manufacturing facilities are headed by a national of the country where the facility is located, and around 92% of senior management at our facilities is also local. Foreign workers make up less than 12% of workers at each site, excepting only Kuala Lumpur, Malaysia (13%) and Ipoh, Malaysia (20%).

### DIVERSITY IN THE WORKPLACE

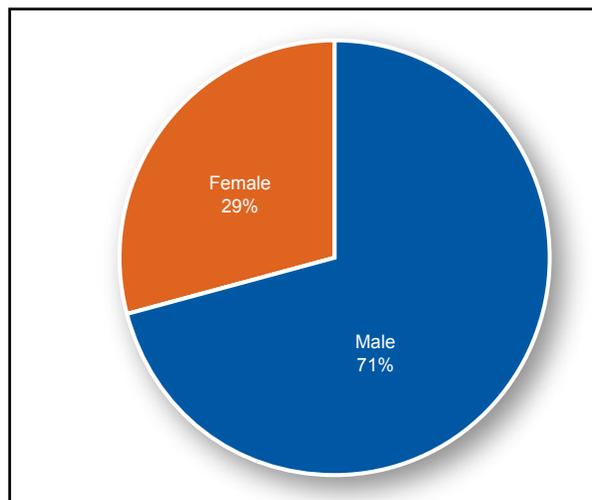
It is our policy to provide equal opportunities at all organizational levels. Women hold one in five executive positions in our organization, and around one third of our non-executive workforce is female.

#### Distribution of gender

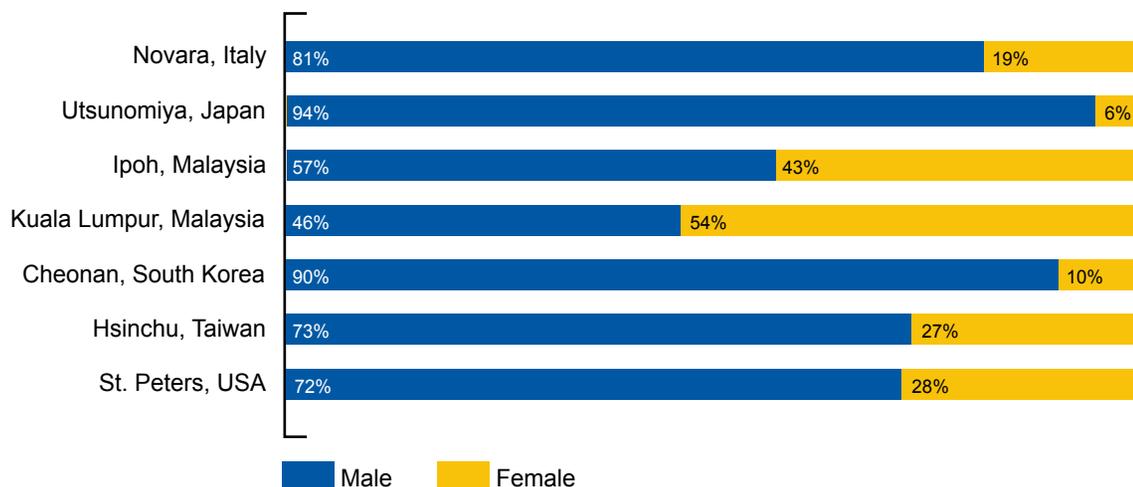
Executive



Non-Executive



#### Global workforce by gender 2014



## PEOPLE

### CULTURE ENGAGEMENT ACTIVITIES

#### *Culture training*

We have recently undertaken cultural training activities at each of our locations around the world. The sessions enable employees to engage with new ideas around safety and productivity, and to discuss and reflect on what these can mean in practice for day-to-day work life.

Recent training activities include a 'Zero Defects' concept, which explores how we can cultivate a mindset focused on quality, error prevention and waste reduction. In the near future, we will be rolling out individualized development programs, LEAN management and project management training across the global organization.

Training sessions take place in a number of formats depending on audience requirements. These include videos, intranet tutorials and workshops for factory employees. So far, more than 400 employees have participated in Zero Defects workshops at our Merano and Novara facilities in Italy and at our Kuala Lumpur and Ipoh facilities in Malaysia. We are on schedule to reach all facilities and employees by the end of 2015.

#### *Employee Culture Survey*

We are committed to ensuring that our employees' voices are heard. In 2012, we conducted a pilot Culture Survey to get a baseline on employee engagement with our culture, mission and values. Since then, we have conducted a Survey every year.

Just over 1,560 employees took part in our 2014 Culture Survey, achieving a response rate of around 60%. The consolidated results show an increasing level of engagement across the board. In terms of performance against our 'Essential Behaviors', the highest levels of agreement were observed for the statements "There is a high level of service consciousness or focus on the customer" and "There is a high level of awareness and focus on quality". In terms of our essential values, strongest engagement was observed for "Customer", "Ethics" and "Performance".

The 2014 Survey also highlighted two areas that require additional focus: global communication and performance management.

### WOMEN IN LEADERSHIP

SunEdison Semiconductor is a diverse company in terms of nationality and ethnicity, and we are working to strengthen the career path for women in our organization.

In 2015, we implemented our Women in Leadership program. As part of this initiative, two individuals from each facility have been selected to join a global forum where they can share knowledge and propose ideas on how to better support women in the workplace and develop their own leadership capabilities. Selected candidates will have demonstrated a capacity for leadership in their current work role or as a volunteer, as well the potential for growth into more senior roles.

## LABOR PRACTICES AND HUMAN RIGHTS

In alignment with EICC standards governing labor, SunEdison Semiconductor is committed to upholding the human rights of workers, and to treat them with dignity and respect as understood by the international community. This applies to all workers including temporary, migrant, student, contract, direct employees, and any other type of worker.

### NON-DISCRIMINATION

Every SunEdison Semiconductor employee has the right to be treated with respect. We maintain an ongoing policy of non-discrimination in full compliance with federal, state, and local laws and regulations in every country we operate in. Every potential discrimination incident is immediately investigated and the appropriate disciplinary action is taken. Retaliation against any person who complains about or witnesses behavior contrary to this policy is also prohibited. Our non-discrimination policy is posted at all facilities.

### FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING

In conformance with local laws and with EICC labor standards, we respect the right of all our employees to form and join trade unions of their own choosing, to bargain collectively and to engage in peaceful assembly without fear of discrimination, reprisal, intimidation or harassment. Approximately 24% of all workers at SunEdison Semiconductor are covered by collective bargaining agreements. The following facilities have active unions:

- St. Peters, Missouri, U.S.
- Novara, Italy
- Merano, Italy
- Utsunomiya, Japan
- Cheonan, South Korea

Union relations are managed by a dedicated function within our human resources organization. We are working to ensure our approach is as consistent as possible given the different union set up in each country.

## LABOR MANAGEMENT RELATIONS (INCLUDING STRIKES AND LOCK-OUTS)

Occasional one-day strikes took place at our Merano facility in Italy during the reporting period. These disputes were related to compensation packages in the wake of our IPO and this issue has now been fully resolved. No industrial actions, including strikes or lockouts, were reported at any of our other facilities.

### CHILD LABOR

SunEdison Semiconductor strictly forbids the employment of children. We have established an overall minimum age for employment. SunEdison Semiconductor employees worldwide must be at least 18 years of age.

### BONDED LABOR, MIGRANT AND CONTRACT WORKERS

The risk of bonded, forced and compulsory labor is a critical issue for the electronics sector globally and, in recent years, cases of poor housing conditions and exploitative working conditions have been linked to our industry. Within our operations, Malaysia has been identified as the highest risk as much of the country's manufacturing industry relies on foreign workers, mainly from Indonesia, Bangladesh and Nepal.

We employ 210 foreign workers in Malaysia, around 17% of our Malaysian workforce, and our policy is to offer equal conditions, benefits and pay to our foreign colleagues. For those that live in contractor-provided dormitories, we ensure that conditions are clean, safe and that some personal space is provided. We do not require employees to surrender their passports or pay fees related to their employment. Our labor contracts also include provisions to ensure workers have the ability to opt out of their contracts at will.

We audit labor conditions through high-level assessments using the EICC guidelines. The assessments include straightforward, penetrating questions aimed at identifying potential problems combined with on-site audits of the manufacturing facilities and the living quarters. We have also instituted third party independent audits for EICC compliance, the results of which are shared with staff and major customers. In addition, our contractor program includes regular communication with contractor workers to solicit feedback on working conditions.

## PEOPLE

### **HUMAN RIGHTS ASSESSMENT FOR SUPPLIERS**

As an EICC member, we are also required to ensure that the EICC Code of Conduct is acknowledged and implemented by our first tier suppliers as a minimum. We therefore undertake regular human rights assessments in which the supplier must submit a questionnaire that is used to categorize their risk level.

### **REGISTERING ISSUES AND COMPLAINTS**

We encourage all SunEdison Semiconductor employees to report anything that makes them feel unsafe at work. Additionally, we ask that all financial, ethical or compliance issues are brought to the attention of management as soon as possible. We provide an anonymous, global hotline for this purpose.

### **ATTRACTING AND RETAINING A SKILLED WORKFORCE**

Our success depends on a continuing ability to attract, develop and retain the best-qualified employees. We do this by, among other things, offering attractive conditions of employment and a variety of competitive benefits to our employees around the world.

These benefits are guided by the needs of our valued and motivated workforce. Specific employee benefits may differ by country and specific location of the facility, depending on controlling regulations. These benefits will also vary according to an employee's status, such as full-time, part-time, or contract.

## COMMUNITY OUTREACH

SunEdison Semiconductor is committed to transforming lives through innovation. We encourage our people to put their skills and our unique values to work beyond the company gate in order to make a positive difference wherever we can. During the reporting period, our outreach projects focused on three main areas: participation in local business groups concerned with environmental and safety policies, local action on environmental issues, and support for charity events and fundraising.

### ***REGFORM Regulatory Group, St. Peters, Missouri***

During 2013 and 2014, SunEdison Semiconductor maintained an active role as a member of REGFORM, the Regulatory Environmental Group for Missouri. REGFORM is a statewide business association that works with state and federal agencies to provide sound and technically defensible input on environmental policies. REGFORM's primary objective is the development and negotiation of policies that produce demonstrated environmental improvements commensurate with the costs involved for compliance.

### ***Housekeeping in the Free Industrial Zone, Kuala Lumpur, Malaysia***

In February 2014, volunteers from our Kuala Lumpur facility demonstrated Malaysia's strong spirit of gotong-royong – which can be translated as 'cooperation among many to achieve a shared goal' – as they joined a team housekeeping effort in the Free Industrial Zone. Alongside volunteers from several other local industries, SunEdison Semiconductor employees helped clean up waste and worked on specific maintenance projects to improve the working environment for everyone.

### ***One Company–One River, Cheonan, South Korea***

Our One Company–One River cleaning campaign continued throughout the reporting period. Volunteers from our Cheonan facility worked to remove waste and improve riverside environments for both leisure use and for local wildlife. The One Company–One River project follows on from the 2010 clean up at the Geum River, for which SunEdison Semiconductor was awarded the Certificate for Conservation of the Environment by the Environmental Office of Korea.

### ***Helping from the heart, St. Peters, Missouri***

In early 2015 we partnered with the American Heart Association, a national organization that works to raise awareness about heart disease and its prevention. As part of a nationwide drive to secure resources, our volunteers raised USD 15,000 for the Association and SunEdison Semiconductor topped up the fundraising contribution to a total of USD 25,000.

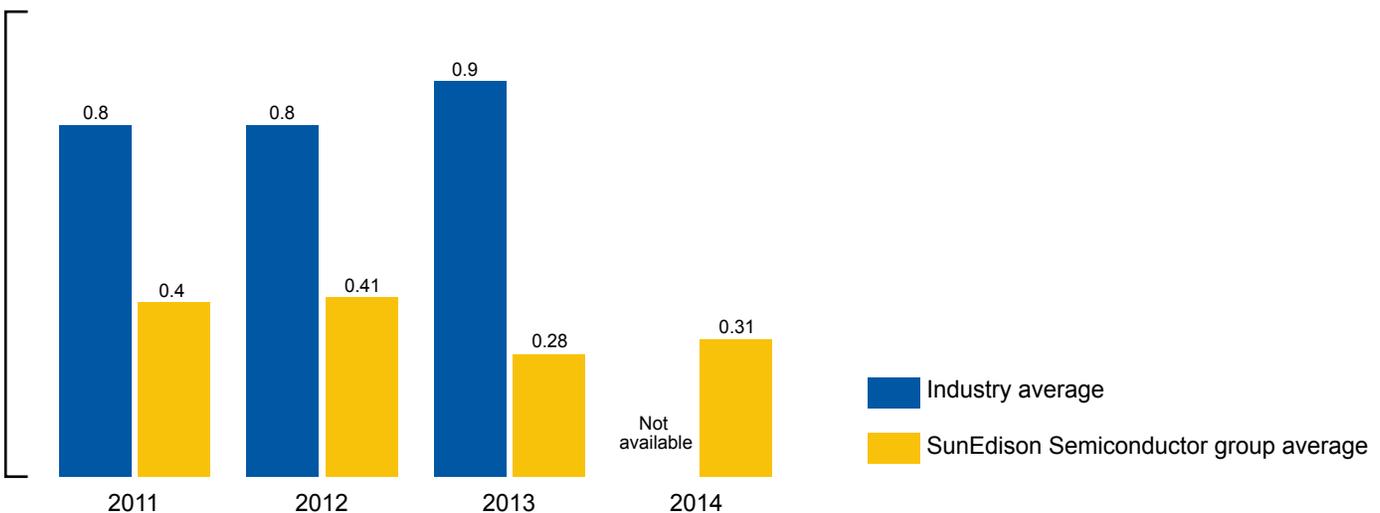
# HEALTH AND SAFETY

The safety and wellbeing of our employees is the overriding priority at SunEdison Semiconductor. We consider the only acceptable level of performance in this dimension to be an injury-free workplace, and through our environment, safety and health (ESH) activities we are making significant progress towards achieving this goal at all our facilities.

## ESH PERFORMANCE HIGHLIGHTS

In our 2012 Sustainability Report, we set ourselves the ambitious goal of achieving a group average Total Recordable Rate (TRR) lower than the top quartile of the semiconductor and related device manufacturing group, as categorized in the North American Industry Classification System (NAICS 334413). We are pleased to report that we achieved this goal in 2013, and are on target to do so again for 2014 (pending publication of 2014 figures).

### Total recordable rate



**Source:** Industry average retrieved from United States Department of Labor, Bureau of Labor Statistics. The 2014 industry average was not available at the time of printing. Visit the United States Bureau of Labor Statistics website [www.bls.gov](http://www.bls.gov) for updates.

**Note:** Average incidence rates of total recordable cases of non-fatal occupational injuries and illnesses (mean) for establishments with >1,000 employees.

## A CROSS-FUNCTIONAL APPROACH TO HEALTH AND SAFETY

Ours is a high-risk industry due to the type of processes and materials we use. Health and safety must therefore be top of every employee's agenda, every day. A central ESH committee at each of our manufacturing facilities meets on a monthly basis to review safety and health issues. Senior management also reviews ESH metrics with each plant's operating staff on a monthly basis. By analyzing accident and incident statistics along with details of significant events, senior management are able to provide direction and secure resources to address health and safety issues.

We value knowledge from every level of our organization. Our facility workers are the best source of input to ensure that we maintain the highest levels of health and safety performance at each of our facilities. For this reason, we operate an open-door policy that allows employees to voice any safety concerns. This helps us to promptly address any emergent issues. We also encourage our employees to share their ideas regarding safer work practices, and we are always open to trying new safety processes that deliver proven results.

**HEALTH AND SAFETY PROGRAMS AND TRAINING**

We use a variety of programs and training initiatives to manage and address safety and health issues at our manufacturing sites around the world. These programs focus on hazard reduction, risk and loss reduction, industrial hygiene and behavioral safety.

**Behavioral Accident Prevention Process (BAPP)**

Behavior-based safety uses the science of behavior change to solve workplace safety problems. Put simply, by analyzing what people do, and why they do it, we can define and promote behaviors critical to safety while removing barriers to safe behavior.

We piloted our first behavioral-based safety program at our facility in Pasadena, Texas in 2010, and recorded a dramatic drop in incident rates. We then replicated the pilot at our facility in Kuala Lumpur, Malaysia in 2012 and recorded equally positive results.

Since 2013, we have implemented a system based on the Behavioral Accident Prevention Process (BAPP) at six of our facilities. All facilities will have BAPP implemented by mid-2016 and we will then begin tracking performance across our global operations.

**Occupational Health and Safety Assessment Series (OHSAS 18001 Audits)**

OHSAS 18001 is part of an international standard that helps facilities control occupational safety and health risks. Third-party auditors conduct an annual surveillance audit and a compliance audit every three years at all SunEdison Semiconductor facilities in order to maintain certification.

**HEALTH AND SAFETY COMMUNICATION**

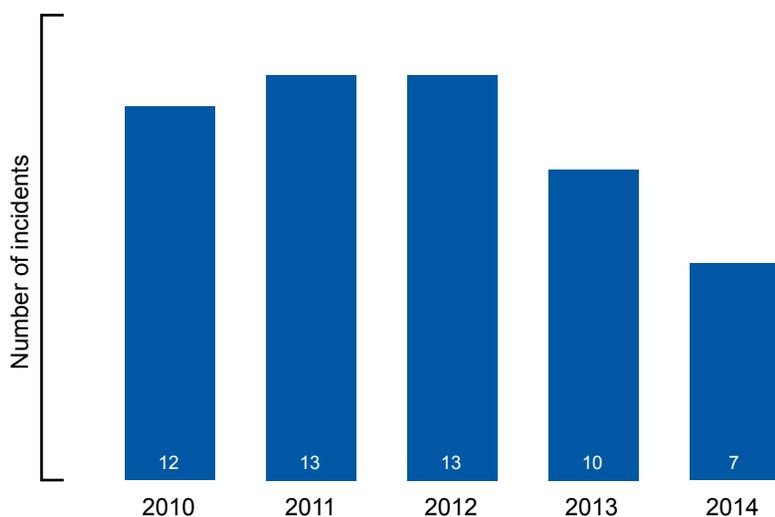
In accordance with EICC Code of Conduct guidelines on health and safety, SunEdison Semiconductor provides all employees with appropriate health and safety training in their primary language. We ensure health and safety information is clearly posted in all our facilities.

**OCCUPATIONAL INJURY AND ILLNESS**

We use the Total Recordable Rate metric (TRR), as defined by the United States Occupational Safety and Health Administration (OSHA), to benchmark safety performance against other companies.

The TRR metric is based on recordable injuries per 200,000 hours of exposure and is used to measure safety performance at all our operations worldwide.

**Behavior-Related incident trend at Kuala Lumpur, Malaysia (BAPP implemented in 2013)**

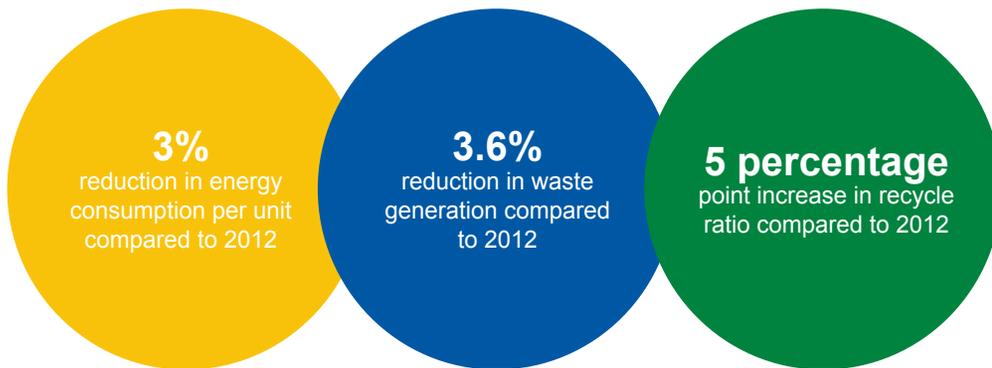


# ENVIRONMENT

## ENVIRONMENTAL GOALS

Energy consumption	3% year-over-year reduction on a per unit basis
Water consumption	3% year-over-year reduction on a per unit basis
Waste generation	3% year-over-year reduction on a per unit basis
Recycle ratio	3% year-over-year increase

### Environmental performance highlights 2013-2014



Our semiconductor wafers enable manufacturers worldwide to produce high-performance energy efficient electronics. In this way we are already making a positive impact on our world. But we also embrace our responsibility to reduce the impact of our own operations on the environment and encourage concerted action all along our value chain. In this section we provide an overview of the significant progress we have made in reducing our energy consumption, water use, emissions and waste, while continuing to meet our customers' strict quality requirements at a competitive price.

### ENVIRONMENTAL PERFORMANCE HIGHLIGHTS

In 2009, we established a set of goals to guide our environmental efforts. These included ambitious year-over-year targets that have proved challenging given the organizational – and in many cases geographical – restructuring our operations have undergone during the reporting period.

While we did not achieve every 2014 target, we are pleased to report a five-year trend of continual improvement across all parameters. This includes a 9.5% total reduction in energy consumption, a 4% reduction in water consumption, a 12% reduction in waste generation, and an overall 20 percentage point increase in our waste recycling ratio since 2010.

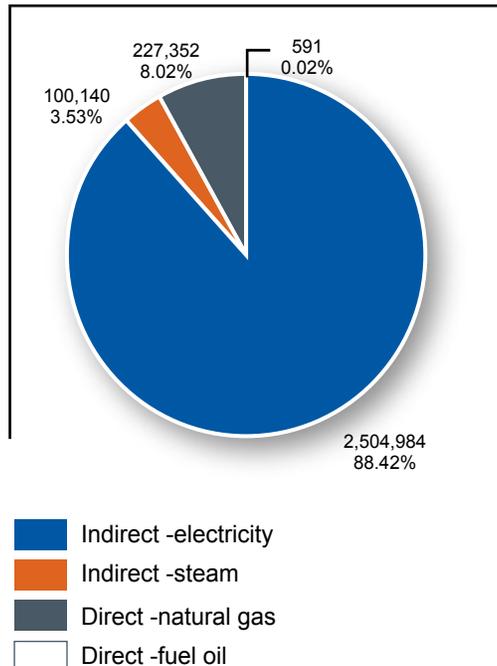
## ENERGY CONSUMPTION

Effective energy use is critical to the success of our manufacturing-intensive operations. By implementing energy efficient production processes, optimizing our utility supply systems, and ensuring fast troubleshooting to minimize the impact of any problems, we reduce both our costs and our environmental footprint.

We report our energy consumption using the standard terms of direct and indirect energy. Direct energy includes the forms of energy consumed on-site (e.g. natural gas used to heat a building). Indirect energy is energy that is consumed by SunEdison Semiconductor plants (e.g. electricity) but produced outside of our organizational boundaries.

We report direct energy and electricity consumption together since we have operational control over the use of our direct energy and how much electricity we consume.

### Total direct and indirect energy consumption by source 2014 (GJ)



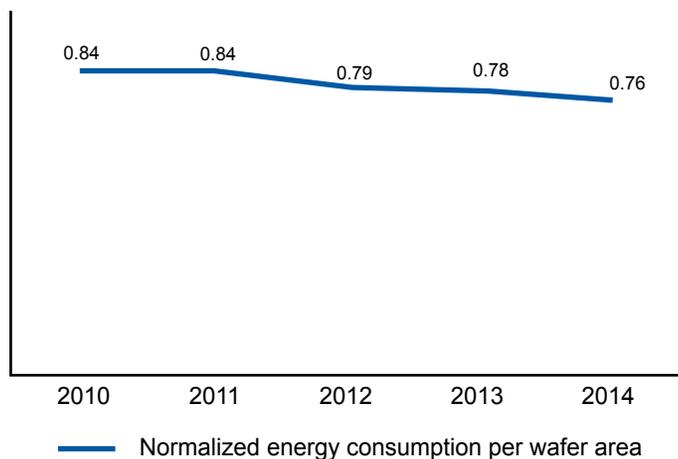
## ENERGY CONSUMPTION TRENDS

The majority of the energy used in semiconductor wafer production comes from electricity. Through 2013 and 2014 we recorded an ongoing decrease in the amount of energy required to produce our semiconductor wafers. This is measured using the amount of energy in kilowatt-hours (kWh) needed to produce a 1,000 square inch equivalent of wafer (KSIE).

This trend can be attributed to a steady growth in production volumes in line with global demand and the benefit we have derived through increased manufacturing efficiencies. Major drivers of energy savings at our manufacturing facilities have been the utilization of increasingly efficient clean rooms, incrementally more energy efficient equipment and reductions in idle equipment and facility size. We have also reduced the amount of energy we use to cool water by relying as much as possible on atmospheric temperatures during colder seasons.

Significant savings have also been achieved through the consolidation of some of our operations. In 2014 we commenced a process to consolidate our semiconductor crystal operations, including the transitioning of small diameter crystal activities at our St. Peters, Missouri facility, to our crystal facilities in Korea, Taiwan and Italy and continued to ramp wafer operations at our Ipoh, Malaysia facility.

### Energy consumption per wafer area



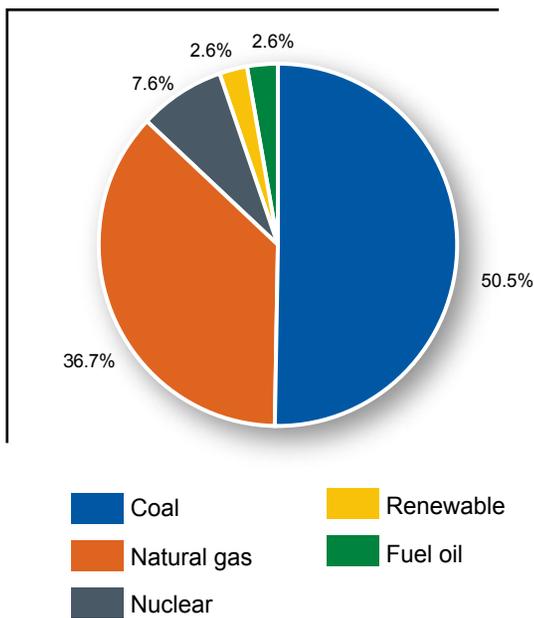
# ENVIRONMENT

## ELECTRICITY FUEL SOURCES

Almost 90% of the energy consumed at our manufacturing facilities is electricity. The primary type of energy or fuel consumed to create electricity has a significant impact on total greenhouse gas emissions.

While most of the electricity used across our facilities comes from coal or natural gas, renewable energy continues to be an important electricity source. Renewables are a significant part of the energy mix at our facilities in Malaysia and our Hsinchu facility in Taiwan. Our largest renewable energy source is currently hydropower.

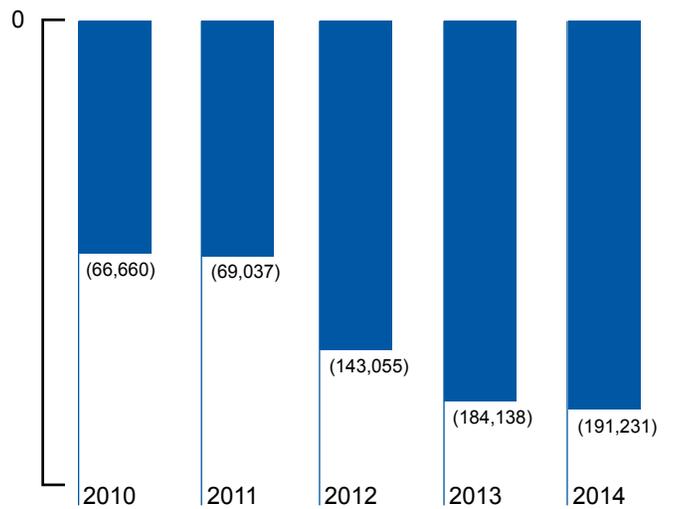
Electricity supply by fuel source 2014



## ENERGY SAVINGS

In 2013 – 2014, the consolidation of manufacturing sites, coupled with increased plant utilization and production efficiencies, increased our energy savings for the sixth consecutive year. As a company, we saved more energy in 2014 than we did in any year over the last decade.

Energy savings 2010-2014 (MWh)



**Local energy saving initiatives**

In the reporting timeframe we have launched several local initiatives to reduce our direct and indirect energy consumption.

**Examples of initiatives completed in 2013-2014**

Location	Project	Impact
Kuala Lumpur, Malaysia	Installation of a high efficiency air compressor	Reduction in electricity consumption
Cheonan, Korea	Additional saving by CPCW (Clean Process Cooling Water) temperature increase (24°C to 27°C)	Reduction in electricity consumption for cooling CPCW – Annually saving USD 110K – 1,190 mWh saved per year
Cheonan, Korea	Improvement of cooling tower pump efficiency	Reduction in the energy required for cooling fluids – Annually saving USD 72K – 756 mWh saved per year
St. Peters, USA	Building consolidation	Reduction in electricity consumption – 70,700 mWh saved since 2010
Hsinchu, Taiwan	COP (Coefficient of Performance) of 7 chillers increased (2.5 ~ 16.8% respectively)	Reduction in electricity consumption – 1,748 mWh saved per year
Hsinchu, Taiwan	Optimization of HVAC fan in clean room	Reduction in electricity consumption – 32 mWh saved per year

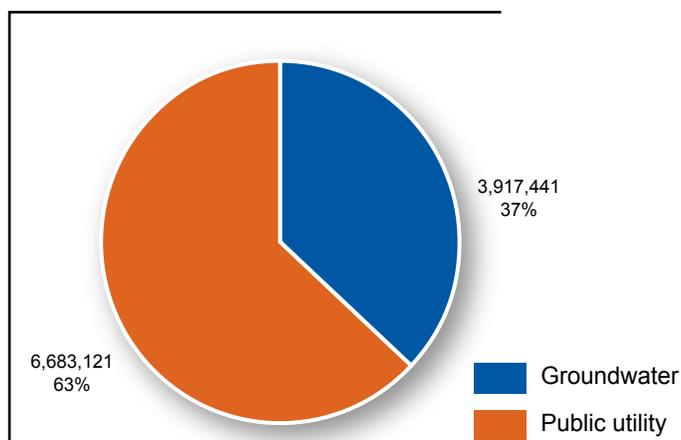
## ENVIRONMENT

### WATER

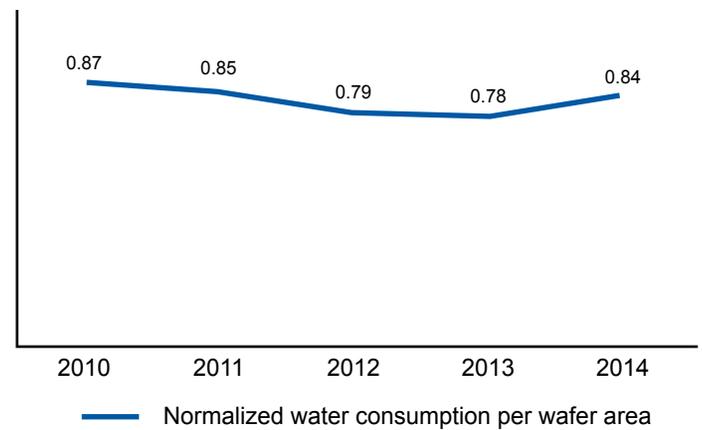
The manufacture of high-purity semiconductor wafers requires substantial amounts of water. Water is used during cooling, cleaning, dilution, and exhaust scrubbing. We are focused on reducing the amount of water we use wherever possible, primarily through internal recycling projects and yield increase.

Following consistent year-over-year reductions since 2009, our total water consumption and specific water consumption per unit of wafer rose slightly in 2014. Contributing factors included: a city water leakage at our Ipoh, Malaysia facility; the waste water recycle ration decreasing at our Cheonan, Korea facility due to a problem with the recycling system; and the EPI product mix changing in the third quarter of 2014 at our Hsinchu, Taiwan facility.

Water consumption by source 2014 (m<sup>3</sup>)



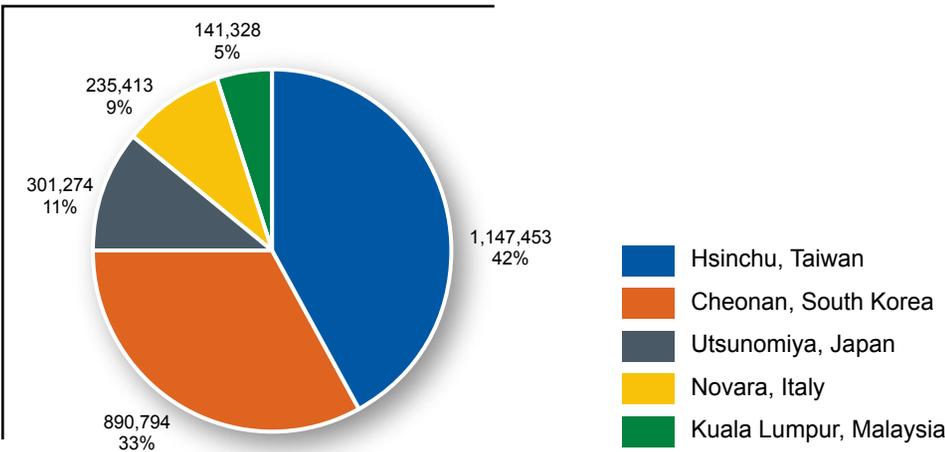
Water consumption per wafer area



**WATER RECYCLING**

At SunEdison Semiconductor, we are constantly working to find new ways to reduce our water usage through recycling and reuse, as well as through process optimization and system upgrades. In 2014, our top performing facilities for water recycling were Hsinchu, Taiwan and Cheonan, South Korea.

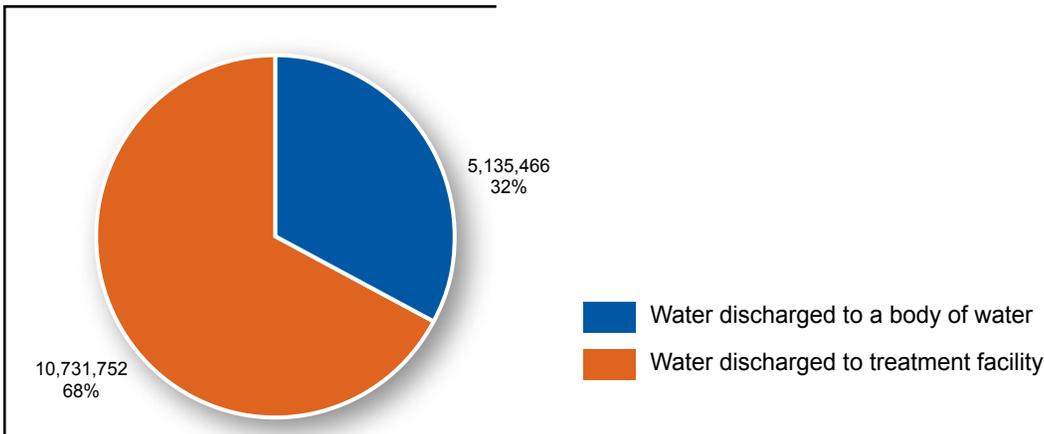
Water recycled by site 2014 (m<sup>3</sup>)



**WATER DISCHARGE**

Water at our facilities is primarily used for cooling and for cleaning processes. A combination of on-site and municipal treatment facilities ensures that the water is fully treated before it is released back into the environment. Recycling and process efficiencies continue the downward trend on water discharged per area of wafer produced.

Water discharge by outfall 2014 (m<sup>3</sup>)



## ENVIRONMENT

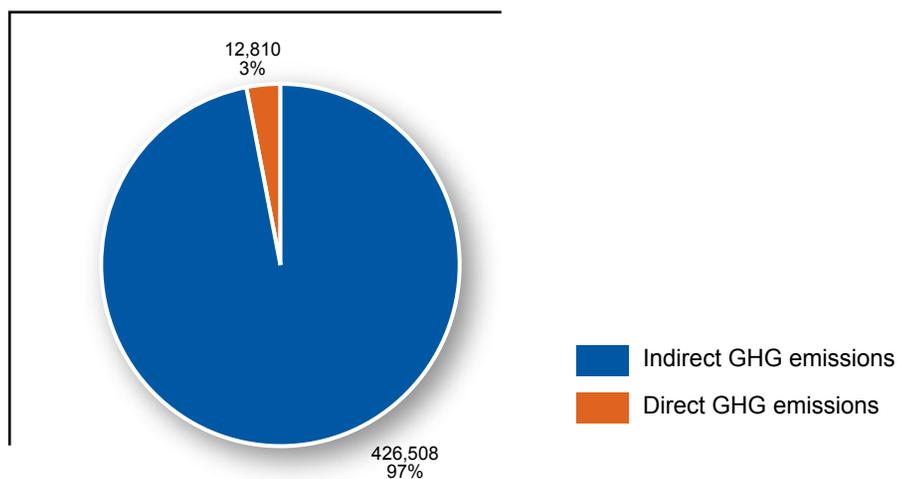
### GREENHOUSE GAS EMISSIONS

Our greenhouse gas (GHG) emissions fall into two categories: direct emissions resulting from the combustion of fossil fuels as part of our manufacturing process (e.g. natural gas and fuel oil consumed on-site) or from small leaks associated with refrigerant gases, and indirect emissions associated with our consumption of steam and electricity generated off-site.

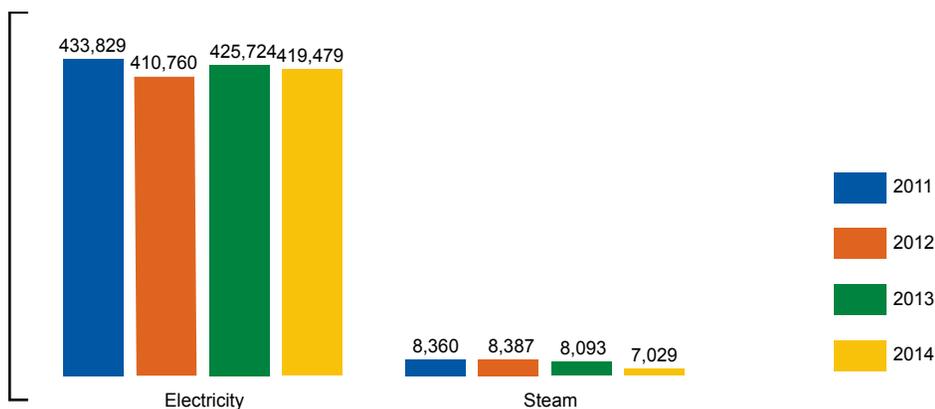
In 2014, our operations emitted a total of 439,318 MtCO<sub>2</sub>e (metric tons of CO<sub>2</sub> equivalents). Around 12,800 MtCO<sub>2</sub>e, or 3% of the total, were direct emissions resulting from process heating and building environmental controls. However, a much higher volume of GHGs were emitted offsite through the generation of the electrical power that we purchased. In 2014, these indirect emissions were estimated to be 426,508 MtCO<sub>2</sub>e or 97% of the total.

(Note: 2013 – 2014 indirect CO<sub>2</sub> emissions calculated using USDOE or USEPA inventory emission factors as applicable to the site.)

#### Total greenhouse gas emissions 2014



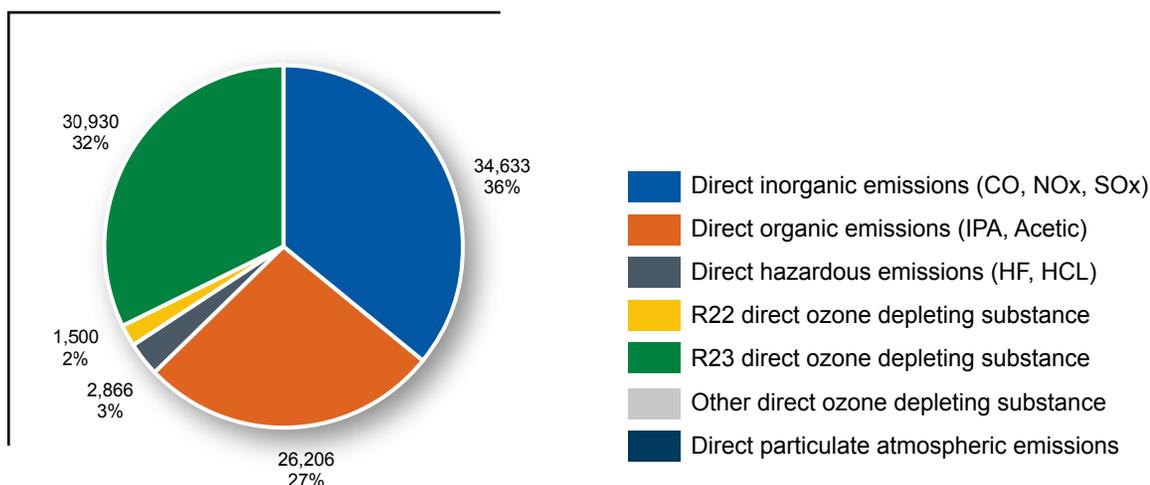
#### Indirect greenhouse gas emissions by source (MtCO<sub>2</sub>e)



## AIR EMISSIONS

As a member of the EICC, we are required to identify all emissions of volatile organic chemicals, aerosols, corrosives, particulates, ozone depleting chemicals and combustion by-products generated at our facilities. All such emissions are to be routinely monitored, controlled and treated as required prior to discharge in accordance with our operating permits and internal procedures relating to the environment. We routinely monitor the performance of our air emission control systems.

Air emissions by type 2014



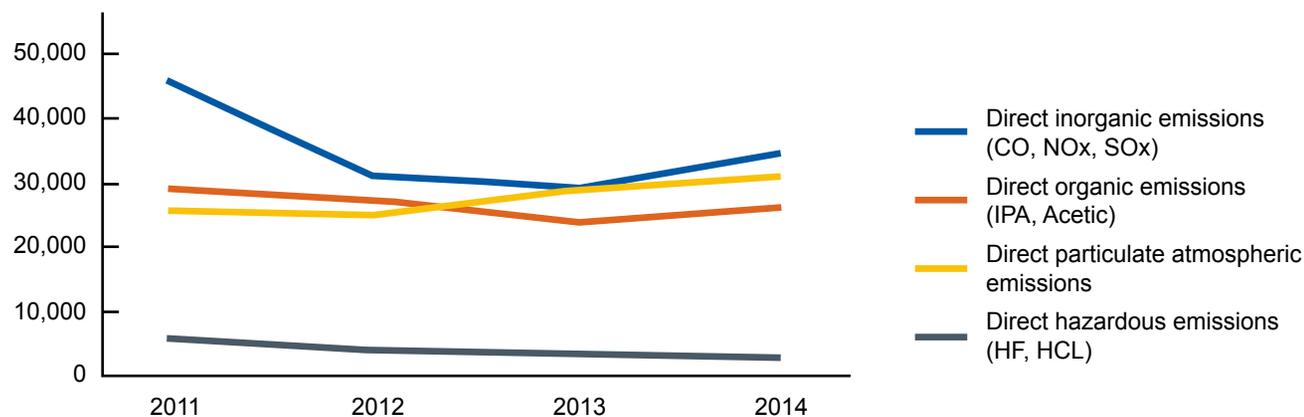
### Ozone depleting substances (ODS)

We have systematically removed or converted refrigerant systems containing ODS at all our facilities. This has resulted in a consistent reduction in ODS emissions in recent years. No emissions of ODS have been reported for the 2013 and 2014 time frame.

### Direct non-ODS air emissions

The reporting period saw a continuing decrease in emissions of direct hazardous materials, reflecting our ongoing efforts in this area. We recorded a slight increase in emissions of direct particulate, inorganic, and organic air emissions in 2014.

Direct non-ODS air emissions trend (kg)



# ENVIRONMENT

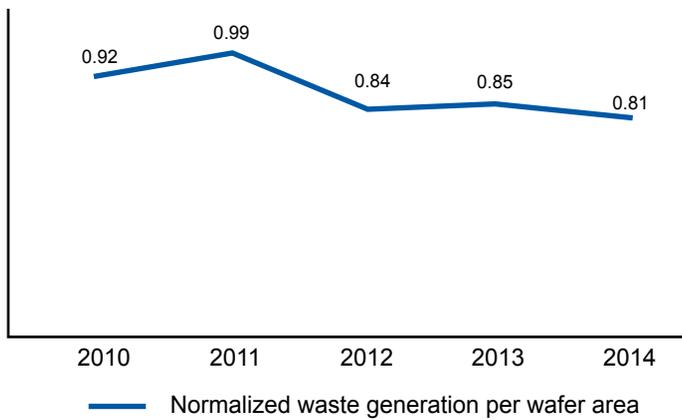
## WASTE

We reduced the total amount of waste generated through our operations by 3.6% in the reporting period. Our efforts in this area have contributed to an overall downward trend over the last five years. This amounts to a reduction of more than one kilogram of waste per unit produced.

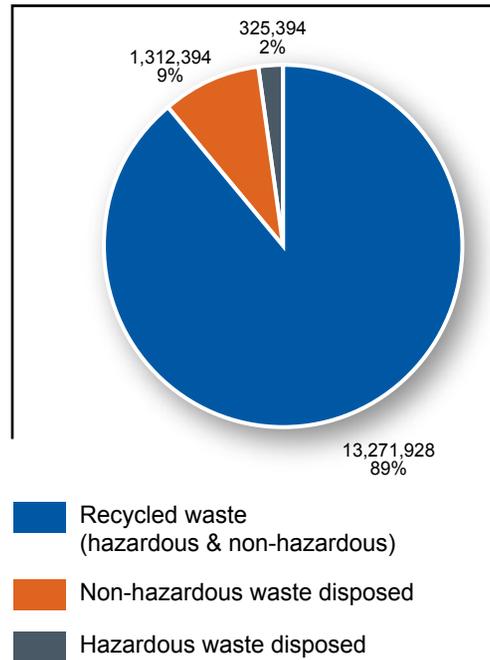
We have also made good progress on waste recycling. In 2014, we recycled 89% of the waste produced by our manufacturing processes, increasing our overall recycling ratio (the percentage of total waste recycled) by 5 percentage points since 2012. Our activities in this area include the recycling of spent slurry. Our facilities in Utsunomiya, Japan and Hsinchu, Taiwan recycled over 2.9 million kilograms and 3.2 million kilograms of waste respectively in 2014.

Significant work has also been undertaken to reduce the amount of hazardous waste we dispose of (as a percentage of total waste). Of the remaining 11% of waste not recycled, just 2% was classified as hazardous.

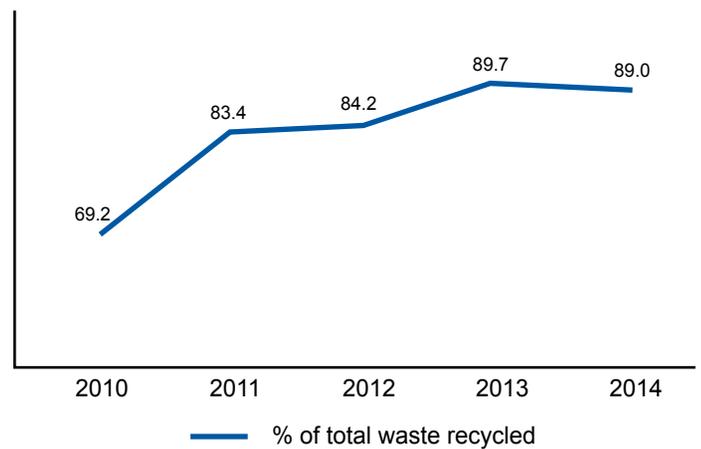
Waste generation per wafer area



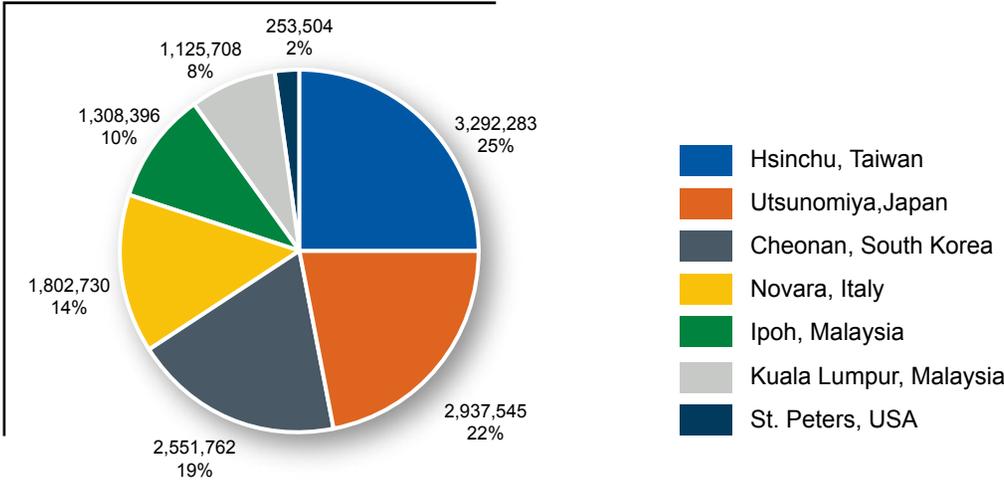
Waste disposed by type 2014 (kg)



Recycle Ratio



Waste recycled by site 2014 (kg)



**HAZARDOUS MATERIALS**

***Isopropyl alcohol and acetic acid***

Isopropyl alcohol (IPA) and acetic acid are used in wafer manufacturing during the cleaning and etching process. We continue to make incremental improvements to the cleaning process by reducing the amount of material used per wafer. This in turn results in lower emissions.

# PERFORMANCE DATA

Category/Indicator	Breakdown	Measurement unit	31.12.2014	31.12.2013	31.12.2012	31.12.2011
<b>ECONOMIC</b>						
Revenue		USD (million)	838	921	934	1198
Gross profit		USD (million)	79	82	82	175
Margin		Percentage	9.4	8.9	8.8	14.6
Profit before taxation		USD (million)	(87.8)	(11.3)	126.3	(518.2)
EBIDTA		USD (million)	89	75	75	170
Margin		Percentage	10.6	8.1	8.0	14.2
Net sales	Total net sales	USD (million)	840.1	920.6	934.2	1,198.3
	Net sales to non-affiliates	USD (million)	837.7	911.5	927.4	1,051.3
	Net sales to affiliates	USD (million)	2.4	9.1	6.8	147.0
<b>PEOPLE</b>						
Employees (include contract workers)		Number of employees	4,461	4,230	4,347	4,454
Contract/ foreign workers		Number of employees	535	390	356	394
By gender	Male	Number of employees	3,201	3,059	3,153	3,265
	Female	Number of employees	1,260	1,171	1,191	1,189
Collective bargaining agreements	Total number covered	Number of employees	1,062	1,066	1,082	1,147
<b>HEALTH AND SAFETY</b>						
Recordable injuries		Number of injuries	15	13	18	21
Serious incidents		Number of incidents	23	19	28	23
Serious incident rate			0.48	0.41	0.65	0.44
Total Recordable Rate (TRR)			0.31	0.28	0.41	0.40
Total Exposure Hours		Hours	9,666,371	9,176,741	8,677,325	10,388,889
<b>ENERGY</b>						
Direct energy consumption	Fuel oil	Mt	15	4	4	29
	Natural gas	Nm <sup>3</sup>	5,828,051	5,278,438	6,193,782	9,056,309
Indirect energy consumption	Steam	Mt	37,206	42,839	44,394	44,253
	Electricity	GJ	2,504,984	2,526,892	2,428,827	2,658,581
Total energy consumption by fuel source		GJ	5,311,491	5,688,169	5,499,982	6,267,013
Electricity utility fuel mix	Coal	GJ	2,684,453	2,796,295	2,992,542	3,194,374
	Natural gas	GJ	1,951,421	2,175,272	1,615,210	2,175,015
	Nuclear	GJ	401,293	379,158	360,177	337,856
	Renewable	GJ	137,577	142,827	186,509	177,562
	Fuel oil	GJ	136,766	196,615	345,547	382,208
<b>WATER</b>						
Total water consumption		m <sup>3</sup>	10,600,562	9,698,934	9,377,980	10,259,000
Consumed from local surface water		m <sup>3</sup>	0	0	0	0
Consumed from on-wells (groundwater)		m <sup>3</sup>	3,917,441	4,047,772	3,539,466	4,164,406
Consumed from public utility		m <sup>3</sup>	6,683,121	5,651,162	5,838,514	6,094,594
Water recycled		m <sup>3</sup>	2,716,262	2,673,098	2,956,165	3,124,777
Waste water discharged to a body of water		m <sup>3</sup>	5,135,466	1,862,509	1,301,002	1,577,736
Waste water discharged to a treatment facility		m <sup>3</sup>	10,731,752	7,264,891	5,786,319	6,607,350

EMISSIONS						
Total emissions	Direct	MtCO <sub>2</sub> e	12,810	11,575	13,580	19,926
	Indirect	MtCO <sub>2</sub> e	426,508	433,817	419,147	442,189
Total direct emissions	Fuel oil	MtCO <sub>2</sub> e	44	13	13	88
	Natural gas	MtCO <sub>2</sub> e	12,766	11,562	13,567	19,838
Total indirect emissions	Electricity	MtCO <sub>2</sub> e	419,479	425,724	410,760	433,829
	Steam	MtCO <sub>2</sub> e	7,029	8,093	8,387	8,360
Direct inorganic emissions (CO, NOx, SOx)		kg	34,633	29,241	31,184	45,681
Direct organic emissions (IPA, Acetic)		kg	26,206	23,900	27,304	28,999
Direct hazardous emissions (HF, HCL)		kg	2,866	3,766	4,346	5,953
R22 direct ozone depleting substance		kg	1,500	0	5,000	3,000
R23 direct ozone depleting substance		kg	0	0	0	0
Other direct ozone depleting substance		kg	0	0	0	0
Direct particulate atmospheric emissions		kg	30,930	28,998	25,227	25,560
WASTE						
Total waste generation		kg	1,637,448	1,574,405	2,290,324	2,889,657
Non-hazardous waste		kg	1,312,394	1,222,998	1,691,630	2,407,263
Hazardous waste		kg	325,054	351,407	598,694	482,394
Waste recycled		kg	13,271,928	13,759,715	12,215,131	14,497,030

**Notes:**

Data for Texas, USA site is only available for 2011, as this site ceased to operate after 2011.  
 Data for Merano, Italy is not included, as this site does not contribute to wafer manufacturing.  
 Recycled waste includes both hazardous and non-hazardous waste.

# GLOBAL REPORTING INITIATIVE G4 INDEX

GENERAL STANDARD DISCLOSURES			
General Standard Disclosures		Report section	Page
<b>STRATEGY AND ANALYSIS</b>			
G4-1	Statement from the most senior decision-maker of the organization	Letter from the CEO	4 - 5
<b>ORGANISATIONAL PROFILE</b>			
G4-3	Name of the organization	SunEdison Semiconductor in brief Business profile	6 - 8 10 - 17
G4-4	Primary brands, products and services	SunEdison Semiconductor in brief Business profile	6 - 8 10 - 17
G4-5	Headquarters location	Business profile	10 - 17
G4-6	Countries of operation	SunEdison Semiconductor in brief Business profile	6 - 8 10 - 17
G4-7	Nature of ownership and legal form	SunEdison Semiconductor in brief Business profile	6 - 8 10 - 17
G4-8	Markets served	Business profile	10 - 17
G4-9	Scale of the organization	SunEdison Semiconductor in brief Business profile Performance data	6 - 8 10 - 17 44 - 45
G4-10	Organization's workforce	SunEdison Semiconductor in brief Business profile People Performance data	6 - 8 10 - 17 26 - 31 44 - 45
G4-11	Total employees covered by collective bargaining agreements	Labor practices and human rights Performance data	29 - 30 44 - 45
G4-12	Organization's supply chain	Our supply chain Stakeholder engagement Strategy, policy and management systems	17 20 - 21 22 - 25
G4-13	Significant changes during the reporting period regarding size, structure, ownership or its supply chain	Business profile	10 - 17
G4-14	Explanation of whether and how the precautionary approach or principles is addressed by the organization	Environment	34 - 43
G4-15	Externally developed economic, environmental and social charters, principles or other initiatives	Corporate governance Strategy, policy and management systems	18 - 20 22 - 25
G4-16	Memberships of associations and national/ international advocacy organizations	Corporate governance Strategy, policy and management systems	18 - 20 22 - 25
<b>IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES</b>			
G4-17	Entities included in the organization's consolidated financial statements or equivalent documents	SunEdison Semiconductor in brief Annual Report 2014	6 - 8
G4-18	Process for defining report content and the Aspect Boundaries	About this report	51
G4-19	Material Aspects identified in the process for defining report content	About this report	51
G4-20	Aspect Boundary within the organization	About this report	51
G4-21	Aspect Boundary outside the organization	About this report	51
G4-22	Restatements of information provided in previous reports	About this report	51
G4-23	Significant changes from previous reporting in the Scope and Aspect Boundaries	About this report	51

GENERAL STANDARD DISCLOSURES (cond't)			
General Standard Disclosures		Report section	Page
<b>STAKEHOLDER ENGAGEMENT</b>			
G4-24	List of stakeholder groups engaged by the organization	Stakeholder engagement	20 - 21
G4-25	Basis for identification and selection of stakeholders with whom to engage	Stakeholder engagement	20 - 21
G4-26	Approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group	Stakeholder engagement	20 - 21
G4-27	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting	Stakeholder engagement	20 - 21
<b>REPORT PROFILE</b>			
G4-28	Reporting period	About this report	51
G4-29	Date of most recent previous report	About this report	51
G4-30	Reporting cycle	About this report	51
G4-31	Contact point	Contact and feedback	54
G4-32	GRI content index	Global Reporting Initiative G4 Index	46 - 49
G4-33	External assurance	About this report Independent assurance statement	51 52 - 53
<b>GOVERNANCE</b>			
G4-34	Organization's governance structure	Corporate governance	18 - 20
<b>ETHICS AND INTEGRITY</b>			
G4-56	Organization's values, principles, standards and norms of behaviors	Governance and management systems	18 - 25

## GLOBAL REPORTING INITIATIVE G4 INDEX

SPECIFIC STANDARD DISCLOSURES					
Material Aspects	DMA and Indicators		Report Section	Page	Notes
Disclosures on Management Approach	G4-DMA		Letter from the CEO	4 - 5	
			Governance and management systems	18 - 25	
			Environment	34 - 43	
<b>Economic</b>					
Economic performance	G4-EC1	Direct economic value generated and distributed	SunEdison Semiconductor in brief Performance data	6 - 8 44 - 45	
Market presence	G4-EC6	Proportion of senior management hired from the local community at significant locations of operation	A global workforce	26 - 28	
<b>Environmental</b>					
Materials	G4-EN1	Materials used by weight or volume	Our supply chain	17	Zero use of conflict resources
Energy	G4-EN3	Energy consumption within the organization	Energy consumption	35 - 37	
	G4-EN4	Energy consumption outside of the organization	Performance data	44 - 45	
	G4-EN5	Energy intensity	Energy consumption	35 - 37	
	G4-EN6	Reduction of energy consumption	Performance data	44 - 45	
Water	G4-EN8	Total withdrawal by source	Water Performance data	38 - 39 44 - 45	
	G4-EN10	Percentage and total volume of water recycled and reused	Water Performance data	38 - 39 44 - 45	
Emissions	G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	Greenhouse gas emissions Performance data	38 - 39	
	G4-EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	Greenhouse gas emissions Performance data	40 44 - 45	
	G4-EN17	Other indirect greenhouse gas (GHG) emissions (Scope 3)	Greenhouse gas emissions Performance data	40 44 - 45	
	G4-EN20	Emissions of ozone-depleting substances (ODS)	Greenhouse gas emissions Performance data	40 44 - 45	
	G4-EN21	NOx, SOx and other significant air emissions	Air emissions Performance data	41 44 - 45	
Effluents and waste	G4-EN22	Total water discharge by quality and destination	Waste Performance data	42 - 43 44 - 45	
	G4-EN23	Total weight of waste by type and disposal method	Waste Performance data	42 - 43 44 - 45	

SPECIFIC STANDARD DISCLOSURES					
Material Aspects	DMA and Indicators		Report section	Page	Notes
<b>Social</b>					
Labor practices and decent work					
Employment	G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	People	26 - 31	Annual turnover only
	G4-LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	Attracting and retaining a skilled workforce	30	
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 safety programs	Health and safety	32 - 33	
	G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and gender	Health and safety	32 - 33	
Training and education	G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	Performance data	44 - 45	
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	Strategy, policy and management systems	22 - 25	
Human rights					
Investment	G4-HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	Our supply chain Labor practices and human rights	17 29 - 30	
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	Labor practices and human rights Performance data	29 - 30 44 - 45	
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	Labor practices and human rights	29 - 30	
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	Labor practices and human rights	29 - 30	
Supplier human rights assessment	G4-HR10	Percentage of new suppliers that were screened using human rights criteria	Labor practices and human rights	29 - 30	
Society					
Local communities	G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	Community outreach	31	
Anti-corruption	G4-SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	Ethics and transparency Strategy, policy and management systems	20 22 - 25	
	G4-SO4	Communication and training on anti-corruption policies and procedures	Ethics and transparency Strategy, policy and management systems	20 22 - 25	

# GLOSSARY

## **Behavioral Accident Prevention Program**

Behavior based safety program that uses the science of behavior change to solve workplace safety problems.

## **Carbon dioxide equivalent (CO<sub>2</sub>e)**

This is the unit of measure used for comparing the radiative forcing of a GHG to carbon dioxide.

## **Eco-Management and Audit Scheme (EMAS)**

Management instrument developed by the European Commission for companies and other organizations to evaluate, report, and improve their environmental performance.

## **Electronic Industry Citizenship Coalition (EICC)**

Non-profit coalition of electronic companies focused on improving industry-wide social and environmental performance through the adoption of a standardized industry code of conduct, as well as consistent use of effective implementation tools and methods.

## **Epitaxial (EPI)**

Depositing a thin layer of silicon atoms onto a wafer by condensing a controlled amount of silicon gas (silane) onto the polished surface of the wafer in a temperature-controlled environment.

## **Etch**

To remove or dissolve surface contamination, work-damaged material (polishing), and to control thickness by chemical action with strong acid and alkaline compounds.

## **Greenhouse gas (GHG) emissions**

Release of GHGs to the atmosphere.

## **KSIE**

Thousand Square Inch Equivalent.

## **Ingot**

A cylindrical piece of single-crystal or polycrystalline semiconductor material, typically resulting from a crystal growth process. Ingots are shaped and then sliced into wafers that are used to manufacture semiconductor devices.

## **Semiconductor Equipment and Materials International (SEMI®)**

SEMI® is a global industry association serving the manufacturing supply chain for the micro- and nano-electronics industries, including semiconductors.

## **Silicon-On-Insulator (SOI)**

A silicon wafer with a thin layer of oxide (SiO<sub>2</sub>) buried in it.

## **Total Recordable Rate (TRR)**

Number of recordable injuries and illnesses occurring among a given number of full-time workers (usually 100 fulltime workers) over a given period of time (usually one year). The standard base rate of calculation is based on a rate of 200,000 labor hours. The 200,000 figure equates to 100 employees, who work 40 hours per week and 50 weeks per year.

## **Total waste generation**

Total waste generation includes hazardous and non-hazardous waste.

## **Wafer**

Thin, circular slice of single-crystal semiconductor material cut from the ingot of single crystal semiconductor.

# ABOUT THIS REPORT

### Reporting cycle and scope

This Sustainability Report covers all of SunEdison Semiconductor’s sustainability activities in all eight sites in six countries unless otherwise stated. We have attempted to provide a complete overview of our operations within the established scope.

This report describes our sustainability performance from the period 1 January 2013 to 31 December 2014. We believe that the data presented is a fair representation of our performance and have included detailed notes in relevant sections to ensure transparency.

Our previous report was published in 2013. We will continue to report in accordance with our financial year, on a biennial basis.

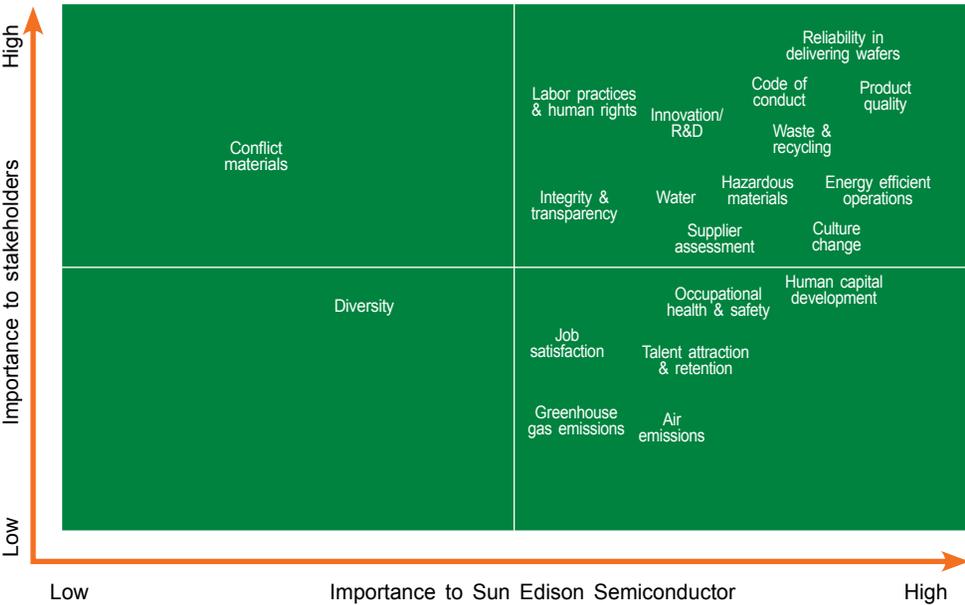
### Reporting standard

This report adheres to the Global Reporting Initiative (GRI) G4 Index and is in accordance with the Core level requirements outlined in the GRI G4 reporting standard. A comprehensive GRI index is included in this report. We referred to the principles for defining report content when planning the report.

### Materiality

In 2015, we conducted a materiality exercise to define the top sustainability priorities according to the impacts of our business on the environment, economy and society, and according to our stakeholders’ expectations.

### SunEdison Semiconductor’s materiality matrix 2015



### Approach to assurance

In order to ensure the accuracy and reliability of the environmental information presented in this Sustainability Report, SunEdison Semiconductor has appointed an independent third party, Trinity Consultants, an environmental consulting company based in Dallas, Texas, to provide verification for this report.

SunEdison Semiconductor has requested that the following data are verified for the 2013–2014 period:

- Carbon footprint (Scope 1 and 2 GHG emissions, metric tons of CO<sub>2</sub> equivalent (MtCO<sub>2</sub>e))
- Energy consumption (kWh)
- Water consumption (m<sup>3</sup>)
- Waste generation (kg)

Verification has been conducted for these data only, focused on the absolute amounts reported by SunEdison Semiconductor.

# INDEPENDENT ASSURANCE STATEMENT

## Independent Assurance Statement to SunEdison Semiconductor LLC

**Introduction & Objectives:** Trinity Consultants, Inc. (Trinity) was engaged by SunEdison Semiconductor LLC (SunEdison Semiconductor) to provide independent assurance for specified 2013 and 2014 environmental data presented in the SunEdison Semiconductor Sustainability Report 2013/2014. The overall objective of this process was to provide assurance to SunEdison Semiconductor's stakeholders on the accuracy, completeness, reliability and objectivity of the specified environmental information included in the Report. This Assurance Statement applies to the information included within the subject Scope of Work.

**Scope of Work:** SunEdison Semiconductor requested that Trinity perform limited assurance of the following specified environmental performance indicators for 2013 and 2014 to determine whether they are fairly presented, in all material respects, in a manner consistent with the designated reporting criteria:

- Direct (Scope 1) greenhouse gas (GHG) emissions from stationary combustion sources (metric tons CO<sub>2</sub>e)
- Indirect (Scope 2) GHG emissions from purchased electricity and steam (metric tons CO<sub>2</sub>e)
- Natural gas consumption (normal cubic meters)
- Purchased electricity (MWh)
- Water consumption (cubic meters)
- Waste generation (kg)

The reported data was evaluated against SunEdison Semiconductor's internal sustainability reporting procedures.

Our procedures assessed the appropriateness and effectiveness of underlying corporate reporting processes, management controls and systems used to develop, compile, analyze and report the specified environmental indicators.

The boundary of the data included in this assurance is limited to the eight manufacturing facilities under SunEdison Semiconductor operational control during the subject period. Text, descriptions, interpretations or other written statements in the Sustainability Report 2013/2014 were not included in the scope of Trinity's work.

**Reporting Criteria:** SunEdison SunEdison Semiconductor has developed the data subject to this verification as documented in their corporate Sustainability Data Management Plan. This Plan incorporates specific definitions for each environmental performance indicator and the basis on which these data are compiled, calculated and reported. External criteria utilized to develop these data include:

- SAR (100-yr)-1996 IPCC SAR (Chapter 2 of the Working Group I report)
- CO<sub>2</sub> Emissions from Fuel Combustion, OECD/IEA (2014)
- U.S. Department of Energy, Energy Information Administration Form EIA-1605 (2007)
- 9th edition U.S. EPA eGRID2012 Version 1.0 – SRMW Subregion (2010 data)
- 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Chapter 2: Stationary Combustion
- Global Reporting Initiative G3 Guidelines GRI Application Levels – EN3 Table

**Assurance Standard:** Trinity's work was conducted following our standard assurance methodology and approach for external verification of sustainability reports, in part based on the International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements Other Than Audits or reviews of Historical Financial Information, suitably adapted.

**Responsibilities:** SunEdison Semiconductor management is solely responsible for the environmental performance data and its presentation in the Sustainability Report 2013/2014. Trinity was not involved in the collection of the reported data or development of the Sustainability Report 2013/2014.

Trinity's responsibility is to perform an assurance engagement to provide conclusions on the agreed Scope of Work based on the assurance activities performed, consistent with exercising our professional judgement.

**Assurance Methodology:** Trinity conducted the following activities during this assurance engagement:

- Visited SunEdison Semiconductor's headquarters in St. Peters, MO to interview key staff responsible for SunEdison Semiconductor's sustainability program, activities, and management systems for the specified environmental performance indicators;
- Reviewed documentation and interviewed relevant staff to understand and evaluate the processes and systems used to collect, compile, consolidate, analyze and report data for the specified environmental performance indicators;
- Reviewed SunEdison Semiconductor's corporate Sustainability Data Management Plan and suitability of calculations, and conversion and emission factors;
- Reviewed the corporate consolidation of data for specified environmental performance indicators, and compared it to data submitted from the eight individual facilities;
- Selected underlying facility source data on a test basis and conducted a desktop review of these sample data to confirm specified site data for six facilities including Utsunomiya, Japan; Novara, Italy; Kuala Lumpur, Malaysia; Hsinchu, Taiwan; Cheonan, South Korea; and St. Peters, MO; and
- Reviewed the presentation of the above performance data in the Sustainability Report 2013/2014 to ensure consistency with our findings, and to address changes and corrections with SunEdison Semiconductor where necessary.

**Trinity's Opinion:** Based on Trinity's activities, nothing has come to our attention to indicate that the corporate 2013 and 2014 data for the specified environmental performance indicators listed under 'Scope of Work' and presented in the SunEdison Semiconductor Sustainability Report 2013/2014 are not fairly presented, in all material respects, in a manner consistent with the designated reporting criteria.

**Trinity's Observations:** Trinity has provided SunEdison Semiconductor with a separate management report. Without affecting the conclusions presented above, we have the following observations:

- SunEdison Semiconductor has established a Sustainability Data Management Plan to guide the development and reporting of sustainability data with a focus on energy and GHG emissions. SunEdison Semiconductor should consider reflecting current methods and approach, formalize processes and controls around complete data development and review, and roll out the Plan to all facilities.
- Key SunEdison Semiconductor ESH staff at corporate and facilities conduct monthly and annual reviews of reported data to confirm completeness and accuracy. SunEdison Semiconductor should consider improving the documentation of this process and interactions during this process.
- Underlying data supporting facility reporting of environmental data were made available during this verification process. SunEdison Semiconductor should consider establishing a more systematic process for obtaining, compiling and archiving these data for future internal QA/QC and report verification.

**Limitations:** Our work did not include visits or physical inspections of any of SunEdison Semiconductor's operating facilities, other than the St. Peters, MO headquarters visit as previously noted.

Trinity's approach to this verification was not intended to detect all weakness in management controls as described above. The verification was performed on corporate management controls on a test basis. Further, it should be noted that the reliability of environmental data may be subject to inherent uncertainties, based on the established methods used to measure or calculate the underlying information.

This Assurance Statement is only valid when it is published with the Sustainability Report 2013/2014 to which it refers, and may only be reproduced in its entirety.

**Statement of Independence:** Trinity is an independent professional services firm that specializes in environmental, health and safety, and sustainability compliance, risk and performance management. We have developed and maintain a quality management system, certified to ISO 9001:2008. No member of the assurance team has a business relationship with SunEdison Semiconductor, its Managers or Directors other than for the purpose of verification of the subject sustainability data and reporting, or has had any involvement in writing the Report, data collection or validation, or the development or implementation of data systems. This verification has been conducted independently and we believe that there has been no conflict of interest.

November 17, 2015

  
**Principal Consultant**

Trinity Consultants, Inc.  
Dallas, TX  
[www.trinityconsultants.com](http://www.trinityconsultants.com)



# CONTACT AND FEEDBACK

We welcome any feedback or questions.  
Please contact us on email  
[rkanapathy@sunedisonsemi.com](mailto:rkanapathy@sunedisonsemi.com)  
or through our headquarters:

**SunEdison Semiconductor Limited**  
501 Pearl Drive  
St. Peters, MO 63376  
USA  
Phone: +1 636 474 5000  
[www.sunedisonsemi.com](http://www.sunedisonsemi.com)