



**JSR Micro**   
MATERIALS INNOVATION

## 2012 Corporate Social Responsibility Report

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# Letter from our President

**JSR Micro, Inc.** is pleased to publish our inaugural Corporate Social Responsibility (CSR) Report. Although this is our first report, we have been integrating sustainability into our business operations for many years, and our CSR program expands upon our corporate traditions of quality, efficiency and safety. JSR Micro views sustainability as an opportunity to make our operations more efficient, effective and meaningful, as well as a means of growing our business. Faced with global challenges such as climate change, resource depletion and unstable economies, we have embraced the challenge to evolve and affirm our role as a technology and business leader committed to making a difference.

As a chemical manufacturer, we are sensitive to our increasing environmental responsibilities and our obligation to practice the principles of sustainability so as to have a positive impact on our customers, suppliers, employees, business partners and neighbors. We operate primarily in the semiconductor industry, which is a mature, innovation-driven market characterized by high competition and consolidation. JSR Micro is at the forefront of new development such as extreme ultraviolet (EUV) lithography and directed self-assembly (DSA) patterning. Our CSR program provides us with an opportunity to drive innovation in these and other high-tech areas while maintaining our competitive advantage.

It is always a challenge to stay competitive and maintain our position as a market leader. Continuous learning is the key to staying innovative. To ensure that learning is embedded in our culture, we track training hours and target employee development on our balanced scorecard. We also have implemented metrics to track our

performance in research and development (R&D) and emerging technologies. Although select programs experienced setbacks in fiscal year 2011, we were very satisfied with our overall performance, including our recent entry into the life sciences and energy and environment markets.

All of our enterprises align with the mission of our corporate parent, JSR Corporation: "to create value through materials to enrich society, people and the environment." The JSR Group is a member of the United Nations Global Compact (UNGC) and, as a member of the JSR Group, JSR Micro respects the UNGC's principles and is "dedicated to acting responsibly in the international



***Sustainability** is the balance of resources: environmental, economic and human. It is recognition of the fact that all of us are part of a universal organism, interdependent on each other's responsible utilization and contribution of resources in equal measure.*

In addition, JSR Micro works closely with our corporate parent to achieve its E2 Initiative®, a hybrid of eco-innovation and energy management, with the dual goals of green business development and persistently efficient and sustainable business operations.

Although JSR Micro is a small subsidiary of JSR Corporation, which has global operations throughout Asia, Europe and North America, we contribute in significant ways. We are uniquely positioned to leverage our Silicon Valley location and relationships with tech giants to ensure that the drive toward sustainability and ethical business practices in the US is closely aligned with our Japanese parent's vision and goals. In this sense, we are a powerful liaison, ensuring an ongoing integration of the best ideas, practices and leadership opportunities.



Key Performance Goals & Status			
Category	Goal	Due	FY11 Status
CSR	Develop CSR program.	2012–2014	On track
	Develop CSR supplier management program.	2014	On track
	Publish biennial CSR reports beginning in 2013.	2013 and 2015	Achieved (1 <sup>st</sup> report)
Environment	Reduce key impacts compared to FY08 baseline: <ul style="list-style-type: none"> <li>Greenhouse gas emissions by 10%</li> <li>Water use by 35%</li> <li>Non-hazardous waste by 25%</li> <li>Hazardous waste by 45%</li> </ul>	2018	On track
	Identify and implement new environmental projects.	2018	On track
	Transition to the Globally Harmonized System of Classification and Labeling of Chemicals.	2014	On track
HR	Invest in employee growth by increasing training hours per employee by 10% as compared to FY11 baseline.	2014	On track
	Engage employees in our CSR program through workshops and suggestion and award programs.	2012–2014	On track

JSR Micro's success has been fueled by our unrelenting pursuit of quality, safety and innovation. We have a history of continuous improvement with robust management systems in place to integrate sustainability values more fully within our operations.

Our quality management system has been ISO 9001 certified since 1998 (currently ISO 9001:2008) and has evolved and improved year after year since its inception. In recognition of our commitment to excellence and quality, Intel selected JSR Micro as the sole photoresist supplier to win its prestigious Supplier Continuous Quality Improvement Award in both reporting years 2010 and 2011.

To ensure a safe and environmentally responsible workplace, we established our Environmental, Health and Safety (EH&S) Committee 12 years ago, which supported efforts to achieve ISO 14001:2004 certification of our environmental management system and OHSAS 18001 certification of our health and safety management system in 2010. JSR Micro set and achieved ambitious reduction targets with the implementation of the environmental program in 2008.

Our reduction initiatives included investment in energy-efficient heating and cooling system upgrades, and our environmental performance has already met goals established for 2018.

Still, we must continue to meet the challenge of maintaining these efficiencies as we expand our facilities and increase production volumes over the next five years.

Employee safety is a key core value of JSR Micro. Hence, we have identified ergonomic-related injuries as an ongoing challenge and implemented numerous targeted measures to prevent these injuries while also educating our people in ergo-safe practices. As part of our safety management system, we are transitioning to the Globally Harmonized System of Classification and Labeling of Chemicals with a target completion date of 2014.

Building on and unifying our efforts, Human Resources leads a new CSR team with representation from diverse departments including Executive, Quality, R&D, EH&S, Sales, Marketing and HR. In addition, we have added CSR objectives and measures to our balanced scorecard. We realize that this inaugural CSR report is a critical step in our journey toward sustainability. While it discusses our recent activities and achievements, going forward we need to identify new initiatives and set new goals. This will be particularly challenging as we have always striven to optimize safety and efficiency while reducing injuries and waste.





Our key customers are expanding their volunteering and giving throughout our local sustainability efforts by requiring best practices communities. Our long history of sustainability-related practices and achievements provides a solid foundation on which to build as we move into the future with confidence and curiosity. We invite you, our stakeholders, to read about our efforts and to share your suggestions on how we can continue to improve and earn your respect as a leader in sustainability.

Our people have roots all over the globe, but we call Silicon Valley home. All of us draw on our diverse heritage to inform and influence the cultural landscape of our company, where chemical operators, lithography technicians, process engineers and research scientists are working together to lead technological innovation in the 21st century and beyond. While we are proud of our work and accomplishments as technology professionals, we also want to set good examples for our family and friends, not only in the workplace, but in our active involvement,

Sincerely,

Eric R. Johnson  
President  
JSR Micro, Inc.

## Report Profile & Self Declaration

This is JSR Micro's first corporate social responsibility report. The report period is fiscal year 2011 (April 1, 2011, to March 31, 2012). In addition, we report relevant data, activities and achievements from previous years to provide perspective and to demonstrate performance improvement. Going forward, we intend to publish our report every two years, in the first quarter of the fiscal year following the report period.

The report follows the Sustainability Reporting Guidelines, Version 3.1, established by the Global Reporting Initiative (GRI), and has been third-party checked by Concept Green LLC as Application Level C. The GRI Content Index detailing specific disclosures and the GRI Application Level Check Statement are at the end of the report.

JSR Micro did not seek external assurance for this first report. However, to the best of our ability, we have confirmed that all information in the report is accurately disclosed and presented. All environmental, health and safety data is monitored and measured through our ISO 14001:2004 and OHSAS 18001 certified management systems. These certifications are subject to yearly review by independent external auditors.



## Contact Information

We welcome your questions and comments concerning this report. Your ideas and suggestions will help drive improvements in future CSR reports. For more information, please contact us at:

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Email: [sustainability@jsrmicro.com](mailto:sustainability@jsrmicro.com)

*Please visit the GRI website at [www.globalreporting.org](http://www.globalreporting.org) for more information about the GRI standards for sustainability reporting.*

## Report Boundary

JSR Micro's manufacturing plant and administrative offices are headquartered in Sunnyvale, California. The company is one of many subsidiaries of JSR Corporation, our parent company headquartered in Tokyo, Japan. Although our parent company publishes annual CSR reports, its reports do not detail JSR Micro's social and environmental performance. The boundary of this sustainability report is limited solely to JSR Micro, Inc., and our US-based operations. Our company does not own, control or influence any other divisions, subsidiaries, leased facilities or joint ventures managed by our parent company.

The data reported for the environmental performance indicators is limited to the Sunnyvale site, where the production processes, research and development, laboratory testing, warehouse operations and the majority of our business operations take place. The boundary for the economic and social performance indicators is the whole of JSR Micro, which comprises the Sunnyvale headquarters and our sales offices throughout the United States. Aside from those mentioned above, there are no other limitations on the boundary of the report.

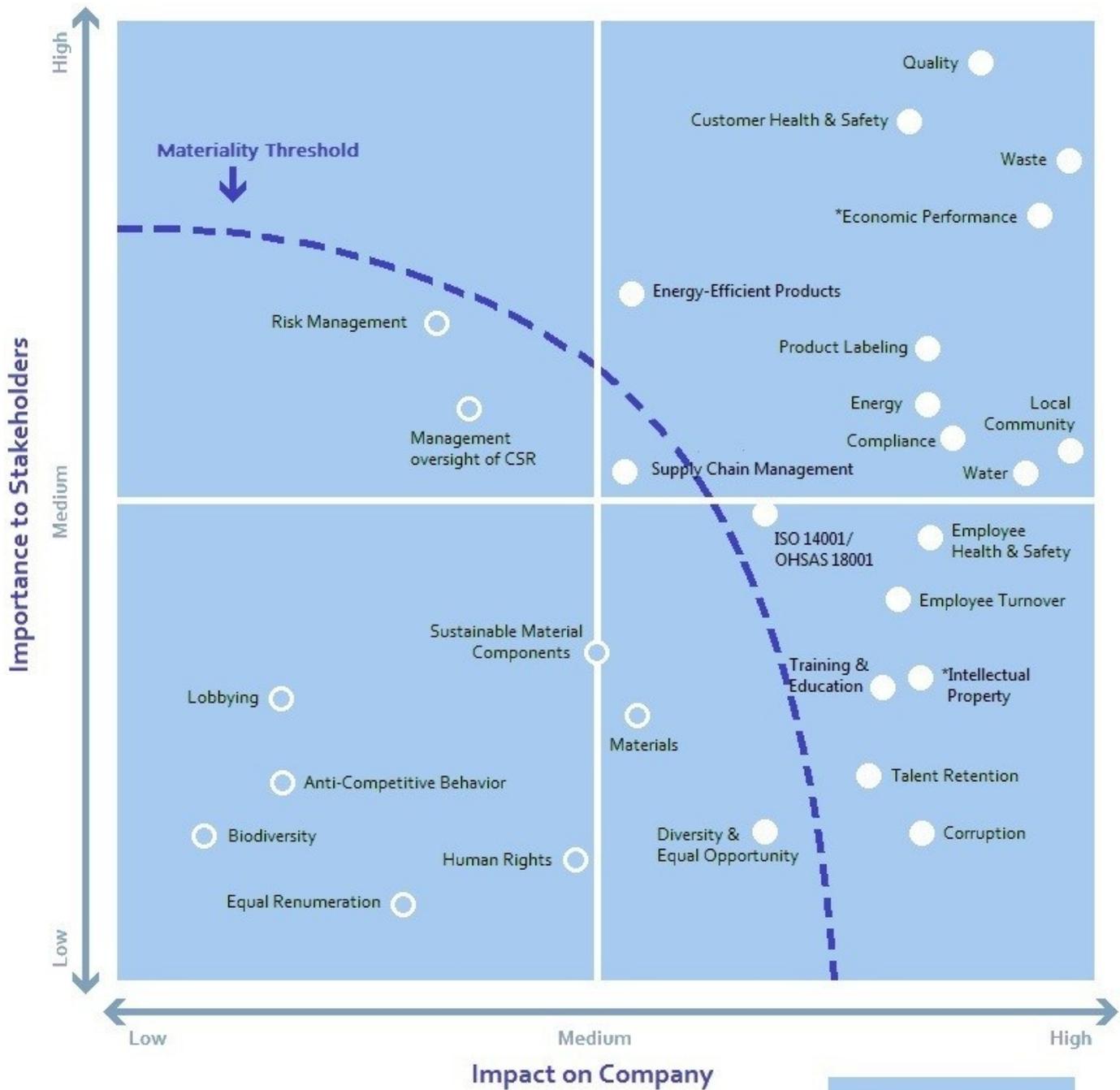
## Report Scope

This report addresses JSR Micro's significant economic, environmental and social impacts. To determine the content for our first report, the CSR team conducted a materiality assessment. They identified potential stakeholders who affect and/or are affected by our activities and who would have a significant interest in this report. Selected stakeholder groups include our business partners, employees, customers, suppliers and neighboring companies. These are also the expected readers of the report. The team conducted a survey with these stakeholders to gain feedback on key CSR topics, expectations and issues relevant to our report. The survey proved to be invaluable in helping us to identify key topics, indicators and trends. We also discussed CSR and sustainability-related topics with all stakeholders willing to speak with us.

Topics critical to JSR Micro's business success were prioritized and then considered with all stakeholder survey data, input from discussions and the results of an internal brainstorming process. The team scored, ranked and plotted the topics on a materiality matrix, as shown. We set our materiality threshold as those topics above medium-high impact on the company or importance to stakeholders. The report discusses these high-priority topics, which cover economic, environmental and social areas of performance and impact. However, as a privately held company, JSR Micro does not disclose financials.

**Materiality** as defined in the GRI Sustainability Reporting Guidelines: *The information in a report should cover topics and indicators that reflect the organization's significant economic, environmental and social impacts; or that would substantively influence the assessments and decisions of stakeholders. Materiality is the threshold at which topics or indicators become sufficiently important that they should be reported.*

# Materiality Matrix



\* This topic is not covered in the report, because it is confidential and managed with internal stakeholders.

- High Priority Topic
- Low Priority Topic

## Glossary of High-Priority Topics

Priority Topics	Description
<b>Compliance</b>	Adherence with laws and regulations.
<b>Corruption</b>	Programs to educate employees about their responsibility to conduct the company's business ethically and legally.
<b>Customer Health &amp; Safety</b>	Compliance to standards, codes and regulations concerning health and safety impacts of products to prevent hazards to customers.
<b>*Economic Performance</b>	Indicators leading to an increase in productive capacity and success in areas related to overall financial and market strength.
<b>Employee Health &amp; Safety</b>	Programs aimed at protecting the safety, health and welfare of employees, and fostering a safe and healthy work environment. This topic also includes goals for reducing employee injuries and occupational hazards.
<b>Employee Turnover</b>	Efforts to keep the number of workers that have to be replaced in a given time period low compared to the average number of workers.
<b>Energy</b>	Efforts to minimize consumption of energy.
<b>Energy-Efficient Products</b>	Issues relating to development of products that can significantly reduce energy consumption.
<b>*Intellectual Property</b>	Measures to protect JSR Micro's patents, trademarks or copyrights.
<b>ISO14001/OHSAS18001</b>	Compliance to policies and requirements of environmental, health and safety management standards, including efforts and goals to identify EHS aspects and continuously improve and minimize impacts.
<b>Local Community</b>	Programs relating to local community engagement.
<b>Product labeling</b>	Issues concerning the labeling of products to comply with regulatory requirements and to give customers access to complete information about products to guarantee safe use.
<b>Quality</b>	Continuously exceeding customer expectations about our products and services.
<b>Supply Chain Management</b>	Programs aimed at managing the social and environmental impacts of our suppliers.
<b>Talent Retention</b>	Efforts to retain employees by investing in JSR Micro's top talent through rewards programs, benefits and learning and development opportunities.
<b>Training &amp; Education</b>	Programs aimed at creating a learning organization through employee development plans and other engagement efforts.
<b>Waste</b>	Goals and action plans for reduction of both hazardous and non-hazardous waste.
<b>Water</b>	Measures to conserve water and action plans to reduce water usage in manufacturing operations.

# Our Company



**Established** in 1990, JSR Micro is a Silicon Valley-based materials manufacturer, operating as a wholly owned subsidiary of our Japanese parent company, JSR Corporation. JSR Micro employs approximately 140 employees; most work at our Sunnyvale headquarters, and about 10% are strategically positioned throughout the United States in Southern California, Arizona, Connecticut, Massachusetts, New Jersey, New York, North Carolina, Oregon, Texas and Virginia.

JSR Micro's core business is the manufacture and distribution of high-performance photoresists to leading semiconductor manufacturers throughout the US and – through our parent and sister companies – the world. We work closely with our customers to innovate, manufacture and deliver electronic materials, hi-tech polymers, lithium ion capacitors and other materials that meet the most exacting requirements in the industry.

JSR Micro also collaborates with industry leaders on numerous R&D projects through joint research agreements and joint development agreements.

This collaborative approach enables us to synergize our mutual passion for technological advancement and materials innovation.

Through one such joint research agreement, we collaborate with world-class scientists at IBM's Almaden Research Center to conduct research and development into directed self-assembly (DSA) technologies. Researchers are studying DSA materials and new chemistries to accelerate and enable smaller lithographic features for IC manufacturing.

In our Emerging Technologies group, we are providing a lithium ion capacitor (LIC) energy storage device. Our parent company has signed a joint development agreement with Capstone Metering LLC, a renewable energy company in Texas that produces meters to control, manage and conserve water usage. JSR Micro's LICs are being designed into Capstone's next generation smart water meters.

## Governance at JSR Micro

JSR Micro is a privately owned company: 78% is owned by JSR Corporation in Japan and 22% is owned by JSR Micro N.V. in Belgium. The board of directors in the US is JSR Micro's highest-ranking governing body. Four of the board's seven members serve on JSR Micro's executive team, and the others are directors at the corporate office in Japan. JSR Micro's president, Eric Johnson, serves as chairman of the board, which oversees JSR Micro's Executive Committee as it develops and executes business strategy. The Executive Committee runs the company on a daily basis, but works closely with JSR Corporation to coordinate strategic efforts, primarily during quarterly board meetings. This governance structure balances the interests of JSR Micro with those of our shareholders.

### Shareholders

JSR Corporation - 78% Ownership  
JSR Micro N.V. – 22% Ownership

### Board of Directors

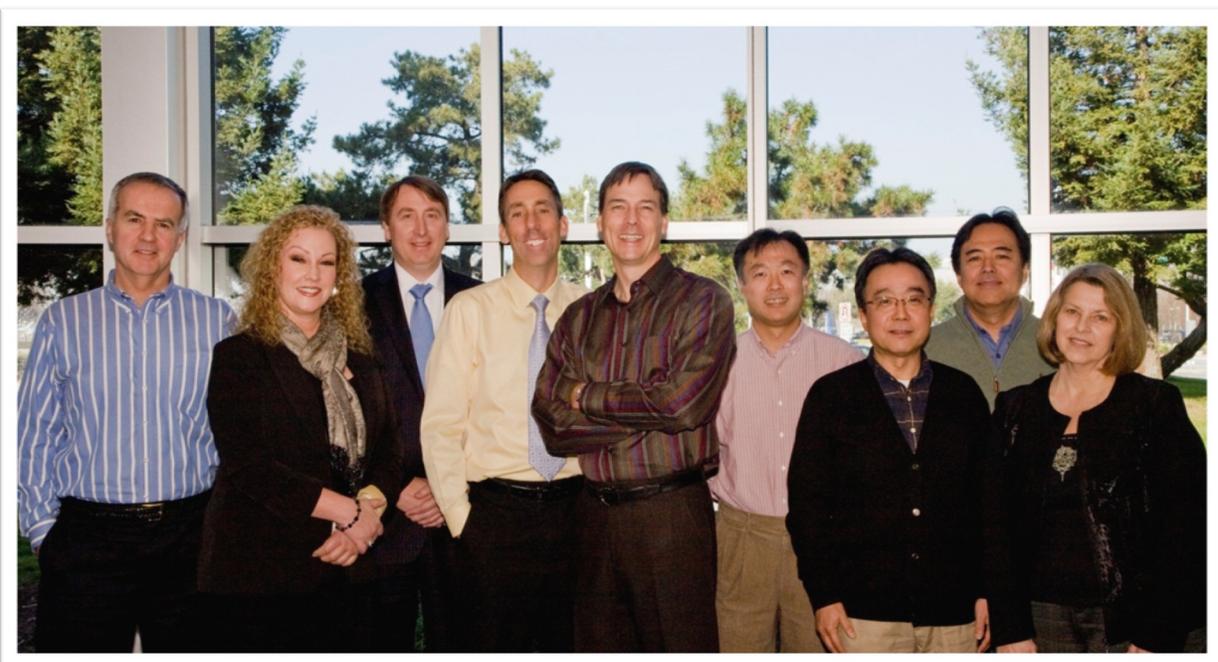
4 JSR Micro directors  
3 JSR Corporation directors

### Executive Team

9 Executive Committee members

Board of Directors		
Age	Total	% Female
Under 30	-	0%
Age 30-50	3	0%
Over 50	4	0%
Race	Total	% Female
Asian	3	0%
White	4	0%

Executive Committee		
Age	Total	% Female
Under 30	-	0%
Age 30-50	3	0%
Over 50	6	33%
Race	Total	% Female
Asian	3	0%
White	6	33%



JSR Micro's Executive Team

# Corporate Social Responsibility

JSR Corporation has made corporate social responsibility a top priority, as recognized by its inclusion in multiple sustainability indices such as FTSE4Good, Ethibel Pioneer & Excellence, Morningstar Socially Responsible Investment Index and the Dow Jones Sustainability Asia/Pacific Index.

JSR Micro has embraced our corporate parent's philosophy as we work to include CSR and sustainability initiatives throughout our business operations. In order to support this objective, our president proposed and sponsored the creation of a cross-functional CSR team, headed by our Human Resources director as the CSR management representative who works with the CSR team leader. Together they engaged employees throughout the organization to establish a corporate social responsibility program and publish our first CSR report.

While CSR is under HR responsibility, the CSR team, "The Social Network," includes representatives from most departments. The CSR team is responsible for the development of our CSR program, publication of CSR reports and recommending future projects to expand the program.

JSR Micro uses a balanced scorecard to establish and communicate business goals, which are then cascaded throughout the organization, tying the business strategy to employee development plans and goals. Corporate social responsibility is included on our balanced scorecard, and the president holds ultimate responsibility for CSR goals.

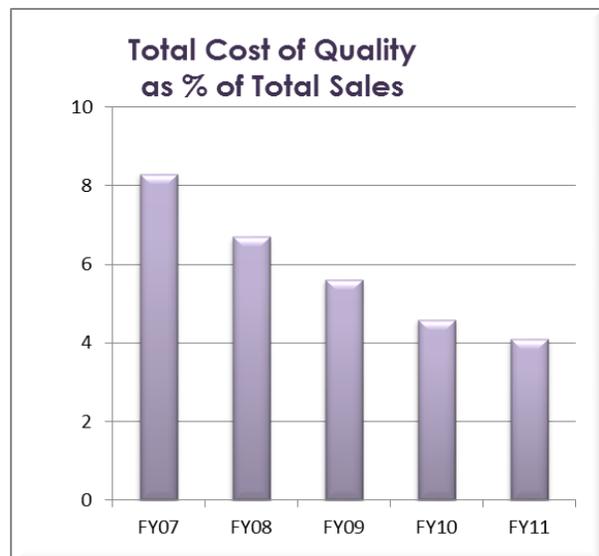
## Quality at JSR Micro

JSR Micro does not compromise on quality. It is a core value embedded in our culture. We empower our employees to demand precision and excellence from themselves and their colleagues to ensure that we consistently deliver exceptional results. Our customer relationships drive our focus on quality, as expressed in our Quality Policy:

- To exceed customers' expectations by providing superior quality products and services
- To proactively anticipate market activities and customer needs
- To provide an environment in which all employees feel empowered to continuously improve the quality of products and jobs

Our Sunnyvale plant was built from the ground up to exacting specifications to support our high-tech manufacturing requirements. Within our facility, we established an ISO 9001:2008 certified quality management system to drive our performance. To measure our quality progress, we established a metric for "cost of quality" (i.e., any cost that would

not have been expended if quality had been perfect), which uses diverse components such as prevention, appraisal and correction. Over the past five years, our quality efforts have shifted from corrective to preventive, and our total cost of quality has decreased by 50% during that period, demonstrating our maturity as a quality-focused organization.



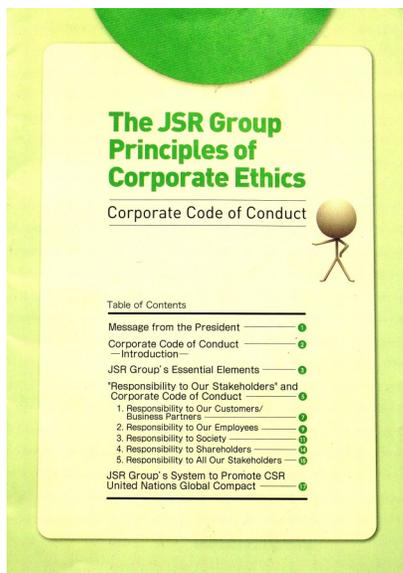
## Ethics & Code of Conduct

JSR Micro adheres to the highest standards of ethical and responsible behavior. As part of the JSR Group, we follow the code of conduct outlined in *The JSR Group Principles of Corporate Ethics*, which is available at our website: [www.jsrmicro.com](http://www.jsrmicro.com).

JSR Micro is committed to compliance with the US Foreign Corrupt Practices Act (FCPA) and all other anti-corruption laws where we do business. In 2012, all of our active management and non-management employees attended anti-corruption training facilitated by our legal firm.

This training is an extension of our ongoing ethics and code of conduct policies, with mandatory sessions on topics such as diversity and anti-sexual harassment. Expanding on our compliance with California's AB 1825 and other state laws requiring supervisors to attend anti-sexual harassment training, JSR Micro requires all employees to attend this onsite training every two years.

Our employee handbook and ethics policy are posted on our intranet, as is our anonymous, toll-free ethics hotline number. Furthermore, we foster an open-door policy whereby any employee can approach any supervisor, executive or HR representative with any concern, suggestion or complaint.



## United Nations Global Compact

The JSR Group joined the United Nations Global Compact in 2009. As a member of the JSR Group, we extend our parent corporation's commitment to respect the principles of the Global Compact.

"The UN Global Compact is a strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labor, environment and anti-corruption. By doing so, business, as a primary driver of globalization, can help ensure that markets, commerce, technology and finance advance in ways that benefit economies and societies everywhere." ([www.unglobalcompact.org](http://www.unglobalcompact.org))

### The Ten Principles (United Nations Global Compact)

- ① Businesses should support and respect the protection of internationally proclaimed human rights; and
- ② Make sure that they are not complicit in human rights abuses.
- ③ Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
- ④ The elimination of all forms of forced and compulsory labour;
- ⑤ The effective abolition of child labour; and
- ⑥ The elimination of discrimination in respect of employment and occupation.
- ⑦ Businesses should support a precautionary approach to environmental challenges;
- ⑧ Undertake initiatives to promote greater environmental responsibility; and
- ⑨ Encourage the development and diffusion of environmentally friendly technologies.
- ⑩ Businesses should work against corruption in all its forms, including extortion and bribery.



**JSR Micro** has more than 20 years of experience creating and developing electronics materials and customizing solutions for our customers and partners. To support our corporate mission "to create value through materials to enrich society, people and the environment," we recently expanded our technical expertise to capture new business opportunities in the life sciences, energy and environment fields.

Although our Sunnyvale operations only serve US markets, we work closely with our Japanese parent and Belgian sister company to develop our products. We also co-develop end materials with our customers through our "Innovation One-on-One" approach. The majority of research into new raw materials is conducted in Japan. JSR Corporation employs a proactive approach to materials development using life cycle assessments, green chemistry and simulation programs to evaluate the relative risk and potential of various chemical compounds. These efforts provide a solid base to further the sustainability of our products.

## Life Sciences

JSR Micro's particles and polymers are at the forefront of life science research, diagnostics and medical device manufacturing. Leveraging our competency in polymer chemistry and our mission to develop products that enhance society, JSR Micro began research in the field of life sciences more than 20 years ago. Today, we apply our state-of-the-art manufacturing skills to serve three life science markets: protein A affinity media for purification of biopharmaceuticals, high technology particles for research reagents and diagnostics, and polymers for medical devices.

Our protein A affinity media (Amsphere™) integrates our technologies for precision polymer synthesis, surface modification and genetic engineering. Due to its high dynamic binding capacity, high alkaline resistance, high flow-rate compatibility, sharp elution profile, easy packing and affordable price, Amsphere is ideal for the production of next-generation or biosimilar antibody drugs. Use of protein A increases efficiency in pharmaceuticals manufacturing and improves the yield and quality of these medicines.

JSR Micro's magnetic and latex microparticles have been widely used in in vitro diagnostic reagents. We also produce latex beads for diagnostics and tool calibration.

Magnosphere™ is our line of magnetic microbeads for automated diagnostic testing and antibody engineering. Medical labs use the beads to diagnose diseases, monitor responses to therapy and conduct DNA research. Our proprietary technology enables faster, clearer and more reliable diagnostic tests.

JSR Micro's medical polymers include elastomers, thermoplastic elastomers and specialty resins. We develop and manufacture these polymers using our superior polymer technologies, which continually evolve and improve in quality and performance to meet customer needs. Medical device manufacturers in the US incorporate JSR Micro's raw polymer materials into a wide range of medical devices, including tubing, bags and gloves.



Magnetic Beads

## Electronic Materials

JSR Micro is a leader in the innovation of semiconductor materials, enabling the development of next-generation microelectronics. We sell photoresists, packaging materials, chemical mechanical polishing pads and interlayer dielectric materials. Integrated device manufacturers around the world use these materials to produce PCs, laptops, smartphones, tablets and other digital consumer electronics.

JSR Micro's photoresists help create electronic products that are lighter, faster and more energy efficient. Advanced photoresists enable the reduction of microchip sizes, which is one of the primary methods for semiconductor manufacturers to decrease the power consumption of various chip components. Smaller microchips can be placed closer to one another, which further reduces the voltage required to power them.

A report by the American Council for an Energy-Efficient Economy (ACEEE) states that semiconductors are the leading factor behind energy-efficiency gains. According to the ACEEE: "Compared to the technologies available in 1976, we estimate that the entire family of semiconductor-enabled technologies generated a net savings of about 775 billion kilowatt-hours (kWh) of electricity in the year 2006 alone." This is equivalent to a savings of \$69 billion (\$613 per US household) and the prevention of 479 million megatons of carbon dioxide (CO<sub>2</sub>) emissions.

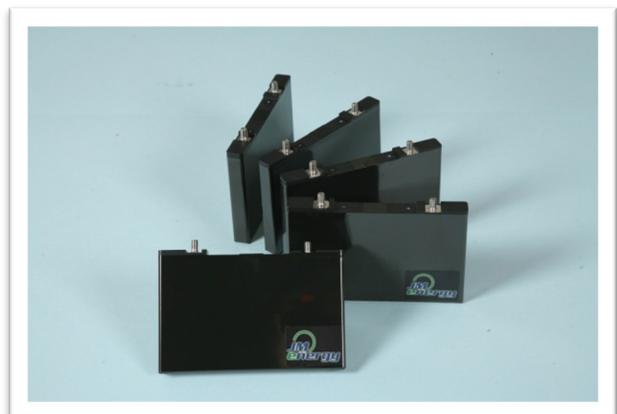


Photo Resist Bottles

## Energy & Environment

In August 2007, JSR Corporation launched JM Energy Corporation, dedicated to the development, manufacture and marketing of its ULTIMO lithium ion capacitor (LIC). An LIC is an electrical storage device that stores or releases electricity through rapid electrostatic reactions. At the end of 2008, JM Energy was the first to commercialize LICs.

In an era demanding energy conservation and environmental measures on a global basis, LICs contribute to improvements in functions such as rapid charge and discharge, energy regeneration, and load leveling. Manufacturing facilities use LICs for a wide range of applications such as peak current assistance, storage, back-up power supply and standardization of voltage. Compared to a battery that stores electricity and has slow chemical reactions, a capacitor makes it possible to charge and discharge electricity virtually instantaneously. In addition, LICs have an extremely long cycle life. They offer diversified solutions to power renewable energy fields such as wind and photovoltaic power generation as well as for industrial equipment requiring instantaneous voltage drop compensation. Working with JM Energy, JSR Micro is pioneering the production and delivery of this powerful technology to the US market.



Lithium Ion Capacitors (LICs)

**JSR Micro** acknowledges the relevance and importance of stakeholder engagement to our success and operations. We partner with our customers to understand their needs and expectations, and we collaborate with our stakeholders to identify issues of concern and develop solutions.

The CSR team conducted a stakeholder analysis forum, which resulted in the identification, classification, evaluation and prioritization of our key stakeholders. We prioritized stakeholders by determining those most likely to be impacted by our organization's goals, activities, business processes and sustainability commitments, as well as those who may impact the success of our operations.

Our main stakeholder groups are our employees, customers and business partners (primarily our parent company JSR Corporation, our photoresist-manufacturing sister companies in Japan and Belgium, and external companies with whom we

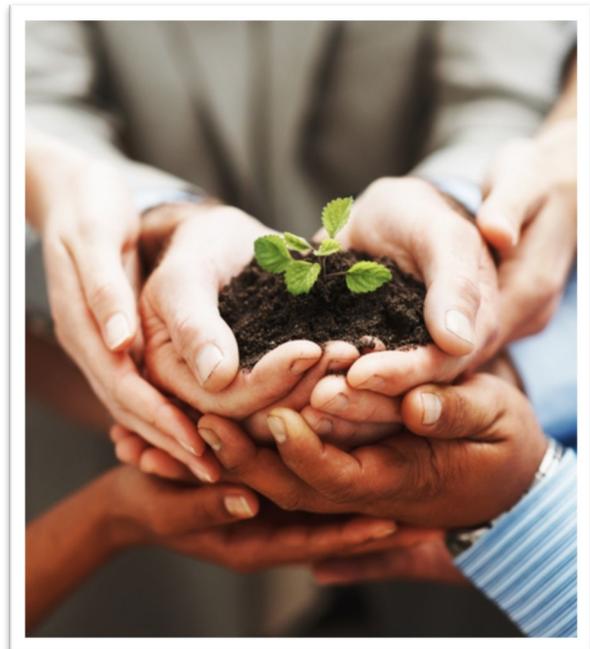
collaborate through joint research and development agreements). In addition, our suppliers, the local community, select government and regulatory agencies, and industry and trade organizations are important stakeholders.

We engage with our stakeholders through a variety of approaches that range from in-person meetings to online surveys, as outlined in the following summary. The engagement frequency varies from daily to annually or as needed, based on the stakeholder and approach. Engagement efforts specific to the preparation of this report are discussed in the Report Scope section.

## Methods of Stakeholder Engagement

### Employees

- Proactive, open-door policy
- Annual performance reviews
- Quarterly employee meetings including Q&A sessions
- Executive luncheons
- Information sessions through brown bag lunches
- Quarterly e-newsletter ("Focus In")
- Departmental and staff meeting communications
- Intranet-based forum ("Inside JSR") and suggestion box
- Surveys (employee satisfaction, interdepartmental, CSR, corporate ethics)
- Anonymous ethics hotline





## Customers

- Management/Executive review meetings with customers
- Customer report cards/scorecards
- Onsite customer audits
- Collaboration through joint R&D projects
- Completion of EICC code of conduct risk assessments
- Participation in industry tradeshows, seminars and conferences
- CSR and ethics webinars
- Online dialogue with customers through company website
- Participation in social networking websites
- Online CSR survey

## Business Partners

- Review meetings
- Onsite audits from parent company
- Information exchange through global meetings
- Lectures/training sessions
- Company websites
- Online CSR survey
- Collaboration through joint R&D projects

## Community

- Membership in sustainability focus group with neighbor companies
- Employee volunteering in charitable activities
- Participation in charity fundraising events
- Partnership with local universities to promote internship program
- Regular dialogue with local nonprofit organizations and charitable institutions to coordinate product and service donations to

## Suppliers

- Routine supplier audits
- Assessment of suppliers' quality operating systems
- Administration of supplier report cards
- Business review meetings
- Online CSR survey

## Government & Regulatory Agencies

- Subscriptions to government/regulatory newsletters
- Attendance at workshops and training programs
- Participation in meetings
- Onsite inspections and audits
- Partnership with community advocacy groups
- Membership in environmental, health and safety councils

## Industry & Trade Organizations

- Participation in and contribution to industry and trade organization training programs, seminars and conferences
- Continuous employee education and learning

**Stakeholders** are defined in the GRI Sustainability Reporting Guidelines as "entities or individuals that can reasonably be expected to be significantly affected by the organization's activities, products, and/or services; and whose actions can reasonably be expected to affect the ability of the organization to successfully implement its strategies and achieve its objectives."

**Our People** are the key to our success. Although our numbers may be small, we are big in terms of expertise, dedication and engagement.

Ninety percent of our workforce is headquartered in Silicon Valley, and 14 employees are based throughout the United States: from the West (Southern California, Arizona and Oregon) to the East (Connecticut, Massachusetts, New York and New Jersey) to the South (Virginia, North Carolina and Texas), which helps us efficiently serve all of our US clients.

WORKFORCE PROFILE	Total	% Female
Regular <sup>(1)</sup>	140	37%
Location	Total	% Female
Sunnyvale HQ	126	38%
Other CA Office	2	50%
Outside CA	12	25%
Age	Total	% Female
Under 30	12	17%
Age 30-50	78	38%
Over 50	50	40%
Race	Total	% Female
Asian	71	54%
Black /African American	7	14%
Hispanic / Latino	12	8%
White	47	23%
Other	3	33%
Employment Type	Total	% Female
Management	28	25%
Administrative Support Workers	13	54%
Sales Workers	9	33%
Professionals	58	52%
Technicians	12	42%
Craft Workers	3	0%
Operatives	17	0%

## A Diverse Workplace

JSR Micro cultivates an inclusive workplace, not only for women and ethnic minorities, but for all employees. We are truly a multi-cultural company with 140 people who collectively speak more than 20 languages. Our employees have earned degrees and gained experience in countries spanning the globe, but they have chosen JSR Micro to build their careers. The average years of service with JSR Micro is 7.5, much higher than the national average.

Further, 25% of the Executive Committee members are female and 25% are minorities; 38% are 30–50 years of age and 62% are over 50. We believe this diverse composition within our leadership team is a reflection of the diversity of our general employee population.



## Affirmative Action Plan

For more than 10 years, JSR Micro has worked with Gerstco, Inc., a leading US affirmative action planning and consulting firm, to coordinate our annual Affirmative Action Plan (AAP) and ensure that we employ best practices in the sourcing, recruitment, selection and hiring and promoting of top talent without regard to race, color, religion, sex, sexual orientation, national origin, age, disability or veteran status. Gerstco is a women-owned business certified by the Women's Business Enterprise National Council.



The diversity of our workforce reflects our commitment to an inclusive workplace. JSR Micro's Affirmative Action Plan runs on a calendar year basis; therefore, the FY11 CSR reporting period overlaps two AAP plan years: CY11 and CY12. AAP hiring goals were neither recommended, nor established, during either plan year, because the numbers of women and minorities hired during each plan year were within targeted ranges for these groups.



## Employee Satisfaction

Every two years, JSR Micro conducts an anonymous employee satisfaction survey through a third-party vendor. Our overall participation rate of 97% is a strong indicator of our employee engagement.

To measure overall satisfaction, the survey asks employees to rate the following statement: "Considering everything, I am satisfied working for this organization at the present time." On the most recent survey, 86% of our employees responded favorably, well above average among 22 participating companies included in the high-tech industry norm.

The survey results are invaluable as we challenge cross-functional teams to analyze lower rated topics and develop actionable programs to address and resolve issues. Engaging employees to be part of the solution is an important part of our continuous improvement process and has led to measurable improvements in key areas over the years.

## Hiring

New Hires in FY11	
Total	15
RATE OF HIRE <sup>(2)</sup> = 11.8%	

We grew by 10% in FY11, and our hiring pattern reflected our diverse workforce, with an even distribution of new hires from all three age groups as defined by the GRI (<30, 30–50 and >50). During the reporting period, 85% of our California hires were from the local community.

JSR Micro is committed to recruiting locally to help sustain and grow talent in our region. Although JSR Micro does not have a formal policy stating a preference for local hires (those living in or within the immediate vicinity of the San Francisco Bay Area), it is our common practice to do so for all levels of our workforce. Within the Executive Committee, the senior management body comprising our president, vice presidents and directors from across the organization, 63% of members were recruited and hired locally.

We use employee referrals, career sites and social media, as well as professional and university networks to recruit new employees. This approach demonstrates our commitment to expand and develop a diverse workforce.

**RETENTION Goal:**  
*To keep turnover at least 20% below industry average*

## Turnover

Turnover in FY11	
Total	5
RATE OF TURNOVER <sup>(3)</sup> = 3.6%	

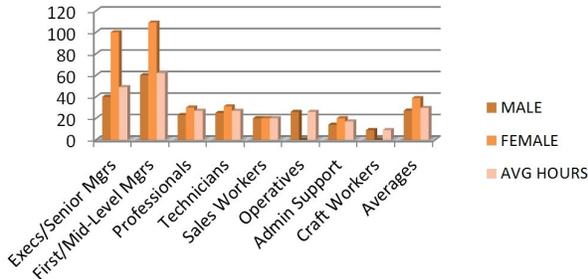
Our impressively low turnover rate is a testament to employee satisfaction at JSR Micro. Based on our most recent compensation survey, employee turnover averaged 14% to 18% for companies of our size, and/or in our region or industry; so, understandably, we are proud of our low turnover rate over the past five years – 3.6% during the reporting period – and believe these numbers are indicative of a growing company that attracts, retains and engages talent.

JSR Micro believes in a direct correlation between an employer and employee loyalty. We have carefully managed headcount so that we have never laid off a single employee in our history. During the recent recession, we worked closely with employees to execute cost-cutting measures (e.g., temporary salary freeze and a request for employees to use half of their accrued vacation) to ensure that we could avoid a reduction in workforce. We are loyal to our employees, and our employees are loyal to us.

Turnover		
<b>Region</b>		
Sunnyvale	60%	3
Other California	0%	0
Outside California	40%	2
<b>Age</b>		
Under Age 30	0%	0
Ages 30-50	40%	2
Over Age 50	60%	3
<b>Gender</b>		
Female	20%	1
Male	80%	4

## Training & Development

### Hours of Training per Employment Category



Continuous learning is essential to our innovation-driven business and integral to our employee retention efforts. As such, JSR Micro's training and development program encompasses a wide array of professional development and technical curricula delivered via offsite seminars, onsite instructor-led sessions, one-on-one cross-training and web-based or online courses. In addition, we offer continuous compliance and environmental health and safety training programs. Each year, several employees are offered inter-departmental rotational assignments or overseas assignments to Japan.

During the reporting period, we had three employees (2.1%) take advantage of our Educational Assistance Program. Although participation was lower than preferred, we regularly promote this program to all employees.

During FY11, employees received an average of 29.6 hours of training, with female employees averaging 38.8 hours of training and male employees averaging 27.1 hours of training. As there were not any female operatives or craft workers, there was no data to report for female workers in those two employee categories. The seven women in the two management categories averaged 40 hours more training than their 20 male counterparts. This disparity is due to two factors: 1) there are fewer females in the sample size, and 2) several female managers attended offsite training seminars, which contributed more training hours.

## Performance Management

JSR Micro has a robust performance management system, wherein all employees receive annual performance reviews and work towards achieving both individual and development goals.

Underscoring our commitment to grow our talent from within, we publish an annual promotion goal on the company's balanced scorecard. In FY11, our workforce was 63% male and 37% female; during the same period those earning promotions were 42% male and 58% female. Moreover, 63% of those promoted were minorities, which is consistent with the diversity within our workforce.

*"Because of the company's educational assistance with my master's degree in accountancy, I can focus on learning and applying advanced accounting and business concepts in my work."*

*- Azusa, Accountant*

### EMPLOYEE DEVELOPMENT

#### Goal:

*To increase our training hours per employee by 10%*



# Employee Benefits

JSR Micro's generous benefits package underscores our commitment to our employees and their families. It also differentiates us from the competition: Our benefits package is in the top 3% of all corporate benefits packages in the San Francisco Bay Area, and our retirement plan compares favorably to the industry average (see plan table). Highlights of our benefits package include 32 paid days off a year, medical/dental insurance with 90% employer coverage of premiums, 401(k) with employer matching, and service and employee referral bonuses (refer to the benefits table for more details).

We welcome participation in our 401(k) plan by all employees who are at least 21 years old, whether their status is regular, temporary, full time or part time. All other benefits are offered to all regular employees who work at least 24 hours per week – 100% of our employees fall into this category.

The JSR Micro 401K Plan Difference		
	Industry	JSR Micro
<b>Participation Rate</b>	85%	93%
<b>Average Balance</b>	\$75K	\$118K
<b>Match Rate</b>	3%	6%
<b>Vesting Period</b>	3+ Years	Immediate

# Internship Program

We regularly welcome students into our JSR family through our internship program. The program offers a hands-on opportunity for college students to work closely with a dedicated mentor and our technical staff on projects that are closely related to their field of study and designed to have a measurable impact on our business. The program targets junior and senior undergraduates and graduate students to ensure that candidates possess the requisite knowledge and skills to work effectively with our Silicon Valley team. Our program provides a collaborative experience that fosters meaningful relationships, which often entices graduates to launch their careers at JSR.

JSR Micro Benefits Package	
<p><b>Retirement</b></p> <ul style="list-style-type: none"> <li>401(k) plan with 6% employer matching</li> </ul> <p><b>Health Insurance</b></p> <ul style="list-style-type: none"> <li>Medical, dental and vision insurance</li> <li>HSA, HRA, PPO and HMO plans</li> <li>Flexible spending accounts</li> <li>Domestic partner coverage</li> </ul> <p><b>Life Insurance</b></p> <ul style="list-style-type: none"> <li>Life and disability insurance</li> <li>Voluntary additional life insurance</li> </ul> <p><b>Bonuses</b></p> <ul style="list-style-type: none"> <li>Annual performance bonus</li> <li>Employee referral bonus</li> <li>5/10/15/20-year service bonuses</li> </ul>	<p><b>Time Off &amp; Leave</b></p> <ul style="list-style-type: none"> <li>32 paid days off: 15 vacation, 11 holiday and 6 sick days</li> <li>Paid days for bereavement, jury duty and volunteering</li> <li>Pregnancy leave</li> <li>Maternity/Paternity leave</li> </ul> <p><b>Lifestyle &amp; Wellness</b></p> <ul style="list-style-type: none"> <li>Employee Assistance Program</li> <li>Wellness program "Sonic Boom!"</li> <li>Paid 24-hour fitness membership</li> <li>Foreign travel insurance</li> <li>Commuter Check® vouchers and FasTrak® toll tags</li> <li>Credit union membership</li> <li>Educational Assistance Program</li> <li>Costco membership</li> </ul>

*"JSR's tuition reimbursement program allowed me to earn my degree, enrich my knowledge and grow my career within JSR Micro. I am very appreciative of this benefit."*

– Erika, Import Master Planner



## Wellness at Work & Home

JSR Micro promotes a culture of wellness. We offer employees a variety of fun and engaging wellness activities throughout the year and encourage healthy behaviors through spirited competition between individual employees and employee teams.

Our Wellness Committee, the "Wellness Buddies," is a cross-functional team representing all demographic and organizational groups within our company. The Wellness Buddies consult their peers to identify activities that will engage our workforce. This grass-roots style of program development has led to numerous successful wellness competitions and onsite events.

We understand that busy lives often make it difficult to take a proactive approach to staying healthy, so we offer a range of wellness activities and resources for our employees.

*"These onsite activities are the only times some of us have to exercise . . . these are the little benefits that make JSR Micro a great place to work."*

– Jon, Senior Process Engineer



### Nutrition

- Fruit Day, a monthly company-sponsored event providing local fruit to all employees
- Fresh fruit and vegetable delivery services
- Healthy cooking demonstrations

### Fitness

- Free gym membership and incentives for frequent gym use
- Onsite abs classes, yoga classes and dancing lessons
- Free hi-tech pedometers for all employees
- Reimbursement of walking/running event participation fees
- Weight loss contests
- Company-sponsored charity walks

### Emotional Well-Being

- CONCERN Employee Assistance Program to provide employees and their families with free counseling on all of life's issues, whether personal, financial, legal, parenting or eldercare
- Lunch & Learn classes on stress management, healthy sleeping and more

### Medical/Physical Well-Being

- Onsite biometric screenings and flu shot clinics
- Wellness Corners with weight and blood pressure monitoring
- Online health assessment surveys
- Online resources for healthy recipes and healthy lifestyles

*"The wellness program is great! Getting people to compete gets them to exercise. I think this is the best 'health care' that the company can give to employees."*

– Karen, Development Engineer

## Community Outreach: Giving

Holiday gift giving and food drives are long-standing JSR Micro family traditions. Our employees have gathered and donated hundreds of pounds of canned foods to The Salvation Army each Thanksgiving for years and have been donating toys to the Family Giving Tree since 2004, helping fulfill the Christmas wishes of children and teens from Bay Area families struggling to make ends meet.

In 2012, JSR employees expanded our gift-giving efforts with a very successful back-to-school backpack drive in coordination with KAFFA, a nonprofit organization helping foster children throughout Santa Clara County.

Moreover, since 2006, JSR Micro has matched significant employee donations to charitable and educational institutions such as UNICEF, the American Red Cross, Mission India, the American Cancer Society, the American Stroke Society, St. Jude Children's Research Hospital and numerous local schools and universities.

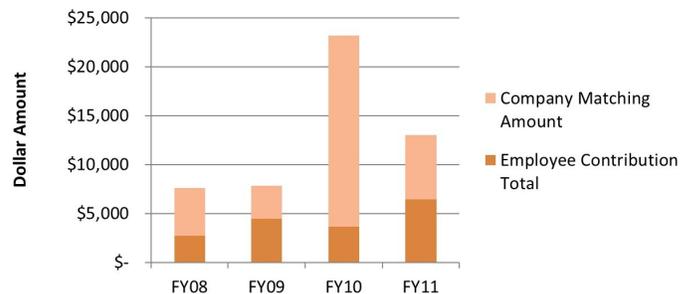
We have also made important financial contributions to help people recover from large-scale catastrophes caused by hurricanes, earthquakes and tsunamis throughout the world, most recently matching contributions from our employees to help in the relief efforts for those impacted by Hurricane Sandy on the East Coast.



*"You can give without loving, but you cannot love without giving."*

– Robert Louis Stevenson

### Matching Donations



*"I was filled with joy while packing boxes of food at the Salvation Army. I say this as a former recipient of donated food at a refugee camp in Indonesia. The food itself wasn't very memorable, but, for my fellow refugees and me, it was invaluable. I am grateful for my mutual experiences of joy as both the giver and the receiver."*

– May, QC Engineer

## Community Outreach: Volunteering

JSR Micro supports humanitarian activities and causes that have special meaning for our company, employees and customers. Our Volunteering Committee, "Goodwill Hunters," gathers frequently to brainstorm, identify and recommend programs that will engage our employees in volunteering and charitable activities throughout the year.

As part of our Volunteering Policy, JSR Micro offers eight paid hours per year to employees engaged in volunteering activities. JSR Micro employees don't limit their volunteering to work days, but often turn out on weekends to participate in walks and runs to support fundraisers such as the Packard Summer Scamper benefitting Lucile Packard Children's Hospital and the KEEP ABREAST walk to support the HERS Breast Cancer Foundation.

*"After volunteering at the Lucile Packard Children's Hospital, I walk out feeling like I want to laugh and cry at the same time, having experienced incredible courage, positive attitudes and inspirational smiles."*

- Mary, Senior Recruiter



JSR bike riders at the "Tour de Moffett Park Bike and Lunch Extravaganza" sponsored by the Moffett Park Business Group

*"It is a very rewarding experience to be able to touch lives and help different people meet their needs. It puts my own life in perspective and helps me see that it is truly more blessed to give than to receive."*

- Cherry, Senior Development Engineer

### **COMMUNITY Goal:**

*To increase our charitable and educational matching donations by 10%*

*To increase our volunteerism by 10%*

*To increase KAFKA and Salvation Army donations by 15% or more*

## Community Outreach: Coordination

Since April 2012, JSR Micro has been a member of the Moffett Park Business Group (MPBG), a nonprofit, membership-based organization committed to supporting the social, environmental and economic health of our community. MPBG focuses on common business concerns within our local community through development, sustainability, community engagement and improved mobility efforts. For example, the group works to develop, engage and sustain community programs such as emergency ride service and alternative commute programs that support workforce mobility.

## Innovation One-on-One

For more than half a century, our corporate parent, JSR Corporation, has worked hard to foster an innovative and collaborative culture. Both attributes have been guiding principles at JSR Micro for more than 20 years as we have expanded our business within the electronics materials industry and beyond, developing new products for life sciences, green energy and environmental technologies.

The slogan "Innovation One-on-One" summarizes our value proposition to our customers – a collaborative approach of discovering and adapting product technologies to fit specific customer requirements and deliver individualized material solutions. JSR Micro partners with our customers to establish a competitive advantage by delivering next-generation technologies, consistent and reliable quality, and balanced cost of ownership.

Over time, our Innovation One-on-One approach has helped us anticipate our customers' needs and proactively research, develop, manufacture and supply advanced materials that enable our customers to out-perform the competition, and to sustain and grow their businesses. Our success is a direct result of our customers' success.



## Supply Chain Management and EICC

Our customers demand transparency throughout the supply chain. As a major chemical supplier to the semiconductor industry, JSR Micro is committed to developing a socially responsible supply chain consistent with the code of conduct established by the Electronic Industry Citizenship Coalition. The EICC is an industry group composed of more than 70 international electronics companies that are working together to improve efficiency, and social, ethical and environmental responsibility in the global supply chain. Many of our customers are long-standing members of the EICC.

The EICC Code of Conduct provides guidelines for performance and compliance with critical corporate social responsibility policies with guidance in five critical areas of CSR performance: labor, health and safety, environment, management system and ethics. We began hosting third-party EICC standardized audits in 2012. The audit results are disclosed to our customers upon request.

In turn, we are establishing our own system to ensure that our suppliers maintain the highest standards of social, economic and environmental responsibility. We practice due diligence to ensure that our suppliers treat their workers with respect and dignity and that their manufacturing processes are environmentally safe.

Our supplier management approach involves a combination of education (supported by training) and compliance (supported by audits). To assess training needs and prepare the supplier for an audit, we conduct a supplier assessment survey in advance. We work with our suppliers to identify solutions and address gaps discovered during an audit. A new supplier management system, which incorporates EICC principles, will be implemented in FY13.



## JSR Micro Wins Intel SCQI Awards

JSR Micro has won Intel's prestigious Supplier Continuous Quality Improvement (SCQI) awards for two successive years, following fiscal years 2010 and 2011. The SCQI award is the highest quality award that Intel bestows upon its suppliers. To qualify for award consideration, a supplier must score at least 95% on the quarterly report card that evaluates performance, cost, quality, availability, delivery and technology, as well as environmental, social and governance goals. Moreover, suppliers must achieve 90% or greater on an improvement plan and demonstrate sound quality and business systems.

The SCQI and Preferred Quality Supplier (PQS) awards are part of Intel's demanding, industry-leading supplier program. During the past four years, JSR Micro received a total of five awards from Intel: three SCQI awards and two PQS awards.

**2011 SCQI**  
Intel® Supplier Continuous  
Quality Improvement Award

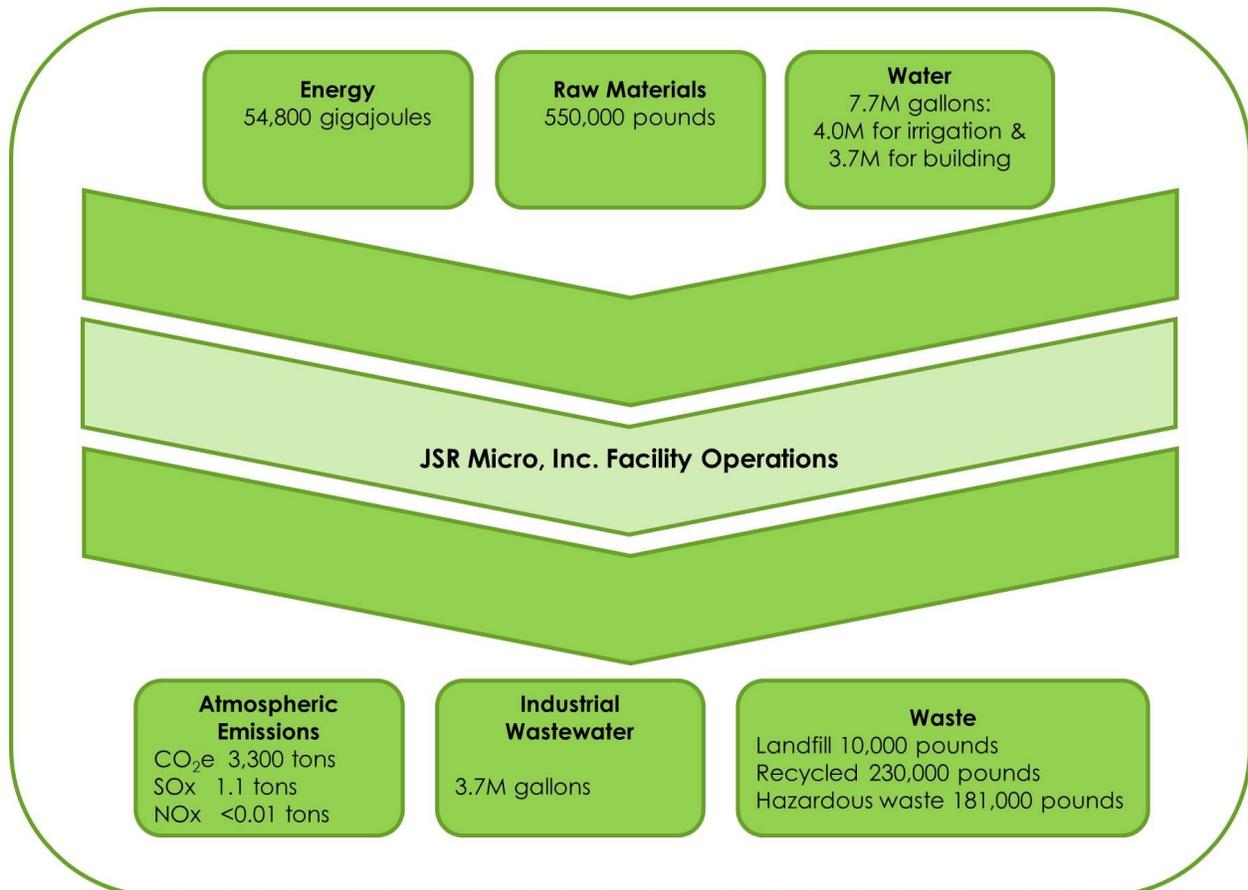
# Our Environment

**JSR Micro** is keenly aware that all of our business activities have direct and indirect impacts on the environment. As a responsible company, we believe that our success depends on sustainable practices. To demonstrate our environmental commitment, we maintain an ISO 14001:2004 certified environmental management system. Our Environment, Health & Safety Policy states that:

- JSR will strive to implement necessary actions to protect the environment and its employees by preventing pollution, injuries and ill health.
- JSR will meet or exceed all applicable government requirements and voluntary requirements to which JSR subscribes.
- JSR will strive to continually improve our environmental, health and safety program by establishing and monitoring goals and objectives to improve overall performance.

In pursuit of ever-increasing efficiency within our operations, JSR Micro has made a serious commitment to reduce our environmental impact throughout the manufacturing lifecycle. The key impacts occur through the energy, water and raw materials we use to run our operations and manufacture our products, and the emissions, wastewater and waste generated from those processes, as detailed in the following chart.

**JSR Micro Overview of Environmental Impact by Business Activities at JSR Micro Plant (FY2011 Results)**



**GHG**  
**Goal:**  
*10% reduction from 2008  
baseline level by 2018*

**Water**  
**Goal:**  
*35% reduction from 2008  
baseline level by 2018*

**Hazardous Waste**  
**Goal:**  
*45% reduction from 2008  
baseline level by 2018*

**Non-Hazardous Waste**  
**Goal:**  
*25% reduction from 2008  
baseline level by 2018*

## Environmental Goals & Challenges

In order to reduce environmental impact strategically, JSR Micro has established green goals with 10-year targets to reduce greenhouse gas (GHG) emissions, water usage and waste relative to FY08 baselines. JSR is sensitive to its impact on the environment and does not believe increased business is a justification for increasing our footprint. As such, the goal values are absolute (not normalized by production volume), which underscores our overall reduction commitment despite expanding production capabilities and volumes.

We have implemented straightforward conservation projects and engaged our workforce to be creative in identifying future improvement projects. Our grassroots campaign promotes green ideas by incentivizing our employees to help us establish and achieve new goals. As a result, we made significant improvements from FY08 to FY11, reaching our goals ahead of schedule. And we are dedicated to the challenge of sustaining those below-target results through FY18.

We have faced several challenges in taking green initiatives from theory to practice. Some examples

include our exploration of environmental mitigation measures such as a conversion to solar panels, wind power and/or recycled (grey) water for irrigation in FY11, but these great ideas ultimately failed our feasibility studies. We decided against a conversion to solar energy due to the extremely lengthy return on investment period and the constraints the panel installation would have placed on our usable space. Other studies revealed that there is not enough wind on our rooftop to operate even small-sized wind turbines and the installation of taller, larger turbines was both cost-prohibitive and a potential threat to local birds. The existing grey waterlines provided by the City of Sunnyvale were not close enough to our facility and a cost/benefit analysis did not support installation of a pipe extension.

While we were not able to implement every project idea, we were impressed with the ingenuity and determination of our people in proposing great ideas to improve our sustainability initiatives. The following section describes our environmental improvement efforts, achievements and future plans.

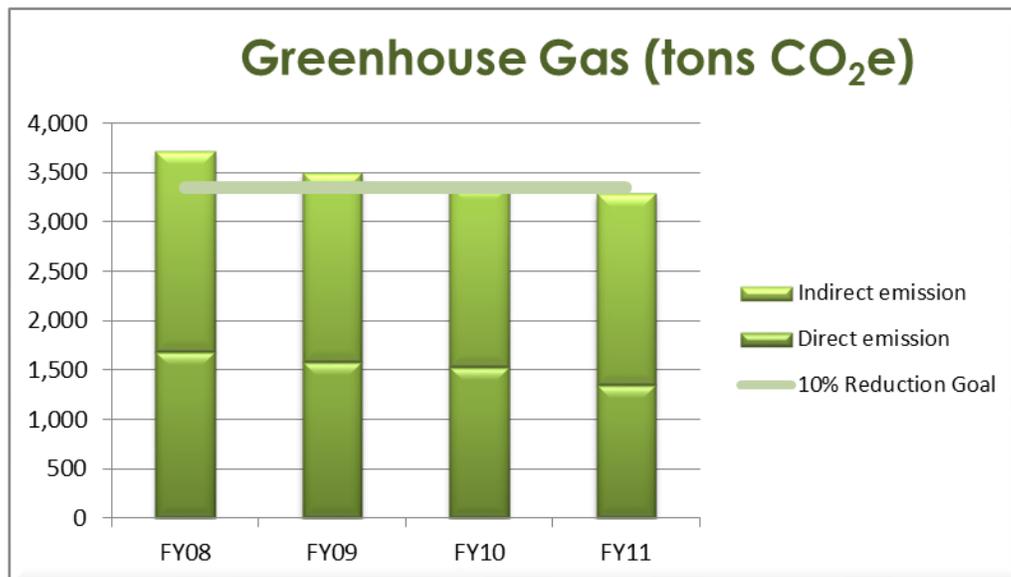
# Climate Change

Climate change is a global issue. JSR believes that we can make a difference by raising awareness concerning the consequences of our daily activities, by establishing and achieving environmentally sensitive goals, and by implementing continuous improvements.

## Managing our Energy & Carbon Footprint

Our emissions are from natural gas used to operate onsite boilers and from purchased electricity used to power our plant, labs, warehouse and administrative facilities. Our estimated FY11 GHG emissions were 3,300 tons of carbon dioxide equivalents (CO<sub>2</sub>e) <sup>(4)</sup>. Direct and indirect emissions are broken out as follows:

- Direct GHG emissions: 1,300 tons of CO<sub>2</sub>e based on 26,800 gigajoules (GJ) of energy consumption. All of these emissions were generated from burning 24,700 thousand cubic feet (Mcf) of purchased natural gas to operate onsite boilers.
- Indirect GHG emissions: 2,000 tons CO<sub>2</sub>e based on 28,000 GJ of energy consumption. These emissions were generated from purchasing electricity used to power plant, labs, warehouse and administrative facilities.
  - Of 28,000 GJ of energy consumption, 23,600 GJ came from indirect non-renewable sources. The primary fossil fuels used were 15,000 Mcf of natural gas and 36 tons of coal <sup>(5)</sup>, which accounts for 24% of the non-renewable total. The rest of the indirect non-renewable sources were nuclear energy (28%), unspecified sources (27%), large hydroelectric (19%) <sup>(6)</sup> and other fossil fuels (2%) <sup>(7)</sup>.
  - Of 28,000 GJ of energy consumption, 4,400 GJ came from these indirect renewable sources: geo thermal (30%), biomass and waste (27%), wind (24%), small hydroelectric (18%), and solar (1%) <sup>(8)</sup>.



## Improving Energy Efficiency & Conservation

In recent years, JSR Micro has implemented several improvements to our infrastructure to improve efficiency and reduce energy usage.

We installed a new industrial boiler in FY11 and two new chillers in FY12 to serve our plant and warehouse. The boiler and chillers are high-efficiency tools that enable JSR to reduce energy costs, increase efficiency and reduce our carbon footprint, thus benefiting the environment and society. Collectively, these three capital expenditures are expected to result in savings of 3,200 gigajoules, which reflect 200 tons of CO<sub>2</sub>e per year <sup>(9)</sup>. That is a significant reduction in CO<sub>2</sub>e and energy usage – roughly equivalent to eliminating emissions by 25 passenger vehicles on an annual basis <sup>(10)</sup>.

While these investments have contributed to significant savings, not all of our efficiency improvements have required large capital investments. Between FY08 and FY12, we installed high-bay induction fixture retrofits with occupancy sensors to save energy on lighting. We also implemented efficiency upgrades on our air compressor system, saving over nine tons of CO<sub>2</sub>e per year. Our IT team has migrated all data storage to a server system that allows for seamless virtualization of computer software, reducing workstation overhead and further reducing energy usage. We have also sprayed anti-reflective coating on our rooftops and insulation foam on our warehouse interior walls to provide better climate control and reduce energy usage, particularly air conditioning.



## Approaches to Product Delivery

We ship our products by ocean freight and air both nationally and internationally. Because the greenhouse gas footprint of freight by water is much less than freight by air, we have increased our ocean-freight shipping and reduced air-freight shipping. However, some of our products do require air shipment due to time and/or temperature constraints. Significant improvements in our planning have enabled us to ship the majority of our exports by sea.

Over a two-year period, from September 2010 to September 2012, these efforts reduced our greenhouse gas emissions by 1,146 tons of CO<sub>2</sub>e <sup>(11)</sup>.

### Future Plans

*We will continue to explore ways to reduce energy consumption and minimize our carbon footprint. Future plans include reducing the number of computer servers, implementing automatic air conditioning shutdown in certain areas during off hours and pursuing LEED (Leadership in Energy and Environmental Design) Silver certification on new building construction.*



*"I used to fill up my gas tank every week but now that I have an electric car, I just plug it in at JSR's charging station while I work. This has saved me 44 gallons per month."*

- Keiko, Import/Export Analyst

## Supporting Greener Commuting

While JSR Micro does not currently track employee commuting mileage and associated greenhouse gas emissions, we have implemented practices to encourage use of public transportation and other greener commuting options.

### Electric Vehicle (EV) Charging Station

Electric vehicles generate about 70% less greenhouse gas emissions than gas-powered vehicles. Calculations show that a gas-powered vehicle would have to average 78.3 miles per gallon to be as environmentally friendly as an electric vehicle <sup>(12)</sup>. One challenge for electric cars is their limited range as most can only travel about 100 miles per charge. To address this challenge and encourage employees to use environmentally friendly transportation, JSR Micro installed two 120-volt charging stations in our employee parking lot. As more employees begin to drive electric vehicles, we will increase the number of charging stations to meet the demand.

### Commuter Checks

To stimulate the use of public transportation, JSR Micro provides Commuter Check vouchers to employees. The vouchers are accepted by transit operators for the purchase of transit passes and tickets. JSR Micro covers up to \$150 of public transportation costs per employee each month. Currently, about 6% of our employees participate in this program.

### FasTrak

JSR Micro also provides employees with FasTrak tags, a toll collection system that electronically pays tolls on California bridges and roads without requiring drivers to stop, thus reducing greenhouse emissions.

# Water

As a California-based company, responsible management of water usage is critical. All of our water comes from our municipal water supply, managed by the Santa Clara Valley Water District. Water is an essential raw material in the production of our finished products and indispensable in our quality control processes. Mindful of local water shortages, we prioritized the reduction of water usage as a key objective.

When we started to track water usage in FY08, we discovered that we consumed more than 13 million gallons of water per year, and that more water was consumed for landscape irrigation than production, lab operations and indoor plumbing combined. Since then, we have reduced water consumption by 5 million gallons per year, consuming roughly 7.7 million gallons of municipal water in FY11. Production operations and indoor plumbing consumed 3.7 million gallons and irrigation of our campus landscaping used 4.0 million gallons.

### Future Plans

*Moving forward, we will look for opportunities to reduce water consumption within our facility. For example, many of JSR's products are shipped in glass bottles, which are washed in a bottle washer prior to filling. We will evaluate this equipment's water usage and consider improvements to make the process more efficient.*

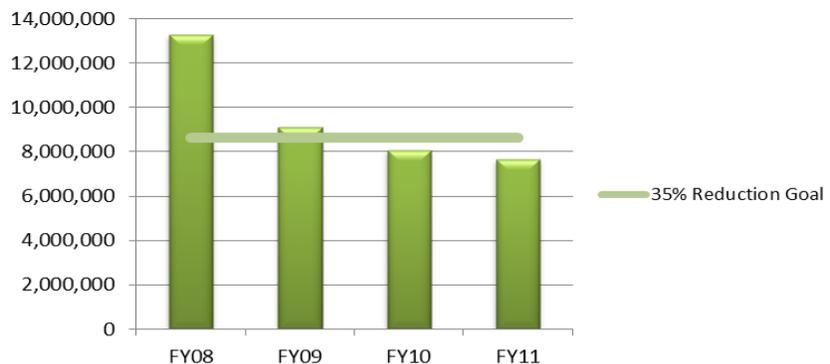
## Improving Water Use

To reduce our water usage, we focused first on landscape irrigation, the area of greatest opportunity for improvement and that which also had the least impact on our operations. The irrigation water reduction efforts implemented in FY09 resulted in a 30% water savings in the same year and ongoing savings of 40% thereafter.

To achieve this reduction, we joined the Irrigation Technical Assistance Program hosted by the Santa Clara Valley Water District and worked with them to assess our irrigation system. Based on their advice, we installed an environmentally advanced irrigation controller that adjusts landscape watering to optimal levels based on historic weather data and actual local temperature. As the temperature increases or decreases, the controller increases or reduces the amount of water applied.

Under the same program, we also removed 24,000 square feet of lawn and replaced it with chip bark. This improvement not only reduced irrigation water needs, but resulted in a more balanced, healthier landscape. While planning this project, we discovered the diverse needs of the lawn, pine trees and redwood trees. By removing lawn and adjusting irrigation accordingly – for example, replacing some sprinkler and spray heads with stream bubblers – we were able to provide precise watering to all landscape flora to achieve optimum results.

### Water Consumption (gal)



## Materials & Waste

Like all manufacturing companies, JSR Micro uses materials in the production process that result in both regular, non-hazardous waste and hazardous waste byproducts. We have made significant reductions in our regular, non-hazardous waste generation, diverting over 220,000 pounds of regular waste from the landfill every year based on recycling. The major recycled items are wood, cardboard boxes, glass, paper, e-scrap, plastic, cans and batteries.

As a chemical manufacturer, we have always taken every precaution in handling our hazardous material and waste. Hazardous chemicals are used primarily in the manufacturing and testing of products or vessel cleaning procedures. The effluents become hazardous waste, most commonly characterized as ignitable or corrosive.

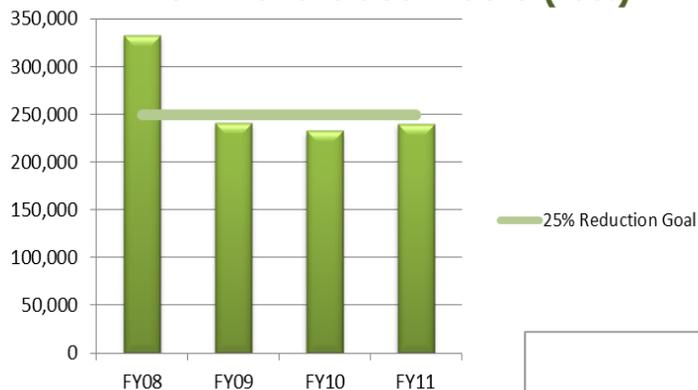
In 2011, JSR Micro generated 240,000 pounds of non-hazardous waste. Of this, 230,000 pounds (96%) was diverted through recycling and 10,000 pounds (4%) was disposed of in municipal landfills <sup>(13)</sup>.

JSR Micro also generated 181,000 pounds of hazardous waste; of this, 140,000 pounds (77%) was re-used as fuel for cement kilns or incinerated by our hazardous waste disposal contractor and 41,000 pounds (23%) was treated by our contractor using such methods as neutralization, separation and precipitation, whereby filtered solids are stabilized and disposed of in municipal landfills.

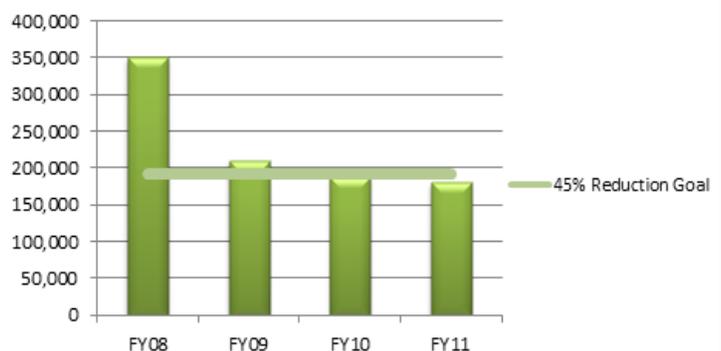
### Future Plans

We will continue to explore ways to reduce both hazardous and non-hazardous waste. We have plans to eliminate the use of Styrofoam cups and increase e-filing in place of paper filing. Within our production facility, we will explore ways to reduce packaging and streamline production and quality control processes.

### Non-Hazardous Waste (lbs.)



### Hazardous Waste (lbs.)



## Past Initiatives

### Reducing Non-Hazardous Waste

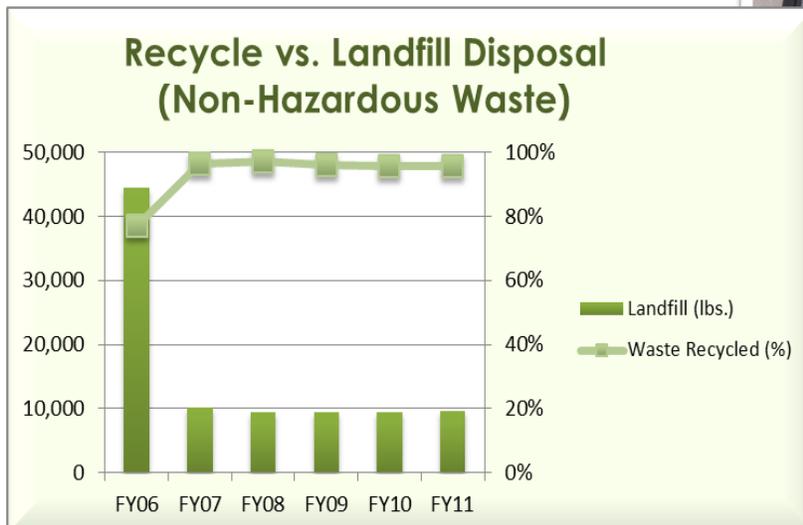
JSR Micro has a long history of sustainability-related goals for waste materials. The total weight of non-recycled waste has dropped 80% over the past six years, and we recycle 96% of our non-hazardous waste. The majority of our recyclables are mixed materials such as cardboard and wood, resulting from the high volume of shipping and packing materials used at our production facility.

Our recycling accomplishments have been recognized by the state of California for three consecutive years, earning us Waste Reduction Awards Program (WRAP) awards from the California Waste Management Board in 2009, 2010 and 2011.

We are continually looking for new ways, both large and small, to reduce waste and protect the environment. For example, we recently replaced all paper towel dispensers with high-efficiency hand dryers in all of our onsite facilities, thus eliminating the waste of 280,000 paper towels per year. Additionally, we switched office paper usage to 100% post-consumer content recycled paper, and business cards for all employees will soon be printed on 100% recycled paper with soy-based inks.

### Reducing Hazardous Waste

As a part of JSR Micro's continuous improvement program, we are always striving to be more efficient, conserve resources and reduce waste. In FY09, after reviewing our solvent usage and filtration methods, we improved production processes, resulting in 66,000 pounds of reduced solvent use and preventing 880 pounds of solid waste annually. We also decreased hazardous waste by streamlining our quality control process to reduce storage sample use, while maintaining consistency and quality in our lab protocols.



**Safety** is JSR Micro's top priority. As a chemical manufacturing company, we are acutely aware of the need to exercise extreme caution in all of our activities. Therefore, we are never satisfied with mere compliance, but always strive for continuous improvement and industry best practices to ensure the safety of our employees, customers and the environment.

JSR ensures compliance with all government and voluntary environmental, health and safety requirements through the following oversight activities:

- Annual compliance audits
- New process, equipment, and chemical reviews
- New or updated regulation monitoring
- Internal inspections

The company regularly undergoes regulatory inspections by the Environmental Protection Agency and Cal/OSHA. As our results demonstrate, a violation is very rare.

If we do receive a citing, we make sure to identify the root cause, take corrective measures and check that the remedial actions are effective.

The sole environmental citing in 2011 was related to the storage of a few liters of hazardous waste past the specified accumulation time, for which we paid a \$2,000 fine. The issue was corrected immediately and had zero impact on the surrounding environment.

JSR Micro has never had a hazardous substance spill that was significant enough to threaten human health, land or water bodies.

Incident Type	FY08	FY09	FY10	FY11
<b>Environmental violation</b>	0	0	0	1
<b>Reportable spill</b>	0	0	0	0

## Safety Training & Drills

JSR implements safety training and drills on a regular basis, including:

- Hazard communication training
- Injury/illness prevention training
- Evacuation drills
- Emergency spill response drills
- Fire prevention training and fire extinguisher drills
- First aid and AED
- Chemical hygiene training
- Hazardous waste operations and emergency response training

### Average safety training hours per year:

- per employee: 7 hours
- per chemical handler: 9 hours
- per administrative work employee: 3 hours



## Customer Safety

The health and safety of our customers and those who use JSR products will always be our highest priority. To enhance our ability to meet this goal, JSR maintains a staff of environmental, health and safety experts who understand current laws and regulations and keep abreast of pending semiconductor industry regulations. Our EH&S staff manages a comprehensive environmental management system that evaluates health and environmental risks through all phases of the product lifecycle: from product assessment to R&D and to commercialization of our finished products.

We take pride in the development and maintenance of comprehensive material safety data sheets (MSDSs) for each product we develop, from R&D samples to products used in mass production around the world. Our EH&S staff is readily available for direct customer support, providing detailed product composition, regulatory restrictions and additional safe storage and handling recommendations beyond those specified on the MSDS.

We believe the development of our customer health and safety begins with a comprehensive understanding of the needs and concerns of our customers and the industries we serve. We maintain a close association with industry associations such as SEMI® (Semiconductor Equipment and Materials International), World Semiconductor Council and Semiconductor Industry Association.



## Product Labeling & Hazard Communication

Our stringent approach to managing product labeling and hazard communication protects both our customers and our employees. JSR Micro provides material safety data sheets or safety data sheets and attached labels for all chemical products regardless of hazard level. By regulatory and internal requirements, all of JSR Micro's product MSDSs include composition information, environmental and health hazard information, safe handling instructions, recommended preventative measures, proper disposal method and regulatory information. All chemical product labels provide safety warnings and precautions, hazardous ingredients, emergency response and contact information. We are proud that JSR Micro has never had a product label non-compliance violation.

Hazard information is continuously updated to provide users with the most accurate and useful information available. JSR Micro's MSDSs and labels meet or exceed the Occupational Safety and Health Administration's Hazard Communication Standards. The EH&S department works closely with our Asian and European counterparts to ensure regulatory compliance worldwide.

Transition of our MSDSs to meet the strict requirements of Globally Harmonized System of Classification and Labeling of Chemicals (GHS) is underway. This transition will allow for a thorough analysis of all raw materials and their hazardous properties. GHS adoption will provide global harmonization of health, physical and environmental hazards, as well as provide standard pictograms for easy identification of product hazards on both safety data sheets and labels. These changes will make safety information readily available and easily understandable to chemical handlers and users. JSR Micro intends to complete this transition by FY14.

## Our Proactive Approach to Workplace Safety

**We are** OHSAS 18001:2007 certified, with comprehensive safety policies, rules and procedures in place to ensure that all employees perform their jobs safely. JSR has not had a single chemical injury since FY09 due to our rigorous preventive measures and employee awareness.

Beyond the baseline of responsible policies, rules and procedures, we believe that true safety is a result of a safety-first culture nurtured by all employees, who proactively participate in our safety initiatives and work as a team to create a positive and productive atmosphere. JSR has implemented various employee-based programs and activities to engage employees in the company's safety improvement efforts. For example, every meeting within the company starts with the question: "Are there any safety issues that need to be discussed?"

## EH&S Committee

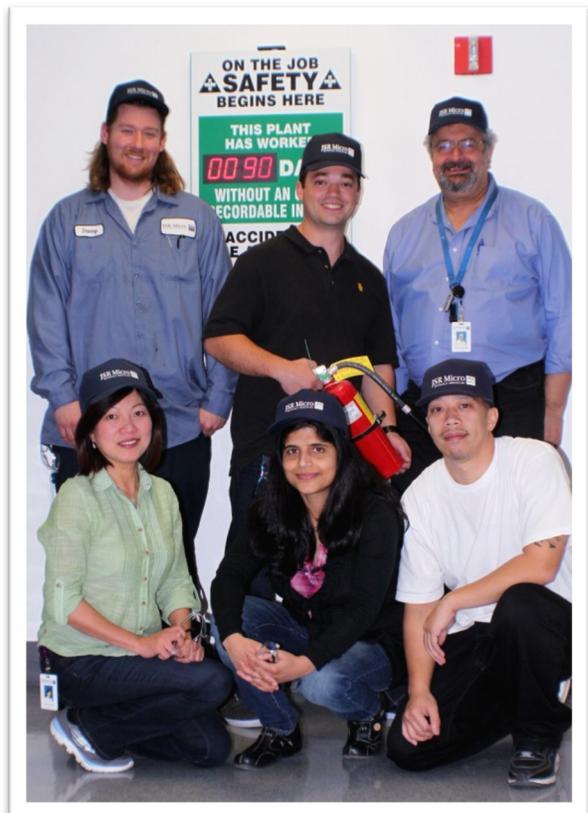
First established in 2001, the EH&S Committee is a cross-functional team with the mission of ensuring that JSR Micro's workplace is safe and environmentally responsible. The committee conducts monthly inspections and meets afterward to discuss the inspection findings, corrective actions and ideas for improvement. The members also discuss employee concerns, share new information and craft EH&S-related communications for distribution throughout the organization. Committee membership is rotated on an annual basis to ensure that the committee benefits from different perspectives and integrates new employees on a regular basis.

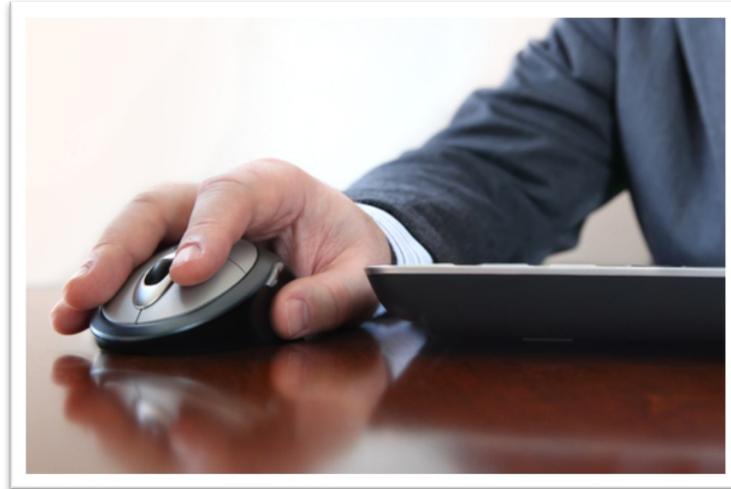
*"The EHS committee serves an essential purpose, proactively preventing issues, conducting inspections and relaying EH&S related information to employees."*

- Laurence, Senior Process Engineer

## Suggestion Box & Near-Miss Log

Empowering our employees to voice their opinions and express their concerns helps us stay proactive and positive in our ongoing effort to improve productivity, efficiency and workplace safety. We encourage employees to make suggestions for improvement and report near-miss observations in our online suggestion box and near-miss log on a regular basis. During employee meetings we recognize and reward employees with the most constructive ideas.





## Improving Ergonomics

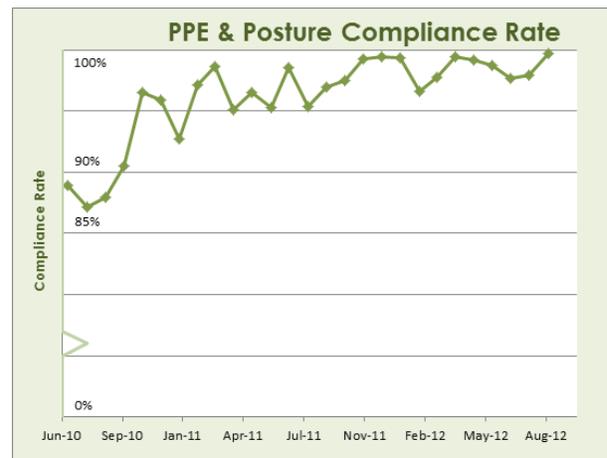
Even though we are a chemical manufacturer, the most common workplace injuries do not involve chemicals, due to our effective workplace safety programs and strong safety-first culture. Instead, the most common injury at JSR Micro is related to ergonomics, particularly the repetitive use of lab pipettes and computer mice and keyboards.

Preventing ergonomics injuries has been complicated because most jobs require the daily, repetitive use of tools or computers, and employees tend to downplay minor discomfort as an inconsequential part of the job. As such, we have determined that ergonomic injuries pose one of our greatest workplace safety challenges. Since 2009, we have implemented a number of initiatives to mitigate this risk:

- Annual ergonomic training
- Work station evaluations and improvements
- Ergonomic software installed on every computer to monitor keyboard and mouse clicks
- Mandatory micro-break compliance for all computer users
- Installation of ergo-proper hardware (lifting devices, ergo-friendly chairs, monitors, keyboards, mouse devices, etc.)
- Online discomfort reporting system and self-assessment tool

## Behavior-Based Safety Program

Our Behavior-Based Safety Program, implemented in FY10, promotes the company's safety culture by encouraging personal responsibility for the practice and encouragement of safe behaviors as well as identification and elimination of unsafe behaviors. Employees observe and advise each other on safe and ergonomically sound behaviors such as wearing proper personal protective equipment (PPE) or employing safe postures at their workstations. The company believes that this approach, whereby employees work together to prevent injuries, rather than being policed by management, has helped us nurture a truly sustainable safety culture. Both the PPE and posture compliance rates have shown marked improvement since the program was implemented.



# GRI Content Index \*

Profile Disclosure	Description	Reported	Cross-reference / direct answer
<b>1. Strategy and Analysis</b>			
1.1	Statement from the most senior decision maker	Fully	Letter from Our President
<b>2. Organizational Profile</b>			
2.1	Name of the organization	Fully	JSR Micro, Inc.
2.2	Primary brands, products and/or services	Fully	Our Products
2.3	Operational structure of the organization	Fully	Our Company
2.4	Location of the organization's headquarters	Fully	Sunnyvale, CA
2.5	Number of countries organization operates	Fully	United States
2.6	Nature of ownership and legal form	Fully	Corporation, wholly-owned subsidiary
2.7	Markets served	Fully	Our Products
2.8	Scale of the reporting organization	Partially	Our Company As a privately held company, financial information is considered confidential and is not reported.
2.9	Significant changes during reporting period	Fully	None
2.10	Awards received in the reporting period	Fully	Letter from Our President Materials & Waste: Reducing Hazardous Waste
<b>3. Report Parameters</b>			
3.1	Reporting period	Fully	Fiscal year 2012 (April 1, 2011 to March 31, 2012)
3.2	Date of most recent previous report	Fully	N/A (first report)
3.3	Reporting cycle (annual, biennial, etc.)	Fully	Biennial
3.4	Contact questions regarding the report	Fully	About Our CSR Report: Contact Information
3.5	Process for defining report content	Fully	About Our CSR Report: Report Scope
3.6	Boundary of the report	Fully	About Our CSR Report: Report Boundary
3.7	Any limitations on report scope or boundary	Fully	About Our CSR Report: Report Boundary
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, other.	Fully	None
3.10	Restatements	Fully	None
	Significant changes from previous reporting period	Fully	N/A (first report)
3.12	Standard Disclosures table	Fully	GRI Content Index
3.12	External assurance	Fully	About Our CSR Report: Report Profile & Self Declaration

Profile Disclosure	Description	Reported	Cross-reference / direct answer
<b>Governance, Commitments, and Engagements</b>			
4.1	Governance structure	Fully	Our Company: Governance at JSR Micro and Corporate Social Responsibility
4.2	Indicate whether the Chair of the highest governance body is also an executive officer	Fully	Chair is JSR Micro's president
4.3	Unitary board structure	Fully	N/A
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	Fully	Our Company: Governance at JSR Micro
4.14	Stakeholder groups engaged	Fully	Our CSR Report: Report Scope
4.15	Stakeholder identification and selection	Fully	Our Stakeholders
4.16	Approaches to stakeholder engagement	Fully	Our Stakeholders
<b>Performance Indicators</b>			
Economic			
EC7	Local hiring	Fully	Our People: Hiring
Environmental			
EN1	Materials used by weight or volume	Partially	Our Environment: Environmental Goals and Challenges
EN3	Direct energy consumption by primary source	Fully	Our Environment: Managing our Energy & Carbon Footprint
EN4	Indirect energy consumption by primary source	Fully	Our Environment: Managing our Energy & Carbon Footprint
EN5	Energy saved due to conservation and efficiency	Partially	Our Environment: Improving Energy Efficiency & Conservation
EN6	Initiatives to provide energy-efficient or renewable energy-based products and services	Partially	Our Products
EN8	Total water withdrawal by source	Fully	Our Environment: Water
EN16	Total direct and indirect GHG emissions by weight	Fully	Our Environment: Managing our Energy & Carbon Footprint
EN18	Initiatives to reduce GHG emissions and reductions achieved	Partially	Our Environment: Improving Energy Efficiency & Conservation
EN22	Total weight of waste by type and disposal method	Fully	Our Environment: Materials and Waste
EN23	Total number and volume of significant spills	Fully	Safety

Profile Disclosure	Description	Reported	Cross-reference / direct answer
Social			
LA1	Total workforce by employment type, employment contract, and region broken down by gender	Fully	Our People: A Diverse Workplace
LA2	Total number and rate of new employee hires and employee turnover by age group, gender and region	Partially	Our People: Hiring
LA3	Benefits provided to full-time employees not provided to temporary or part-time employees	Fully	Our People: Employee Benefits
LA10	Average hours of training per year per employee by gender, and by employee category	Fully	Our People: Training & Development
LA13	Composition of governance bodies and breakdown of employees per employee category	Partially	Our People: A Diverse Workplace and Our Company: Governance at JSR Micro
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures	Fully	Our Company: Ethics and Code of Conduct
PR3	Type of product and service information required by procedures; percentage of significant products and services subject to such information requirements	Fully	Safety: Product Labeling & Hazard Communication
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling	Fully	Zero incidents

\* This table identifies the GRI standard disclosures reported and the location of the associated responses. Disclosures not listed are not reported.

# Third-party GRI Application Level Check



## CONCEPT GREEN

sustainability reporting,  
communications & training

www.conceptgreen.net  
info@conceptgreen.net  
+1.505.414.9313

## THIRD-PARTY GRI APPLICATION LEVEL CHECK STATEMENT

JSR Micro, Inc., contracted Concept Green LLC, a women-owned sustainability consulting firm and Certified B Corporation, to perform a review and application level check of its report *JSR Micro 2012 Corporate Social Responsibility Report*.

### THIRD-PARTY QUALIFICATIONS

Concept Green has specialized in GRI report development, training and consulting since 2008. Concept Green is a GRI Organizational Stakeholder and an ISOS Group Collaborating Partner in executing GRI Certified Trainings in the Southwestern U.S. Both co-owners are ISOS Group GRI nominated trainers.

### METHODOLOGY

- JSR Micro submitted a draft of its report to Concept Green, which performed an initial level check of all report content and data.
- Concept Green identified areas where additional content and data were needed to meet the required standard disclosures for GRI Application Level C, based on GRI's Sustainability Reporting Guidelines, Version 3.1.
- JSR Micro addressed all content and data requirements, then re-submitted a pre-final version of the report to Concept Green for verification.
- Concept Green reviewed the pre-final report's content, data and GRI Content Index to verify that the report met all requirements for GRI Application Level C. Where profile disclosures were not fully reported, Concept Green verified that valid reasons for omission were provided.

### VERIFICATION

Concept Green verifies that the report *JSR Micro 2012 Corporate Social Responsibility Report*, dated March 30, 2013, meets all requirements of GRI's Sustainability Reporting Guidelines, Version 3.1, for GRI Application Level C.



Carrie Christopher  
Co-owner

Jennifer Pontzer  
Co-owner

## End Notes

- 1) Regular describes employees who work under an indefinite employment status; JSR Micro did not employ any part-time, self-employed, fixed-term, temporary contract, seasonal or supervised workers during the reporting period.
- 2) Due to the small size of JSR Micro's overall workforce, new hires within segments are not calculated.
- 3) Due to the small size of JSR Micro's overall workforce, turnover rates within segments are not calculated.
- 4) Direct emission (scope 1) and indirect emission (scope 2) are combined in the graph. GHG emissions are calculated based on emission factors published in the PG&E Greenhouse Gas Emission Factors Info Sheet, last updated April 8, 2011 and available at [www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge\\_ghg\\_emission\\_factor\\_info\\_sheet.pdf](http://www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge_ghg_emission_factor_info_sheet.pdf). PG&E is the investor-owned utility that provides natural gas and electricity to JSR Micro's Sunnyvale facility. Emission factors for 2010 and 2011 are based on the average of PG&E's 2005 to 2009 GHG emission factors. Emission factors for 2008 and 2009 are based on PG&E's third-party-verified GHG inventory submitted to the California Climate Action Registry (2008) and The Climate Registry (2009).
- 5) The amount of natural gas and coal used to generate the electricity was calculated based on the information from the U.S. Energy Information Administration.
- 6) Large hydroelectric is not counted as a renewable source under California Renewable Portfolio Standard Program.
- 7) Pacific Gas and Electric's power mix data was used for the indirect renewal and non-renewal source calculations.
- 8) Ibid.
- 9) The savings were verified by both Enovity, Inc., and Pacific Gas and Electric.
- 10) Pacific Gas and Electric's GHG emission factors were used for the conversion calculation.
- 11) The conversion factors were obtained from the report titled "Smart Goods Transport" by Low Carbon Leaders Project, an initiative supported by the UN Global Compact and World Wildlife Fund (WWF).
- 12) The comparisons were made using the conversion factors issued by the Greenhouse Gas Protocol.
- 13) The information on the disposal and recycling methods for non-hazardous and hazardous waste was provided by our certified waste management contractors.

## Acknowledgement

This report was made possible by the willing collaboration of many contributors. We wish to acknowledge and extend our gratitude to all of those who worked on this project. Many people worked behind the scenes to research, analyze, and report the data; to draft, edit and publish the text; to research, design and incorporate the images – everyone engaged played an important role in the production of the final report.

## G3.1 Content Index - GRI Application Level C

Application Level C	Third-party-checked
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### STANDARD DISCLOSURES PART I: Profile Disclosures

REPORT FULLY ON THE BELOW SELECTION OF PROFILE DISCLOSURES OR PROVIDE A REASON FOR OMISSION

#### 1. Strategy and Analysis

Profile Disclosure	Description	Reported	Cross-reference/Direct answer
1.1	Statement from the most senior decision-maker of the organization.	Fully	Letter from Our President

#### 2. Organizational Profile

Profile Disclosure	Description	Reported	Cross-reference/Direct answer
2.1	Name of the organization.	Fully	JSR Micro, Inc.
2.2	Primary brands, products, and/or services.	Fully	Our Products
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	Fully	Our Company
2.4	Location of organization's headquarters.	Fully	Sunnyvale, CA
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	Fully	United States
2.6	Nature of ownership and legal form.	Fully	Corporation, wholly-owned subsidiary
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	Fully	Our Products
2.8	Scale of the reporting organization.	Partially	Our Company As a privately held company, financial information is considered confidential and is omitted not reported.
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	Fully	None
2.10	Awards received in the reporting period.	Fully	Letter from Our President

#### 3. Report Parameters

Profile Disclosure	Description	Reported	Cross-reference/Direct answer
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	Fully	Fiscal year 2012 (April 1, 2011 to March 31, 2012)
3.2	Date of most recent previous report (if any).	Fully	N/A (first report)
3.3	Reporting cycle (annual, biennial, etc.)	Fully	Biennial
3.4	Contact point for questions regarding the report or its contents.	Fully	About the Report
3.5	Process for defining report content.	Fully	About the Report: Report Scope
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance.	Fully	About the Report: Report Boundary
3.7	State any specific limitations on the scope or boundary of the report (see completeness principle for explanation of scope).	Fully	About the Report: Report Boundary
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	Fully	None
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods).	Fully	None
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	Fully	N/A (first report)
3.12	Table identifying the location of the Standard Disclosures in the report.	Fully	GRI Content Index
3.13	Policy and current practice with regard to seeking external assurance for the report.	Fully	About the Report: Report Profile section

#### 4. Governance, Commitments, and Engagement

Profile Disclosure	Description	Reported	Cross-reference/Direct answer
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	Fully	Governance & Ethics: Governance at JSR and Corporate Social Responsibility
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	Fully	Chair is JSR Micro's president
4.3	For organizations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members.	Fully	N/A
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	Fully	Governance & Ethics: Governance at JSR
4.14	List of stakeholder groups engaged by the organization.	Fully	About the Report: Report Scope
4.15	Basis for identification and selection of stakeholders with whom to engage.	Fully	Stakeholder Engagement
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	Fully	Stakeholder Engagement

### STANDARD DISCLOSURES PART III: Performance Indicators

REPORT FULLY ON 10 CORE OR ADDITIONAL PERFORMANCE INDICATORS - AT LEAST 1 FROM EACH DIMENSION (ECONOMIC, ENVIRONMENTAL SOCIAL)

#### Economic

Performance Indicator	Description	Reported	Cross-reference/Direct answer
<b>Economic performance</b>			
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	Not	
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	Not	

## G3.1 Content Index - GRI Application Level C

EC3	Coverage of the organization's defined benefit plan obligations.	Not	
EC4	Significant financial assistance received from government.	Not	
<b>Market presence</b>			
EC5	Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.	Not	
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	Not	
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.	Fully	People, Performance & Promise: Hiring
<b>Indirect economic impacts</b>			
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	Not	
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	Not	
<b>Environmental</b>			
<b>Performance Indicator</b>	<b>Description</b>	<b>Reported</b>	<b>Cross-reference/Direct answer</b>
<b>Materials</b>			
EN1	Materials used by weight or volume.	Partially	Environmental: Environmental Goals and Challenges
EN2	Percentage of materials used that are recycled input materials.	Not	
<b>Energy</b>			
EN3	Direct energy consumption by primary energy source.	Fully	Environmental: Managing our Energy & Carbon Footprint
EN4	Indirect energy consumption by primary source.	Fully	Environmental: Managing our Energy & Carbon Footprint
EN5	Energy saved due to conservation and efficiency improvements.	Partially	Environmental: Improving Energy Efficiency & Conservation
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	Partially	Our Products
EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	Not	
<b>Water</b>			
EN8	Total water withdrawal by source.	Fully	Environmental: Water In FY12, total volume of water withdrawn was approximately 29,148 cubic meters (7,700,000 gallons).
EN9	Water sources significantly affected by withdrawal of water.	Not	
EN10	Percentage and total volume of water recycled and reused.	Not	
<b>Biodiversity</b>			
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	Not	
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	Not	
EN13	Habitats protected or restored.	Not	
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	Not	
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	Not	
<b>Emissions, effluents and waste</b>			
EN16	Total direct and indirect greenhouse gas emissions by weight.	Fully	Environmental: Managing our Energy & Carbon Footprint. In FY12, total CO2e emissions were 2,994 tonnes (3,300 tons). Of this, direct emissions were 1,179 tonnes (1,300 tons) and indirect emissions were 1,814 tonnes (2,000 tons).
EN17	Other relevant indirect greenhouse gas emissions by weight.	Not	
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	Partially	Environmental: Improving Energy Efficiency & Conservation
EN19	Emissions of ozone-depleting substances by weight.	Not	
EN20	NOx, SOx, and other significant air emissions by type and weight.	Not	
EN21	Total water discharge by quality and destination.	Not	
EN22	Total weight of waste by type and disposal method.	Fully	Environmental: Materials and Waste. In FY12, JSR disposed of 191.0 tonnes of waste (421,000 pounds). Hazardous waste was 82.1 tonnes (181,000 pounds), with 63.5 tonnes (140,000 pounds) recycled and 18.6 tonnes (41,000 pounds) disposed off site. Non-hazardous waste was 108.9 tonnes (240,000 pounds), with 104.3 tonnes (230,000 pounds) recycled and 4.5 tonnes (10,000 pounds) disposed in municipal landfills.
EN23	Total number and volume of significant spills.	Fully	Safety
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.	Not	
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.	Not	
<b>Products and services</b>			
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	Not	
EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	Not	
<b>Compliance</b>			
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	Fully	Safety
<b>Transport</b>			
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	Not	
<b>Overall</b>			
EN30	Total environmental protection expenditures and investments by type.	Not	
<b>Social: Labor Practices and Decent Work</b>			

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Performance Indicator	Description	Reported	Cross-reference/Direct answer
<b>Employment</b>			
LA1	Total workforce by employment type, employment contract, and region, broken down by gender.	Fully	Our People: A Diverse Workplace
LA2	Total number and rate of new employee hires and employee turnover by age group, gender, and region.	Partially	Our People: Hiring and Turnover
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	Fully	Our People: Employee Benefits
LA15	Return to work and retention rates after parental leave, by gender.	Not	
<b>Labor/management relations</b>			
LA4	Percentage of employees covered by collective bargaining agreements.	Not	
LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.	Not	
<b>Occupational health and safety</b>			
LA6	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.	Not	
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region and by gender.	Not	
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	Not	
LA9	Health and safety topics covered in formal agreements with trade unions.	Not	
<b>Training and education</b>			
LA10	Average hours of training per year per employee by gender, and by employee category.	Fully	Our People: Training & Development
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	Not	
LA12	Percentage of employees receiving regular performance and career development reviews, by gender.	Not	
<b>Diversity and equal opportunity</b>			
LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.	Partially	Our People: A Diverse Workplace and Governance at JSR
<b>Equal remuneration for women and men</b>			
LA14	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation.	Not	
<b>Social: Human Rights</b>			
Performance Indicator	Description	Reported	Cross-reference/Direct answer
<b>Investment and procurement practices</b>			
HR1	Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening.	Not	
HR2	Percentage of significant suppliers, contractors and other business partners that have undergone human rights screening, and actions taken.	Not	
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	Not	
<b>Non-discrimination</b>			
HR4	Total number of incidents of discrimination and actions taken.	Not	
<b>Freedom of association and collective bargaining</b>			
HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights.	Not	
<b>Child labor</b>			
HR6	Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor.	Not	
<b>Forced and compulsory labor</b>			
HR7	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures taken to contribute to the elimination of all forms of forced or compulsory labor.	Not	
<b>Security practices</b>			
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	Not	
<b>Indigenous rights</b>			
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.	Not	
<b>Assessment</b>			
HR10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments.	Not	
<b>Remediation</b>			
HR11	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms.	Not	
<b>Social: Society</b>			
Performance Indicator	Description	Reported	Cross-reference/Direct answer
<b>Local communities</b>			
SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	Not	
SO9	Operations with significant potential or actual negative impacts on local communities.	Not	
SO10	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.	Not	

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<b>Corruption</b>			
SO2	Percentage and total number of business units analyzed for risks related to corruption.	Not	
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures.	Fully	Ethics and Code of Conduct
SO4	Actions taken in response to incidents of corruption.	Not	
<b>Public policy</b>			
SO5	Public policy positions and participation in public policy development and lobbying.	Not	
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	Not	
<b>Anti-competitive behavior</b>			
SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	Not	
<b>Compliance</b>			
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	Not	
Social: Product Responsibility			
Performance Indicator	Description	Reported	Cross-reference/Direct answer
<b>Customer health and safety</b>			
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	Not	
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	Not	
<b>Product and service labelling</b>			
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	Fully	Hazard Communication
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.	Fully	Zero incidents
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	Not	
<b>Marketing communications</b>			
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	Not	
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.	Not	
<b>Customer privacy</b>			
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	Not	
<b>Compliance</b>			
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	Not	

