ROOS INSTRUMENTS, INC.

Corporate Social Responsibility (CSR)

2011 Annual Report

ROOS Instruments has supplied Automated Test Equipment for the world's most innovative semiconductor technology. Now RI leads the industry with a Corporate Social Responsibility (CSR) management system focused on reaching aggressive goals that reduce our impact on the environment.
This report is available online - roos.com/green.

Energy Facts
Natural Gas: 2,317 Therms
Electricity: 209,113 Kilowatt Hours*
GHG (Scope 1&2): 15,611 kg CO2 -e
*100% of electricity offset by RECs
5% Solar, 95% Wind

THINK BEFORE YOU PRINT

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In 2011, ROOS Instruments earned the Award for Environmental Innovator 2010 for our corporate "Green Initiative", representing our all-in commitment to environmental stewardship and leading role in the automated test industry to reduce energy use and utilize alternative sources of clean energy. Purchasing 100% green energy since 2005 has helped us reach a higher standard of environmental responsibility and encouraged us to take this concept one step further. We are proud to offer our flagship product, Cassini, as one of the most energy efficient automated test platforms available. "We see this initiative as a wise investment in our future. Meeting energy needs with clean power and reducing the energy footprint of any investment, be it our company or the products we make, is very rewarding." -- Cathy Rossi-ROOS, ROOS Instruments COO. **2011 EPA Yearly Report**

ACCOMPLISHMENTS

7 Years of 100% Renewable Electricity (5% Solar, 95% Wind)
Over 1.48 million kWh purchased since 2005

Year	2005	2006	2007	2008	2009	2010	**2011**
kWh	200,114	202,634	210,240	230,975	218,975	208,594	**209,113**
% Change	-1.95%	1.24%	3.62%	8.98%	-5.51%	4.94%	**0.25%**

Awarded Environmental Innovator 2010 ***Awarded 2011***
Silicon Valley Power issues the Environmental Innovation Award to organizations for "all around efforts to support energy efficiency and renewable energy."

"Green Team" Awards for RI Employees after energy audit and training. ***January 2012***
John Messmer was awarded the "Grind" award for leading eWaste recycling program, eliminating over 1200 lbs. of extra equipment. The "Innovator Award" goes to Cathrine Rossi-ROOS for pioneering RI's commitment to sustainability with REC purchases and recently installing low flow toilets, enabling a drastic reduction in water resources. Chris Messmer won the "Guru" award for being the most knowledgeable about RI's green projects and activities.

eWaste Recycling - Over 1200 lbs. was collected by GreenMouse ***April 2011***

At Desk Recycling - quarterly recycling, reduce waste, reuse components ***Since 2009***
Each desk has a dedicated recycling container, facilities empties weekly and reports "good to great" compliance and notifies individuals of incorrectly discarding recyclable material in a waste bin. Our vendor, Waste Management, switched from taking only paper and cardboard (separated) to accepting all forms of plastic, glass, aluminum, and paper in one container, increasing individual compliance.

Reduce Travel - Telecommuting and Virtual/Web Conferencing ***Since 2006***

Goals for 2011

10% Reduction of Electricity[1]
209,922 kWh Target
209,113 kWh Actual (Target Achieved)

10% Reduction of Natural Gas[2]
1693 Therms Target
2317 Therms Actual (18% Over)

Encourage corporate environmental responsibility by joining Earth Hour and increase individual employee participation with "Green Team" awards and incentives. Reduce all energy usage by 10% of "peak demand."

Planned Goals for 2012 and Beyond

- Maintain Energy Consumption at present levels, including anticipated growth
- Cascading requirements - Vendor incentives (monetary and preference) to voluntarily participate in creating a CSR of their own.
- Strive for 100% recycling with facility reviews where all recyclable material is recovered from waste bins prior to dumping.
- Increase energy efficiency of ROOS systems with software and hardware engineering related to supporting sleep and low power modes.
- Replace existing fluorescent lighting fixtures based on Silicon Valley Power's sponsored energy audit to update to modern lighting standards for brightness, install motion sensors, and replace some fixtures with LEDs, to saves hazardous waste disposal fees, and reduce energy use over the fixtures' lifetime.

[1]90% of 2008 levels (Peak demand) or 209,922 kWhs/yr (2008 Annual Usage = 233,247 kWh)
[2]90% of 2009 levels (Peak demand) or 1693 Therms/yr (2009 Annual Usage = 1881 Therms)

Green Power Partners

Silicon Valley Power

100% renewable energy from Silicon Valley Power/3Degrees°. Verifiable RECs available upon request.[3]

EPA

ROOS Instruments participates with the EPA Green Power partnership.

RI has purchased 100% renewable energy for every year since 2005.[4]

WWF Earth Hour

WWF Earth Hour - March 26th 2011 @ 8:30pm ROOS Instruments participates in Earth Hour by turning off all lighting for an hour.

The following suppliers and customers have implemented a similar Corporate Responsibility and Environmental Management System. Thank you for helping ROOS Instruments promote good environmental stewardship in the semiconductor industry.

[3] Contact "admin@roos.com" to request RECs from Silicon Valley Power

[4] EPA: http://www.epa.gov/greenpower/partners/partners/roosinstrumentsinc.htm

Green Projects

RI Santa Clara, CA
Building Area: ~19,600 feet² , Constructed 1978
5000 feet² redeveloped 2007 with modern HVAC, high efficiency motion sensing lights
The projects listed below contributed to successfully achieving the 2011 targets.

Total Expected Annual Impact for All Projects in 2011: **8,100 kWh**
3.8% of 2011 Target kWh

Name of Project — *Potential Impact*[5]

Power Usage Audit: **1,000 kWh**
Measure kWh of various systems around RI to create estimated usage profiles. Replace, virtualize, and reduce where appropriate.

Weatherstripping Doors: **1,000 kWh & 100 Therms**
Improve heating efficiency in winter and cooling efficiency in summer.

Power conservation: **1,000 kWh**
Turn off lights when not in use. Use motion sensors for lights frequently left on.

Sleep profiles on workstations: **1,000 kWh**
Less than 5% of the workstations did not have an acceptable sleep profile enabled.

Lighting & Insulation Audit: **4,000 kWh**
Inspect lighting upgrade candidates and prepare project ROI based on rebates from energy provider (SVP).

Workstation Upgrades: **100 kWh**
Recommissioned 3 PCs with new/high efficiency models.

HVAC maintenance: **100 Therms**
Assure optimum performance. (managed by Environmental Systems)

Other CSR Goals:

- Reclaim Used Equipment: Any ROOS equipment can be returned to Santa Clara factory for recycling. Incentives like free shipping may be available. Publicized online roos.com/contact, and on printed material like docs & service/training manuals.
- Increase recycling compliance with "unified" recycling bins located throughout the building that is used for plastic, aluminum and paper instead of separate bins.
- Supply "Green certified" office cleaner and post consumer recycled paper products in restrooms and kitchens and environmentally friendly cleaning chemicals.

[5] Potential Impacts were computed with the following calculators:
EPA's www.epa.gov/cleanenergy/energy-resources/calculator.html
CO2 Footprint Calculator: www.carbonify.com/carbon-calculator.htm

Future Green Projects

Name of Project — *Potential Impact*

"Leave Off" Stickers: **1,000 kWh**
Light switch plates to clearly identify where lighting can be reduced.

Virtual Trade Shows vs Real Trade Shows: **Saving 0.23 Tons of CO2**

Cloud Infrastructure: **5,000 kWh**
Hosted computing vs Onsite Server power consumption

Clean Living **Waste Reclaim**
Replacing all non-biodegradable products used in the break rooms like foam cups and plates to more biodegradable ones.

Sweater & Shorts Days: **500 Therms**
Wear warm clothing and leave temp down to 68 two days a week in Winter
Wear cool clothing and leave temp up to 76 two days a week in Summer

Lighting Reduction: **1,000 kWh**
Reduce lighting by removing bulbs from 4x fixtures to 2x. Perform recommendations from Energy Audit including retrofitting some light fixtures and adding motion sensors.

Land Care: **Hazardous Material Reduction**
Mulching and using non-toxic chemicals for lawn maintenance.

Purchase RECs to offset 100% GHG Emissions: **100% GHG Offsets**

Employee Activities

Recycle Program: 100% of recyclable material is collected in dedicated bins.

Green Waste: recycle all electronics that are not in use. (GreenMouse)

Annual Employee Training and Audits (Carpool, how to reduce paper, proper tire inflation, etc...)

Enabling mobile workforce: **2,000 kWh**
Provide smart phones, laptops and other materials for mobile and remote offices.

Web conference **Saving 2.91 Tons of CO2**
Instead of face to face meetings, use remote presence (video chat) for sales/support

Cascading CSR Notice **Reduce Scope 3 GHG**
Top 10 vendor CSR Questionnaire - Cascading requirement letter and questionnaire

Earth Hour
Turn off lights for an hour on March 26th at 8:30pm and encourage people to join. Send email to City of Santa Clara, Employees, Suppliers, Customers to encourage participation.

Vendor Letter and qualification:
Promote vendors who have their own Green programs on our roos.com/green page. Prefer "green" vendors by clearly marking them in our vendor contact databases to enable increased purchasing of equipment and services from preferred sources.

Compliance Enforcement

All local and national environmental laws, regulations and contractual requirements are followed by ensuring appropriate signs and labeling are posted. Employees are notified of changes to requirements via email and are required to attend annual safety training programs appropriate to their tasks. All vendors are certified and approved legal operations, only verified if suspected of violations.

Projects are reviewed by assigned personnel and milestones used to show progress.
OSHA - Computer Workstations & Material Safety Data Sheets (MSDS)

Employees are asked to complete the Green Audit & Survey
All locations (RI Headquarters in Santa Clara and remote offices) are included in this program.

Safety Program
All Employees should complete formal training inlcuding: workstation ergonomics, lifting, emergency plans, and distracted driving. Employees working on the production of RI systems should complete electronics safety, soldering iron, lighting, ventilation, lead exposure training courses. Employees who regularly ship equipment must learn about back safety, maintaining a safe working environment (i.e. no cluttered floors) and proper lighting.

"Green Team" awards given to RI employees annually to encourage innovation and participation.

Innovator - finds new and effective ways to meet or define goals
Grind - the person recognized for doing the most to lower consumption, increase reuse or do the most recycling @ RI Santa Clara
Guru - the person who proves the most aware of RI's current programs (answers most questions right, random drawing if tie)

Example "Green Team" Guru survey questions:

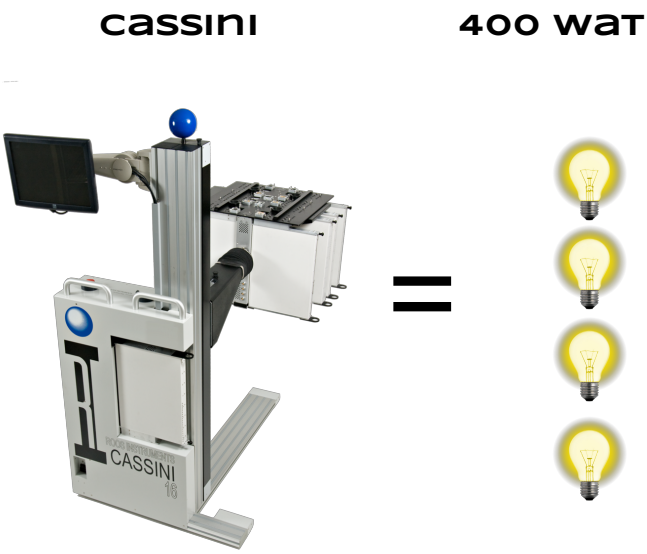
How many kWhs did ROOS consume last year?
How many Watts does a typical Cassini (8 TIMs) use in an hour?
What is the Thermostat set at right now?
How many Therms (Natural Gas) has RI used last year?
How many average total miles do RI employees collectively commute per day? (excluding visits from employees not located near Santa Clara)

Employee Training Resources

The ROOS training presentation includes an introduction "What is our CSR?", an Employee Survey/Audit, mandatory minimum training of 2hrs/year. Prize incentive to come up with a project that saves the most kWh or CO_2. Employees are instructed to "turn off" all lights (except where indicated) when you leave the room, including: bathrooms, office, and when locking up for the day. Carpooling is highly encouraged. The thermostat is not 72 °F all year round; 74 °F in warm months and 68 °F in cold months. Employees sent newsletter including links to "More Energy Saving Tips" online. Posters from "Recyclestuff.org" remind employees where to recycle various items. Occasionally "Bike to Work" incentives like free lunch is used to get hooked on cycling as normal transportation. Local Government Programs are used to educate and engage. Email newsletter includes topics like "How to Reduce paper at work" and "Dangers of distracted driving" OSHA's new distracted driving brochure explains to employers and supervisors the importance of preventing texting by their workers while driving. Texting while driving dramatically increases the risk of motor vehicle crashes, the leading cause of worker fatalities.

Disclosing Results

The Green Annual Report (this document) published online at roos.com/green includes ROOS Instruments' annual usage, goals, projects, analysis and refinements needed to the Corporate Social Responsibility program.



Greenhouse Gas (GHG) Emissions

Greenhouse Gas Emissions and Carbon Dioxide Equivalent (CO2 -e) are calculated using the GHG Corporate Protocol standard[6]. 0% of Scope 1 and 100% of Scope 2 GHG Emissions are offset by Renewable Energy Credits.

Total Scope 1 & 2 **16,328 kg CO2 -e**

Equivalent to 11,731 kg C02, 2.09 kg CH4, 2.09 kg N20

Scope1: Generated by ROOS Instruments
Includes RI vehicles, appliances (refrigerators), HVAC systems, facilities and landscaping.

2000 Tundra 4WD, 6 cyl, 3.4 L (Petrolium - Transportation)[7]	**4,445 kg CO2 -e**
2 Office Refrigerators (Leaking Refrigerant)[8]	**38 kg CO2 -e**
12 Air Conditioning Units (Leaking Refrigerant)[9]	**100 kg CO2 -e**
Natural Gas (Heating with Natural Gas): 2317 Therms[10]	**10,886 kg CO2 -e**
Facilities (Gas Lawn Care, Blower, etc.)[11]	**142 kg CO2 -e**

Scope 1 Total: **15,611 kg CO2 -e**

Scope2: Generated by electricity producers for ROOS Instruments (Silicon Valley Power)
100% renewable sources. Natural Gas usage is included in Scope 1.
Electrcity: 221,790 kwH **152,937 kg CO2 -e**

100% Offset by Renewable Energy Credits

Scope 2 Total: **0 kg CO2 -e**

[6] Scope1 GHG emissions calculation. http://www.ghgprotocol.org/calculation-tools/faq

[7] Annual mileage is 7,500 miles/year @ 15 mpg = 0.0667 gallons per mile = 500 gallons of gasoline per year

[8] KitchenAid Model: KSF5200EWHO, 5.125 oz of R134b, 0.145291306 kg
Kenmore Model: 106.9618412, 1992, 6.25 oz R12 0.17718452 kg = 0.322 kg total
Global Warming Potential Table HFC 134a, 1300 R404a, 3260 R407b, 2285 R407c, 1526 R410A, 1725 source:
http://www.epa.vic.gov.au/climate-change/carbon-management/Worksheet_1-Refrigerants.pdf

[9] GHG emissions from refrigerants (kg CO2-e) = Recharge capacity (kg) X Annual leakage rate x Global Warming Potential - 37.72 kg CO2 -e = 0.322 kg x 0.09 x 1300; Air conditioners/chillers Annual leakage rate = 0.09 (9%) - www.fueleconomy.gov

[10] 0.005 metric tons CO2/therm - http://www.epa.gov/cleanenergy/energy-resources/refs.html

[11] According to the EPA, and one gas-powered lawn mower emits as many pollutants as 8 new vehicles driving 55mph for the same period of time. 30 min per week, for 12 months, equals 16 hours, approx 16 gallons of gas.
http://www.epa.gov/cleanenergy/energy-resources/calculator.html

Energy Usage Details

Electricity generated by Silicon Valley Power

Conservation efforts are monitored with vendor supplied meters and (where appropriate) audits at the plug with a "Kill-a-Watt" monitoring device or built-in metering device.

By Year

2005[12]	2006	20007	2008	2009	2010	**2011**
200,114	202,634	210,240	230,975	218,975	208,594	**209,113**
-1.95%	1.24%	3.62%	8.98%	-5.51%	-4.95%	**0.25%**

2011 By Month

Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
12677	15176	12833	13483	16732	15293	20855	22536	23666	18595	17474	14451
-22%	-6%	3%	5%	-2%	20%	-6%	-17%	-7%	0%	7%	14%

Basis for monthly % is the previous year (2010)

Natural Gas provided by PG&E

Conservation efforts are monitored with vendor supplied meters.

By Year

2008	2009	2010	2011
2179	1881	1982	2317
N/A	-16%	5%	14%

2011 By Month

Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
363	351	212	87	130	34	18	16	17	91	335	663
-52%	-26%	33%	-13%	217%	209%	350%	1500%	467%	250%	232%	35%

Basis for monthly % is the months of peak demand (2008)

[12] Started purchasing Renewable Energy Credits in 2005