

ASES and the Web / A Road Trip  
Keya Lea Horiuchi  
Oct 2013

Others have taken road trips.



# What Will Be Covered?

- Look our world and new era of communication
- The value of ASES
- How online advertising works
- What SEO is and why it's important
- Example of how Solar Today would go online
- Supporting Chapters and Business members
- Generating revenue

# How Has Media Changed from 1954 to 2013?

- Radio



Dominated by Broadcasters

- TV



Dominated by Broadcasters

- Internet

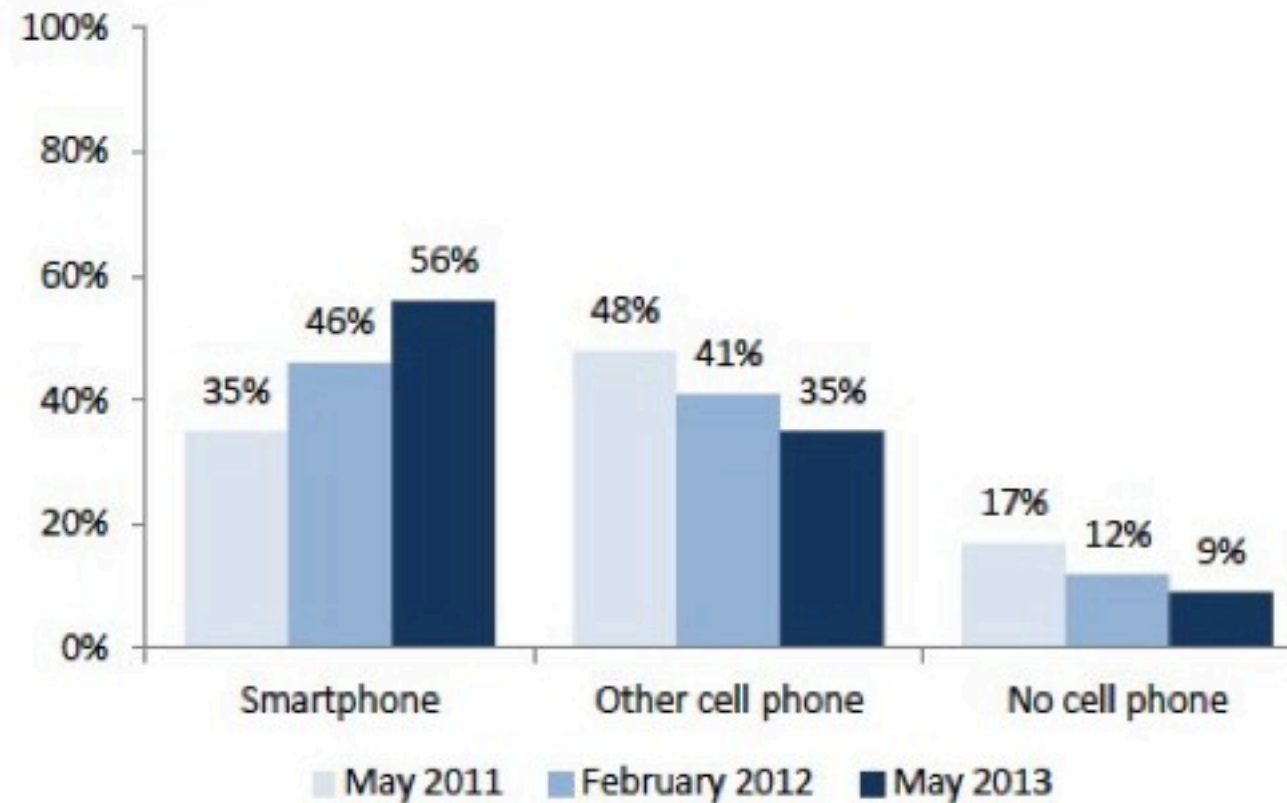


**Dominated by Content**

**It just has to be found.**

## Changes in smartphone ownership, 2011-2013

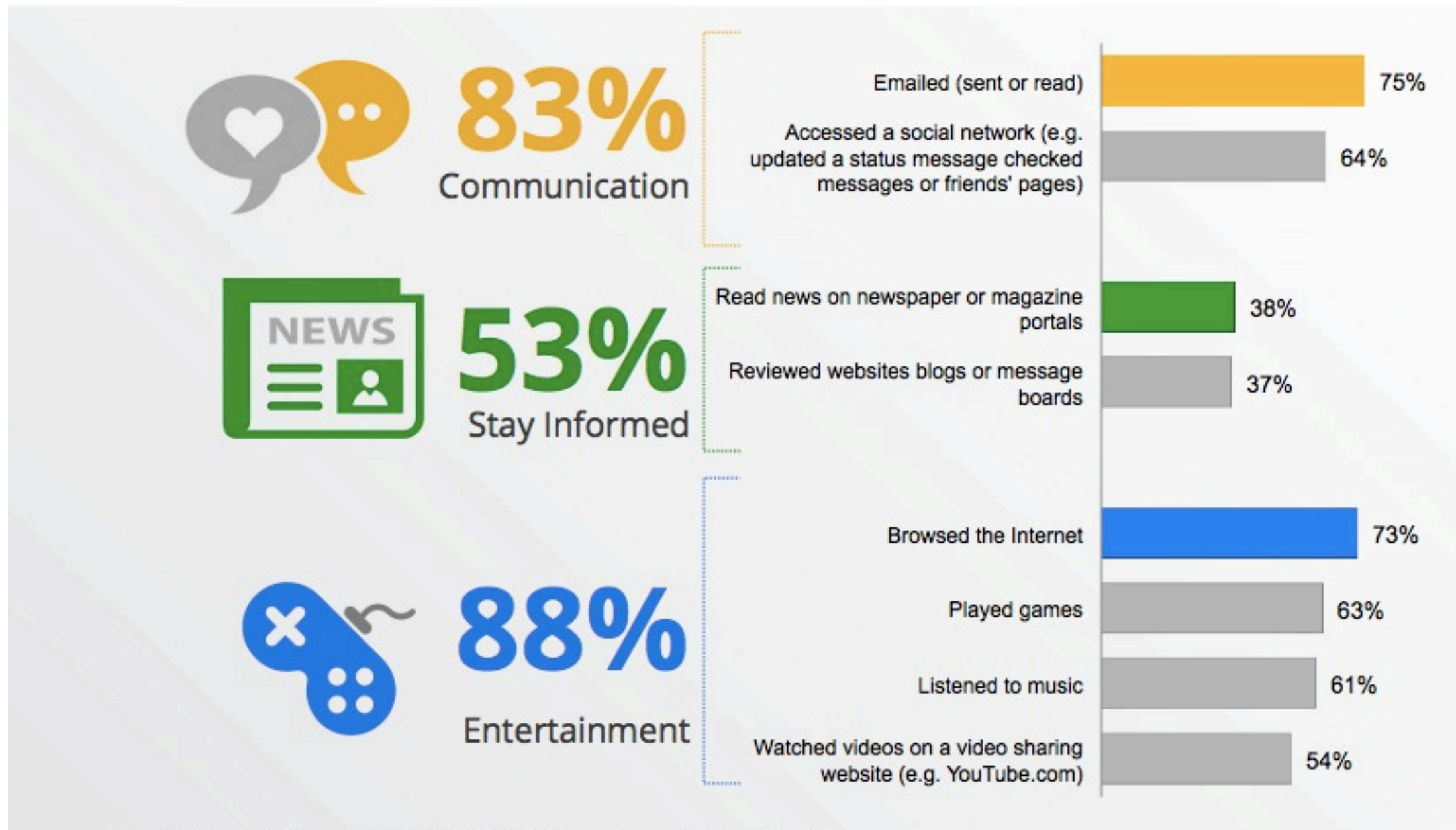
% of all U.S. adults who own...



**Source:** Pew Research Center's Internet & American Life Project April 26-May 22, 2011, January 20-February 19, 2012, and April 17-May 19, 2013 tracking surveys. For 2013 data, n=2,252 adults and survey includes 1,127 cell phone interviews. All surveys include Spanish-language interviews.



# Smartphones are a Multi-Activity Portal



Source: Our Mobile Planet: United States, Google/Ipsos OTX MediaCT, US, May 2012

Base: Private smartphone users who use the internet in general, Smartphone n= 1,000

Q23: Which of the following activities do you do with your smartphone? Please indicate whether you ever do this at all.

[http://ssl.gstatic.com/think/docs/our-mobile-planet-united-states\\_research-studies.pdf](http://ssl.gstatic.com/think/docs/our-mobile-planet-united-states_research-studies.pdf)

# Smartphone Users in the World

**80%**

of the world's  
population now has  
a mobile phone



Number of  
Smartphones in  
U.S

**91.4 Million**



Mobile Phones in  
World

**5 Billion**



Out of  
which only

**1.08 Billion**  
are smart phones



## Smart Phones are Connected to the Internet All the Time

- Having a Smart, Accessible Web Presence is more important than ever
- Allowing people to find content and comment on it, share it with others is key in an interconnected world.



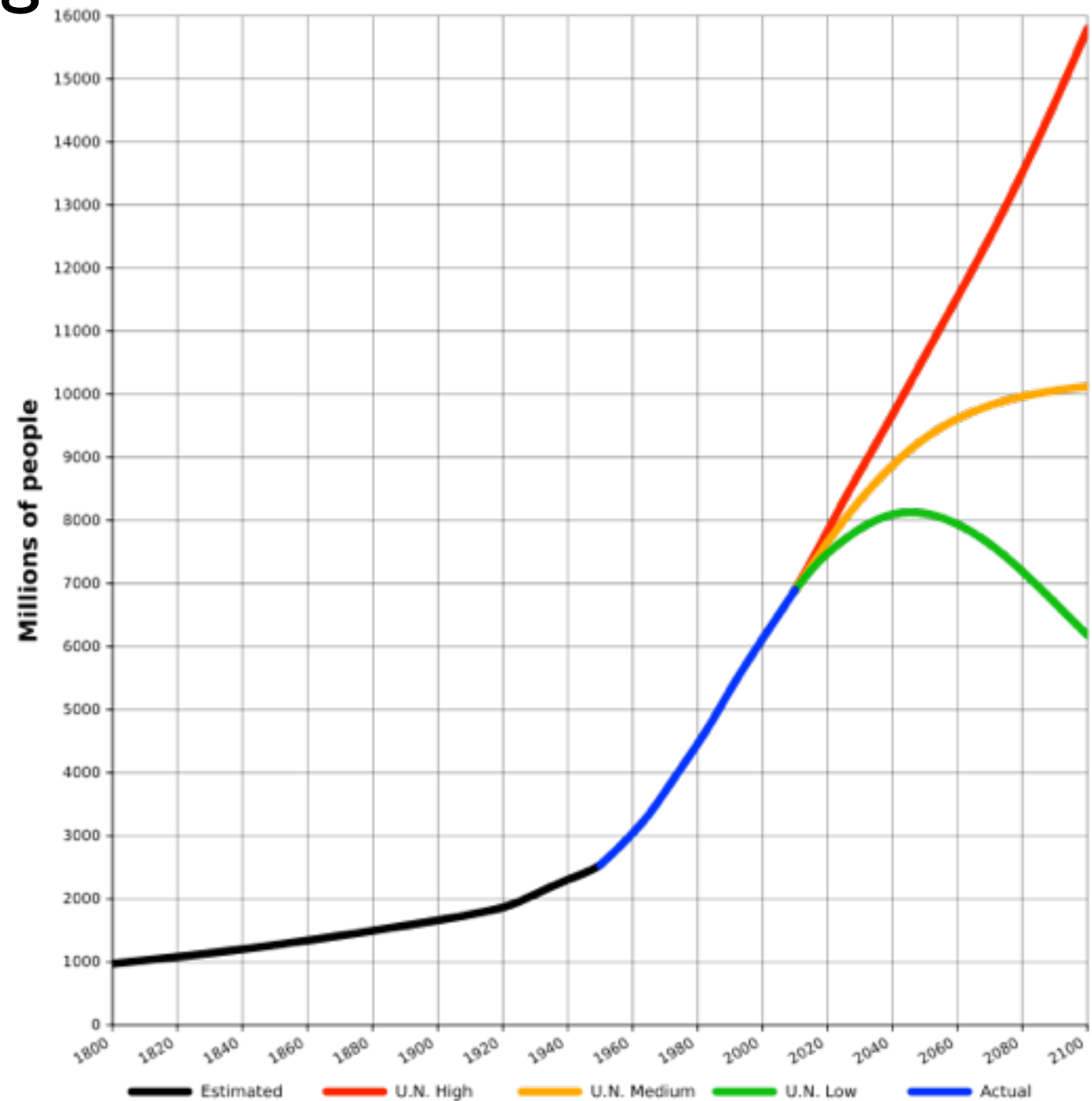
# Mission ASES

To inspire an era of energy innovation and speed the transition to a sustainable energy economy.



# Our World

7 Billion people and growing







What does the  
world need?




Energy

# What Does ASES Have?

- Almost 60 Years of valuable solar, renewable & sustainable energy information.
- It's the information that is missing from the internet.
- It's incredibly valuable as people seek sustainable energy sources. People in developing countries have smart phones and look for information. Why not serve up (clean!) energy information?
- Information that people look for (via search engines) has tremendous value to advertisers.

# Web Ads & Monetization



AdSense products	
Benefits	
How it works	<div><p><b>You make your ad spaces available</b></p><p>You make your website ad spaces available by pasting ad code on your site, and choose where you want the ads to appear.</p></div> <div><p><b>The highest paying ads appear on your site</b></p><p>Advertisers bid to show in your ad spaces in a real-time auction. The highest paying ad will show on your site.</p></div> <div><p><b>You get paid</b></p><p>We handle the process of billing all advertisers and networks for the ads on your site, to make sure you receive your payments.</p></div>



SUBVERSIVE AND TROUBLE-MAKING. THE INTERVIEW TOOK PLACE THROUGH encrypted online communications.

Mr. Snowden, 30, has been praised by privacy advocates and assailed by government officials as a traitor who has caused irreparable harm, and he is [facing charges under the Espionage Act](#) for leaking the N.S.A. documents to the news media. In the interview, he said he believed he was a whistle-blower who was acting in the nation's best interests by revealing information about the N.S.A.'s surveillance dragnet and huge collections of communications data, including that of Americans.

He argued that he had helped American national security by prompting a badly needed public debate about the scope of the intelligence effort. "The secret continuance of these programs represents a far greater danger than their disclosure," he said. He added that he had been more concerned that Americans had not been told about the N.S.A.'s reach than he was about any specific surveillance operation.

"So long as there's broad support amongst a people, it can be argued there's a level of legitimacy even to the most invasive and morally wrong program, as it was an informed and willing decision," he said. "However, programs that are implemented in secret, out of public oversight, lack that legitimacy, and that's a problem. It also represents a dangerous normalization of 'governing in the dark,' where decisions with enormous public impact occur without any public input."

Mr. Snowden said he had never considered defecting while in Hong Kong, nor in Russia, where he has been permitted to stay for one year. He said he felt confident that he had kept the documents secure from Chinese spies, and that the N.S.A. knew he had done so. His last target while working as an agency contractor was China, he said, adding that he had had "access to every target, every active operation" mounted by the N.S.A. against the Chinese. "Full lists of them," he said.

"If that was compromised," he went on, "N.S.A. would have set the table on fire from slamming it so many times in denouncing the damage it had caused. Yet N.S.A. has not offered a single example of damage from the leaks. They haven't said boo about it except 'we think,' 'maybe,' 'have to assume' from anonymous and former officials. Not 'China is going dark.' Not 'the Chinese military has shut us out.'"

An N.S.A. spokeswoman did not respond Thursday to a request for comment on Mr. Snowden's assertions.

Mr. Snowden said his decision to leak N.S.A. documents developed gradually, dating back at least to his time working as a technician in the Geneva station of the [C.I.A.](#) His experiences there, Mr. Snowden said, fed his doubts about the intelligence community, while also convincing him that working through the chain of command would only lead to retribution.

7. [CULTURE](#)  
The Republican Surrender



8. [PAUL KRUGMAN](#)  
The Damage Done



9. Obama's Edge Over G.O.P. Is Still Undeclared After Victory in Standoff



10. Booker, Winning Rocky Senate Bid, Gets a Job to Fit His Profile

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International New York Times

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OF THE HIGHRISE"

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using Google App Engine

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Ed · New York

Without Edward Snowden's disclosures, we citizens would have scant idea of our government's illegal spying activities against its own people. I'm thankful to Snowden for rendering this invaluable service to all concerned Americans.

Oct. 17, 2013 at 6:59 p.m. · RECOMMENDED 286



Joe Van Steen · CA

There is a huge problem with the activities of the NSA, but a lot of what is happening was clear and obvious to anyone who bothered to read the news



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☒ Snowden, Edward J

☒ National Security Agency

☒ Surveillance of Citizens by Government

☒ Classified Information and State Secrets

Ads by Google

[what's this?](#)

#### **2013 Best Skin Tighteners**

An Unbiased Review List of The Top

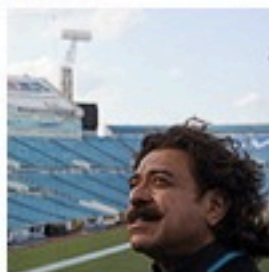
Performing Skin Tighteners In 2013

[www.SkinCareSearch.com/FaceLifting](http://www.SkinCareSearch.com/FaceLifting)

#### INSIDE NYTIMES.COM



##### SPORTS »



Owner of Jaguars and Fulham Seeks Fusion

##### MOVIES »



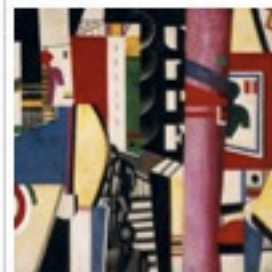
The Screen Is Silver, but the Seats Are Gold

##### OPINION »

#### Op-Ed: Africa's Trauma Epidemic

Billions of dollars have poured into the continent to fight killer diseases. But the most basic killer, injury, is neglected.

##### ARTS »



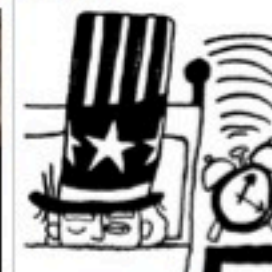
"Léger" at the Philadelphia Museum of Art

##### TRAVEL »



Good Beer in Berlin? Finally, Yes

##### OPINION »

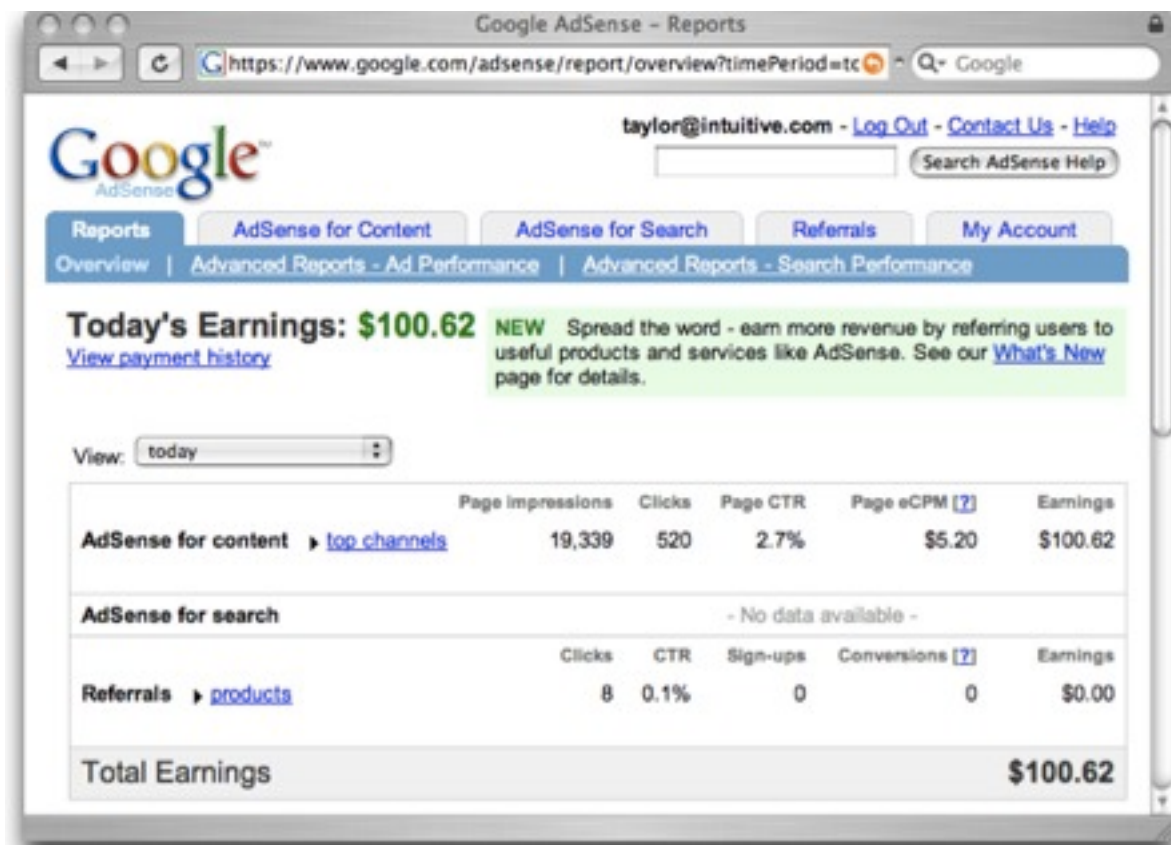


Letters: Crisis Over, Everyone Back to Work



# One reason why people blog:

Creating content that people are looking for  
and place ads within it.



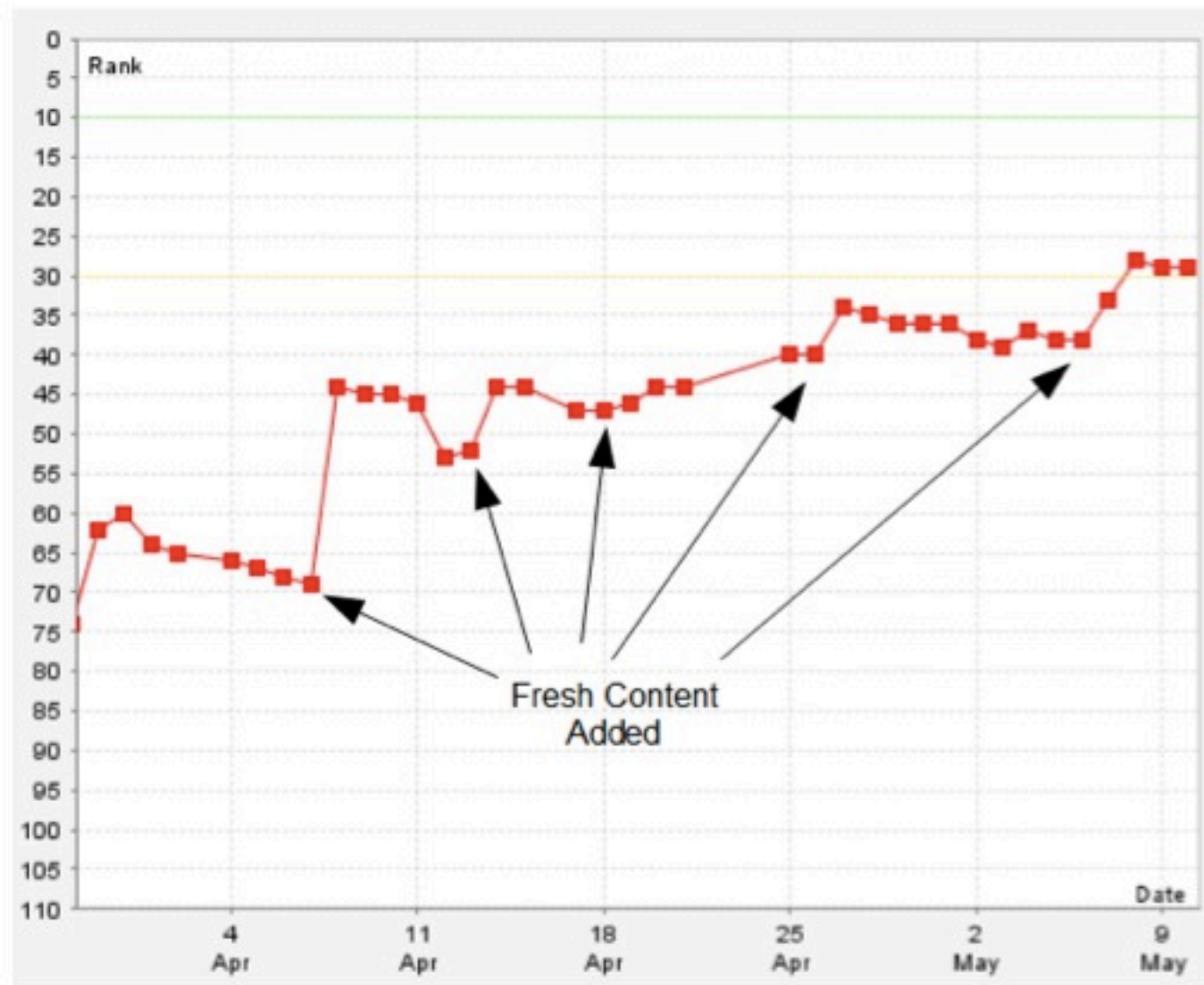
The screenshot shows the Google AdSense Reports interface. At the top, it says 'Google AdSense - Reports' and 'taylor@intuitive.com'. Below the navigation bar, 'Today's Earnings: \$100.62' is highlighted in green. A table below shows performance metrics for 'AdSense for content', 'AdSense for search', and 'Referrals'. The 'AdSense for content' row shows 19,339 page impressions, 520 clicks, a 2.7% CTR, and \$100.62 in earnings. The 'AdSense for search' row shows no data available. The 'Referrals' row shows 8 clicks, a 0.1% CTR, and \$0.00 in earnings. The 'Total Earnings' row shows \$100.62.

	Page Impressions	Clicks	Page CTR	Page eCPM	Earnings
AdSense for content ▶ <a href="#">top channels</a>	19,339	520	2.7%	\$5.20	\$100.62
AdSense for search	- No data available -				
Referrals ▶ <a href="#">products</a>		8	0.1%	0	\$0.00
<b>Total Earnings</b>					<b>\$100.62</b>

August 2011

September 2011

Mar 25	Payment issued - <a href="#">details</a>		(\$576.59)	
Mar 31	Earnings (Mar 1 - Mar 31) - <a href="#">details</a>	\$375.53		
Balance at end of March ?				\$375.53
Apr 28	Payment issued - <a href="#">details</a>		(\$375.53)	
Apr 30	Earnings (Apr 1 - Apr 30) - <a href="#">details</a>	\$461.26		
Balance at end of April ?				\$461.26
May 25	Payment issued - <a href="#">details</a>		(\$461.26)	
May 31	Earnings (May 1 - May 31) - <a href="#">details</a>	\$744.64		
Balance at end of May ?				\$744.64
Jun 24	Payment issued - <a href="#">details</a>		(\$744.64)	
Jun 30	Earnings (Jun 1 - Jun 30) - <a href="#">details</a>	\$636.02		
Balance at end of June ?				\$636.02
Jul 26	Payment issued - <a href="#">details</a>		(\$636.02)	
Jul 31	Earnings (Jul 1 - Jul 31) - <a href="#">details</a>	\$806.52		
Balance at end of July ?				\$806.52
Aug 24	Payment issued - <a href="#">details</a>		(\$806.52)	
Aug 31	Earnings (Aug 1 - Aug 31) - <a href="#">details</a>	\$821.88		
Balance at end of August ?				\$821.88
Sep 26	Payment issued - <a href="#">details</a>		(\$821.88)	
Sep 30	Earnings (Sep 1 - Sep 30) - <a href="#">details</a>	\$826.35		
Balance at end of September ?				\$826.35



ASES Has Great Content Already

# ASES Has **Lots** of Content

- Information the world needs
- Research to share with others, build upon, drive innovation
- Valuable content to advertisers
- Give value to solar advertisers. Through basic search (since every article and paper is SEO) more people see content and learn about business sponsors.
- ASES has more options. All the content is dynamic.



# **Leverage Content's Value**

**Build Up and Support Chapters,  
Business and Professional Membership  
While Fulfilling Mission**

**To inspire an era of energy innovation and speed the  
transition to a sustainable energy economy.**

## The First Page of Mobile Search Results is Key

61%

only look at the **first page of results** when conducting a search on their smartphone



Source: Our Mobile Planet: United States, Google/Ipsos OTX MediaCT, US, May 2012

Base: Private smartphone users who use the internet in general and who are searching via search engine, Smartphone n= 962

Q32: How many search result pages do you look at, when conducting a search with your ... ?





**SOLAR TODAY**  
LEADING THE RENEWABLE ENERGY REVOLUTION  
SUNSHOT: Is a Buck a Watt Feasible? page 10  
March 2011  
solartoday.org

**SOLAR TODAY**  
LEADING THE RENEWABLE ENERGY REVOLUTION  
> DIFFERENTIATION AHEAD for PV Modules page 10  
March 2011  
solartoday.org

**SOLAR TODAY**  
LEADING THE RENEWABLE ENERGY REVOLUTION  
> Installed PV Costs Plummet page 28  
solartoday.org November/December 2011

**SOLAR TODAY**  
LEADING THE RENEWABLE ENERGY REVOLUTION  
> HOW MUCH SOLAR ELECTRIC SYSTEM DO YOU NEED? page 40  
solartoday.org April 2011

**SOLAR TODAY**  
LEADING THE RENEWABLE ENERGY REVOLUTION  
> Will Japan Pioneer the Smart Grid? page 12  
June 2011  
solartoday.org

**SOLAR TODAY**  
LEADING THE RENEWABLE ENERGY REVOLUTION  
> HOW MONITORING CAN HELP MAKE THE N  
Best prac



# Google Search Algorithms

How does it figure out which website to show first?

- There are a large number of factors:
- How old is the website?
- How many other sites are linking in?
- How long do people stay on the site?
- Does the url match the content?
- Does the meta data match up with the content?
- Are the images tagged with the same key words?
- How frequently does the text show up within the content?
- Do the title tags match up with the <p> tags that follow?
- Are there broken links within the page?
- How often does this site generate content? Etc...

It's actually a super secret complex algorithm that frequently changes.

Pdfs can show up within searches, but often do not.

About 87,100,000 results (0.35 seconds)

Ads related to **solar panel** ⓘ

**Residential Solar Panels** 1 (219) 554 8854  
[www.korellsroofinginc.net/](http://www.korellsroofinginc.net/) ▾  
 Chicago Area **Solar Roofing**. Contact Us Today.  
[gallery](#) - [map](#)

**Residential Solar Panels** 1 (773) 273 6991  
[www.chicagoflatroofrepair.net/](http://www.chicagoflatroofrepair.net/) ▾  
 Chicago Area **Solar Roofing**. Contact Us Today.  
[gallery](#) - [map](#)

**Residential Solar Panels** - lakefrontconstruction.net  
[www.lakefrontconstruction.net/](http://www.lakefrontconstruction.net/) ▾  
 We Install **Solar Pannels** on Your Roof. Call Now For an Estimate.

**Solar panel** - Wikipedia, the free encyclopedia  
[en.wikipedia.org/wiki/Solar\\_panel](http://en.wikipedia.org/wiki/Solar_panel) ▾

A **solar panel** is a set of solar photovoltaic modules electrically connected and mounted on a supporting structure. A photovoltaic module is a packaged, ...  
 Solar cell - Suntech Power - Photovoltaic system - Sharp Solar

**Solar Panels** - Amazon.com  
[www.amazon.com/b?node=3236381](http://www.amazon.com/b?node=3236381) ▾

Results 1 - 24 of 4608 - Online shopping for **solar** and wind energy accessories ...

Goal Zero 14101 Luna USB LED Stick Light. \$11.99  
 RENOGY 100 Watt 100w Monocrystalline Photovoltaic PV Solar ... \$209.99

**Residential Solar Panels For Your Home — SunPower**

[us.sunpowercorp.com/homes/products-services/solar-panels/](http://us.sunpowercorp.com/homes/products-services/solar-panels/) ▾

It's a fact: Residential **solar panels** from SunPower produce the most energy of all **solar panels** on the market. Because SunPower home **solar panels** are so ...

**Solar Panel Kit - Harbor Freight Tools**

[www.harborfreight.com/solar-panel-kit-45-watt-68751.html](http://www.harborfreight.com/solar-panel-kit-45-watt-68751.html) ▾

**Solar panel** kits cost less everyday at Harbor Freight. This versatile 45W **solar panel** kit includes 3 15W **solar panels**, voltage regulator and mounting hardware.

**Buy Solar Panels - Kyocera, Mitsubishi, Sanyo, Sharp, REC Solar ...**

[www.wholesalesolar.com/solar-panels.html](http://www.wholesalesolar.com/solar-panels.html) ▾

25+ Items - Compare prices and buy all brands of **solar panels** for home ...

Key Points: • Tight power tolerance • Rigorously tested high efficiency ... Taiwan.  
 Key Points: • Each panel flash tested in STC conditions • Reliable ... USA

Solar Panels by the Pallet - ET Solar P672300WB 300 ... - ET-P660250WB - Sanyo

**News for solar panel****A Staff of Robots Can Clean and Install Solar Panels**

New York Times - 4 days ago

With the price of **solar panels** falling, the industry is looking to labor savings to achieve its goal of make solar energy cheaper than natural gas.

Panasonic will Exhibit New HIT **Solar Panels** at Solar Power International 2013  
 Wall Street Journal - 1 day ago

**Images for solar panel** - Report images**Shop for solar panel on Google**

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**Goal Zero Boulder 30 S...**  
**\$1259.95**  
 Powerful Pro...



**Goal Zero Boulder 30 S...**  
**\$499.95**  
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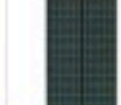
**15-Watt Solar Panel by Batt...**  
**\$99.95**  
 BatteryMart.c...



**GTO FM123 - 10 Watts Sola...**  
**\$194.20**  
 Gate Openers...



**Canadian Solar CS6P-2...**  
**\$212.52**  
 CivicSolar



**Alternative Energy (Solar...**  
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## Ads ⓘ

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[www.lowes.com/](http://www.lowes.com/) ▾

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[www.solarhome.org/](http://www.solarhome.org/) ▾

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[www.homedepot.com/](http://www.homedepot.com/) ▾

★★★★★ 2,805 seller reviews

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 The Home Depot. Shop and Save Now.

**Kyocera 245W Solar Panels**

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## advances solar technology | analysis | markets

### Dow Powerhouse: Evolving Toward High Efficiency



**D**ow Solar's Powerhouse building-integrated photovoltaic (BIPV) shingles made their commercial debut in Denver last fall, but the company was coy about technical specifications. We sat down with CEO Jane Palmieri in February to learn more.

First of all, Palmieri said, future growth depends on solar being sold as a consumer product. So Powerhouse will be sold not through traditional solar installers, but through mainstream roofers and homebuilders. It is designed to handle like



Jane Palmieri

a conventional asphalt shingle — tossed onto a roof in bundles and nailed down through a water-tight membrane. And so, for the first generation of production, Dow chose not a rigid, relatively fragile crystalline silicon technology, but a copper-indium-gallium-selenide (CIGS) thin film on a light, flexible plastic substrate. Dow buys the plastic modules from existing CIGS manufacturers, then laminates them into a standard 12-by-36-inch shingle shape. Palmieri notes that the CIGS technology is improving rapidly, and the company hasn't

announced a specific efficiency because that's been a moving target. It's gone from 9 percent to more than 11 percent within the past year, and is headed for 13 percent as the company ramps up to full scale production at a larger plant in Midland, Mich.

At 11 percent, a three-square-foot shingle would produce 25 peak watts. The homebuilding company D.R. Horton is now installing 3-kilowatt (kW) Powerhouse systems on new-construction homes in the Denver area. That would require 120 shingles covering 360 square feet (33 square meters).

Powerhouse shingles plug together. The only cable run required is off the end of the string to a central inverter (from Kaco or Emerson). The first three retail dealers, who plan to sell the product for reroofing projects, are Academy Roofing (Denver), BMM Roofing (Frederick, Colo.) and D&D Roofing (Commerce City, Colo.). And, according to Palmieri, CIGS is not the final word. Powerhouse may evolve into a high-efficiency gallium-arsenide product. — SETH MASIA

### Greening WREF 2012

**T**he Colorado Convention Center (CCC) — site of the World Renewable Energy Forum (WREF 2012), May 13-17 — has been generating solar power since 2008. The 300-kW array on the south roof (see cover photo) uses 1,310 230-watt SunPower modules feeding three SatCon three-phase inverters. Installed with a nongenerating ballasted rack by Namaste Solar, the system provides 14 percent of the building's electricity year-round, and up to 23 percent during air-conditioning season (see the data log at [bit.ly/4M6Gd5](http://bit.ly/4M6Gd5)). Another 25 percent of the building's electric load is carried by wind power.

LEED: In May 2010, the CCC received LEED Existing Building Operations and Maintenance certification.

**Waste and Water:** CCC has an advanced waste-handling process that diverts 46 percent of its refuse from landfill to compost, recycling and donation programs. In Colorado's high-prairie climate, water use is a critical issue, so the CCC landscaping uses native drought-resistance plants to reduce irrigation load by 75 percent. Water-saving measures are used throughout the complex.

**Air Quality and Carbon Offsets:** Drivers of delivery and passenger vehicles should note that Denver's anti-idling ordinance is strictly enforced. Visitors are invited to use the two Bike Share stations ([bicycle.com](http://bicycle.com)). And attendees may purchase carbon offsets on site to offset the carbon footprint of travel to WREF 2012.



Namaste Solar will lead an in-depth review of the Colorado Convention Center's 300-kW solar project at WREF 2012 forum ([wref2012.org](http://wref2012.org)).

### SolarCity Launches Home Energy Loans

**S**olarCity in March unveiled a home loan program designed to reduce or eliminate the up-front costs of energy efficiency upgrades nationwide. The company offers a comprehensive home energy evaluation to diagnose the cause of high utility bills and energy loss, and a range of upgrades to reduce energy costs and improve indoor air quality.

SolarCity introduced energy efficiency services in 2010 and has launched more than 5,000 efficiency projects in Arizona, California, Colorado, Oregon, and Texas (out of 33,000 energy projects across the

country). The energy efficiency services now moves to Connecticut, Maryland, Massachusetts, New Jersey, New York and Washington, D.C.

A proprietary software package performs billions of calculations during each home evaluation to produce a comprehensive overview of upgrade options, including air infiltration, insulation, heating/cooling and duct leakage. The loan program is underwritten by Admiral Bank of Boston. Packages include a one-year "Save Now, Pay Later" option, or a three- or 10-year "Pay As You Go" option.

### By BILL SCANLON Growing Silicon Crystals Directly on Foil

**A**mpulve Corp., working with the Oak Ridge National Laboratory (ORNL) and the National Renewable Energy Laboratory (NREL), has developed a chemical vapor deposition process to grow silicon on inexpensive foil, creating cells just thick enough — 10 microns or less — to convert most of the solar energy into electricity. The process eliminates the waste involved in sawing wafers from massive silicon boules. The company has built a pilot production line in the Process Development Integration Laboratory (PDIL) at NREL.

A team of NREL scientists, including Howard Branz and Chaz Teplin, in 2005 developed a way to thicken silicon wafers with a perfect crystal coating. A hot tungsten filament decomposes the silane gas at about 700°C (1,292°F), allowing silicon layers to deposit directly onto the substrate.

Then in 2007, visiting investors from Battelle Ventures asked Branz and Teplin whether they could use a breakthrough at ORNL, called RABITS (rolling-assisted biaxially textured substrates). If metal foil is to work as a substrate, it must be able to act as a seed crystal so the silicon can grow on it with the correct structure. The RABITS process forms crystals in the foil that are correctly oriented to receive the silicon atoms and lock them into just the right positions.

Using the correct intermediate buffer layers to coat the foil substrates, the researchers were able to replicate the desired foil crystal structure in the silicon layer grown epitaxially over metal foil.

Battelle Ventures and Innovation Valley Partners then licensed Ampulve, and established a \$500,000 cooperative research and development agreement (CRADA) with PDIL, and a similar agreement with ORNL. "The company now has 13 employees and 100,000 sq ft of manufacturing space and is currently working with

22 sponsored researchers from two national labs.

"We have the potential to produce a 15 percent efficient solar cell at less than 50 cents per watt with a fraction of the capital investment of other venture-funded [photovoltaic] companies," said Ampulve CEO Steven Hane. "And that's due to our R&D collaborations with the national labs."

The production line at PDIL consists of half a dozen vacuum chambers where foils are overcoated with buffer and silicon layers. It was built to Ampulve's specifications by Roth & Rau Microsystems of Germany. Quartz lamps heat metal foils to 850°C (1,562°F) and the foils are coated with

the necessary buffer layers. After transfer to a specially designed chamber, the key silicon layers are grown. The silicon is then exposed to atomic hydrogen to improve its electronic properties. Finally, solar cell junction and electrical contacts are developed.

"The main thing is that we can grow high-quality silicon layers very fast and without putting much energy into the process. That means the solar cells can turn out much cheaper than the wafer-based cells," said Branz.

"Our process goes directly from gas to the epitaxial silicon phase, bypassing the growth and sawing phase," said Mike Colby, Ampulve's director of planning and logistics. "The goal is to achieve the crystal silicon performance that until now focused on thicker wafers — and without having to use a 1,400°C (2,552°F) furnace."

Bill Scanlon is a writer in the Public Affairs Office at NREL.



Ampulve pilot production line at NREL grows high-quality silicon wafers directly from silane gas, bypassing the wasteful sawing process.



# Articles become different web pages / urls so specific content can be found.

<http://solartoday.org/05/2012/dow-powerhouse-evolving-toward-high-efficiency>

Dow Solar's Powerhouse building-integrated photovoltaic (BIPV) shingles made their commercial debut in Denver last fall, but the company...



Image tags: Dow Solar shingles, building integrated photovoltaics, BIPV, roofing

Alt text / Image caption: Dow Solar shingles are a type of PV that can be integrated into a building roof.



Image tag: Jane Palmieri, Dow Solar

<http://solartoday.org/05/2012/greening-wref-2013>

The Colorado Convention Center (CCC) - site of the World Renewable Energy Forum (WREF), May 13 - 17 has been generating solar power since 2008. The 300 kW array on the south roof...

<http://solartoday.org/05/2012/solarcity-launches-home-energy-loans>

SolarCity in March unveiled a home-loan program designed to reduce or eliminate upfront costs of energy-efficient upgrades nationwide. The company offers a comprehensive home-energy evaluation to diagnose the cause of high utility bills...

<http://solartoday.org/05/2012/growing-silicon-crystals-directly-on-foil>

Ampulse Corp., working with the Oak Ridge National Laboratory (ONRL) and the National Renewable Energy Laboratory (NREL) has developed a chemical vapor deposition process to grow silicon on inexpensive foil, creating cells just thick enough - 10 microns or less - to convert most of the solar energy into electricity...

Tag: Bill Scanlon

Alt text / Image tag: Growing silicon wafers from silane gas, NREL





## Louisianan Lights the Way


**A**fter Hurricane Katrina hit the Gulf Coast in 2005, most people were scrambling to get out of New Orleans. Jeff Shaw, however, was doing everything he could to get in.

With the help of a state representative, Shaw, executive director of the Louisiana Solar Energy Society (LSES), and Bill Ball, a fellow solar enthusiast from Arkansas, were able to tow Ball's 2-kilowatt (kW) solar trailer safely through the post-storm chaos to St. Bernard's Parish. The trailer then powered the port authority there for months, allowing the city to receive much-needed supplies.

For Baton Rouge resident Shaw, 53, the decision to help was an easy one. After all, Shaw owes his interest in solar to Louisiana's frequent power outage-inducing hurricanes. "I've been a sailor for 30 years, and I would use solar to power things on my boat," he said. "When hurricanes would hit, we'd lose power for weeks at a time. So I thought, why don't I do the same thing I've been doing on my sailboat?"

But he didn't stop there. In the last 10 years, Shaw has worked to make Louisiana one of the friendliest states in the nation for solar. Shaw helped write the state's net-metering statute, which passed in 2003. He

GULF SOUTH SOLAR



Jeff Shaw helped install solar systems for Brad Pitt's Make It Right Foundation in New Orleans. His reward: A photo op and some quality time with the celebrity.

**Jeff Shaw's advice for fellow solar advocates:**

- **Study what's been done to promote solar in neighboring states.**

"Take the good from what you learn from the best and then apply it to what you're doing in your own state."

- **Get familiar with your state's legislative process.** "I went to a legislative session to learn about metering, and I said, 'OK, write the law.' I'm an engineer, not a lawyer. I write a law, and I said, 'Yes, you're a citizen. And you write a law.'"

- **Start a chapter in your area and educate others.** "I went out there and I said, 'I'm up to work on this.'"

ed organize support for the 2007 passage of generous state solar incentives, including 50 percent rebates on solar

# Bring Value Back into ASES Membership

- Within web redesign, prominent placement
- If have own server (dedicated server) can place as many domains as you want. (Will need it to host massive content.)
- Can host chapters websites on server
- Guide chapters to get their information online in a SEO manner, help them get the solar goodness to their communities.
- Support professional / business members by leveraging great content / massive views / search engines serving information - their business information can also be seen.







# Members

What do people get in exchange?  
What are they supporting?

- Professional / Business Members \$89 - Listings in a way that benefits them
- HTML & Geolocation. Logic that can show certain ads based upon browser location.
- Can submit articles for publication.
- Build value into ASES membership

# Web Server

ases.org

renewable.org

mnrenewables.org

al-solar.org

- Service to the chapters
- Chapters keep full control over the website
- Help with setup give training, how to maintain, get their information out, make SEO, surrounding community can find their events, calendar widgets, share info how to support

# Advertisers want Valuable Info

- People are interested in clean solar and renewable energies.
- They are searching on Google, on their computers and phones.
- Google text-based ads are smart enough to insert relevant advertising on web pages

# ASES Makes Revenue

Less people watching TV, advertisers trying to reach target audience. (Insert pict of person w. ipad)

- Great content - Lots and lots of it
- Embedded advertisements
- Solar / Renewable / Business Online Advertising
- Chapters keep whatever revenue their site makes



# Open Source vs. Closed Systems



The image is a screenshot of the Mozilla website homepage. At the top is a dark blue navigation bar with the Mozilla logo and links for Products, Add-ons, Support, Community, and About. Below the navigation bar, the main heading reads "A Better Way to the Web" in a large, white, serif font. Underneath this heading is a sub-headline: "Or, what an open source community-powered browser can do for you." To the right of the heading is a vertical list of links: Products / Firefox, Features, Performance, Security, Customization, 100% Organic Software, Tips & Tricks, Videos, and Fastest Firefox. In the center of the page is a large illustration of a pink, open ice cream tray containing several colorful, stylized faces of people. Below the illustration, the text "What is organic software?" is displayed. Further down, a paragraph explains the term "organic software" and mentions Firefox. At the bottom right, there is a section titled "Get Firefox 3.5" with a link to download the browser, accompanied by the Firefox logo.

mozilla

Products Add-ons Support Community About

## A Better Way to the Web

Or, what an open source community-powered browser can do for you.

Products / Firefox

- Features
- Performance
- Security
- Customization
- 100% Organic Software
- Tips & Tricks
- Videos
- Fastest Firefox

### What is organic software?

As software companies go, we're a little unusual. We use the term 'organic software' to sum up the various ways we're different from the other guys:

Our most well-known product, Firefox, is created by an international movement of thousands, only a small percentage of whom are actual employees.

Get Firefox 3.5

3.5.5, English (US), Mac OS X (17.6MB)



# Open Source vs. Closed Systems

## What is Open Source?



This might sound crazy at first, but bear with us: **we believe that the more people who know our “secrets”, the better.**

So, we exposed the Firefox source code – the very nuts & bolts of what makes it all work – to the world and encouraged everyone to have a look.

Some people saw things to improve and made the fixes. Others had ideas for new features and made them happen. And others yet took that code, applied their own innovations and built completely new (and amazing) products.

The moral of the story? Being open means good things will happen. Anyone can peek behind our curtains...in fact, there really aren't any curtains at all.



# Online Communities

- Have a question?
- Search for an answer
- Wikipedia



- Anyone can edit. People are constantly contributing.
- Fairly reliable source of information based on the strength of many - OPEN



# Solar Today 1988, 1995, 2003

- Letters to the Editor
- ASES News
- Chapter News / Members
- Resources
- Education News
- Marketplace (small business) / Professional Listings
- Industry News
- Calendar
- Reader's Forum

Open

# Solar Today 2011

- No Letters to the Editor
- What's New / Advances
- Perspective
- Investing
- Local (Milwaukee)
- Case Study / Analysis
- Inside ASES, highlighting chapter.
- 2013 Buyer's Guide, many opt not to be listed, ASES Business Supporters at the last section, some not in category.
- All website comments closed.

Closed

# Open Websites Encourage Information Exchange

One page has comments from:

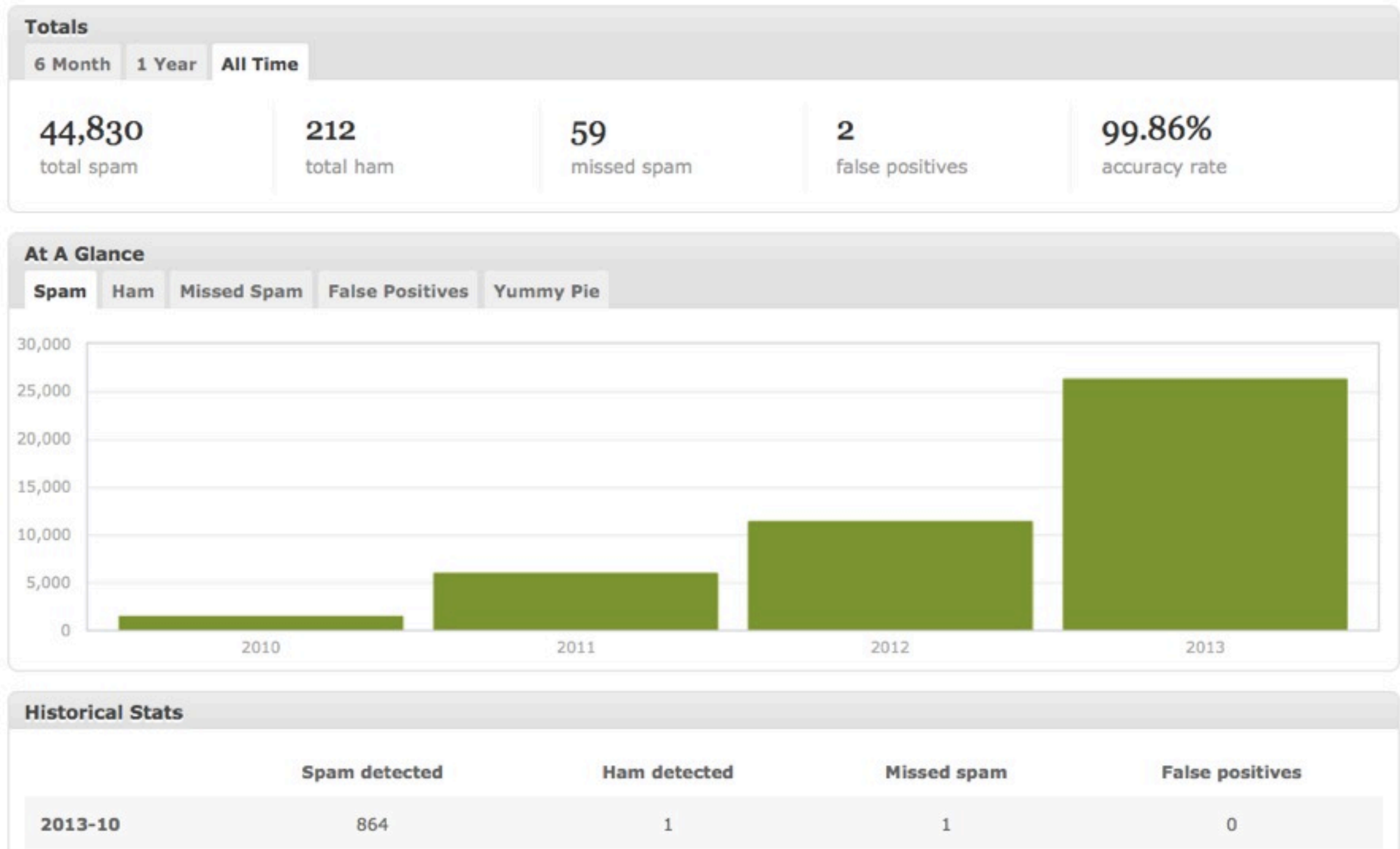
- Texas
- Massachusetts
- Leh, India
- Winnipeg, Canada
- Bella Vista, Buenos Aires

19 comments for "Orientation / South Facing Windows"



It's in a public format, so people can read what others have done or written, to learn, share and participate.

# With the right plugin (Akismet) spam is stopped.







Leave the Dark Side Behind  
**Take a Successful Road  
Trip**

# The Internet

- Website setup to harness many
- Information Exchange
- Content is King
- Amplification of Information
- Spreading messages easy. Let others comment, ask questions, share information



# One Year

- Transform ASES' position in the community to one of a leader of solar and renewable energy information
- Fulfill the mission
- Build the website, put all of the information: 59 years including 43 scientific conferences, 26 years of Solar Today, policy reports online, SEO accessible
- Build a structure on open communication / harness volunteers.
- Regain financials, regain trust of donors, get back into an office.

# ASES Rocks On!

- Web
- Solar Today Paper Magazine
- Conferences - Science & Research
- Solar Tour - Home Outreach
- Local Chapters - Support Local
- Business / Professional Members