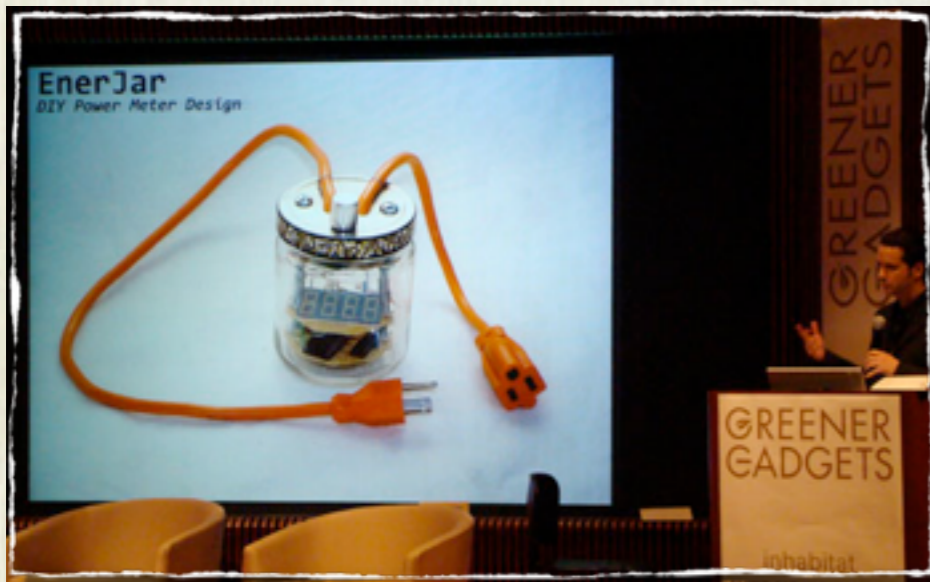


## Bamboo Solar House



Aquarium

Green Tech



DIY Power Meter

Potus Pot



Sun Pod?

## GREEN JOBS



# GREEN DREAM JOBS

*What are they, and where can I get one?*

# AGENDA

- Introductions (5 minutes)
- Expectations (5 minutes)
- Slide presentation overview of Green Jobs (15 minutes)
- Industry perspective by SunPods co-founder Michael Gumm (15 minutes)
- Q&A from participants (5-10 minutes)



**Performance**

*Top Speed:*  
150 mph

*Range:*  
150 miles per charge (est.EPA)

*Recharge Time:*  
Under 2 Hours @ 240V (8 Hours @ Std 120V)

*Interactive Feature:*  
Adjustable regenerative rear wheel braking

*Interactive Feature:*  
Intuitive / adjustable data acquisition system

.....  
For more, download [Introducing the Mission One](#)

*Mission Motors' Mission One EM*

# INTRODUCTIONS



SUN

SunPods SP-300 EV Plug-N-Go™

Electric Vehicle Solar Charging Platforms

*SunPods, Inc. SP300*

# EXPECTATIONS

Perspectives | Policy

Elliott Negin: July 29, 2010

**Renewable Energy Would  
Create More Jobs Than  
Nuclear Power**

The Union of Concerned  
Scientists weighs in on the  
nuclear vs. renewables debate.

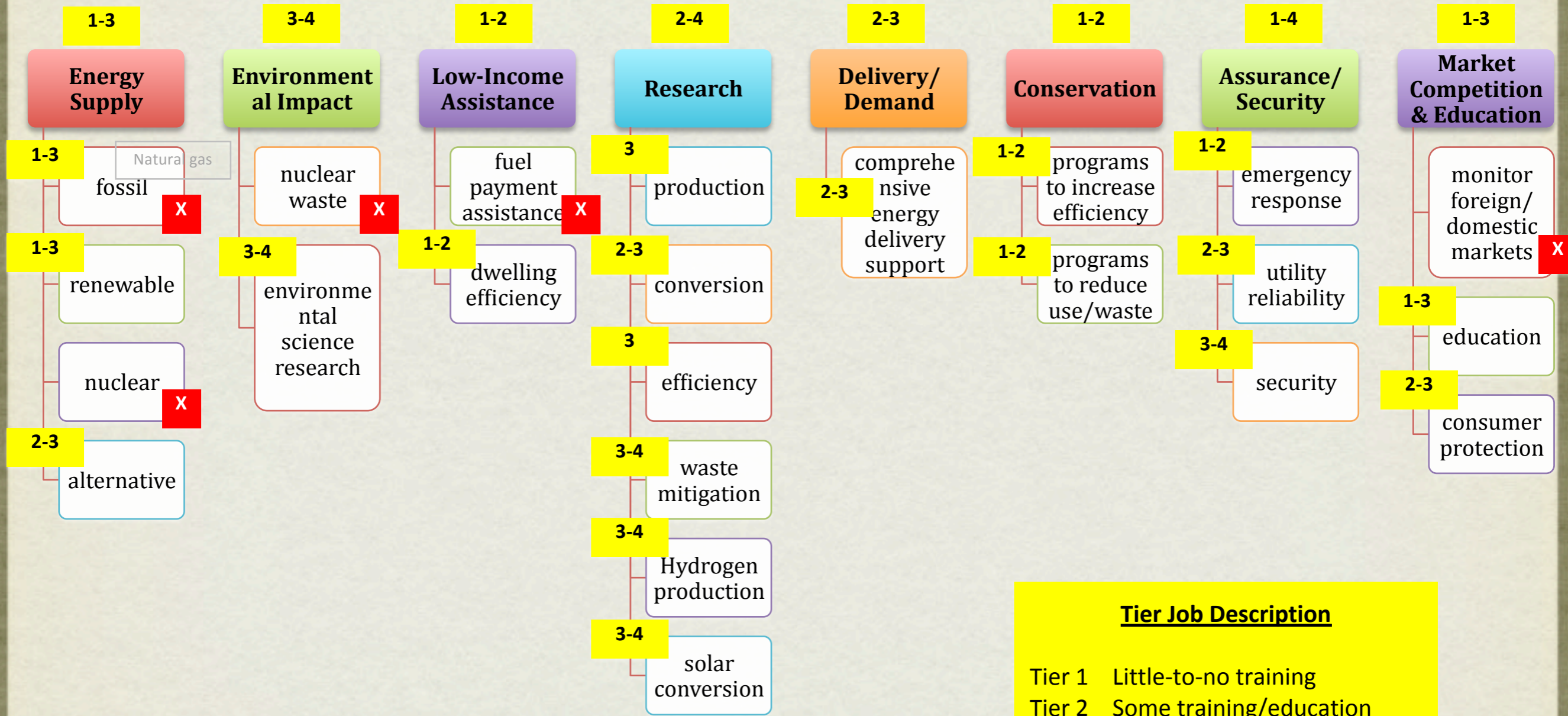


# GREEN JOBS 101

*Overview of the industry*

# GREEN AS A SECTOR

# GAO 8-Sectors of Energy with work Tier designations



**Tier Job Description**

Tier 1 Little-to-no training  
 Tier 2 Some training/education  
 Tier 3 Moderate training/education  
 Tier 4 High-level training/education

**X Not prominent in NOVA area**

# THE FIFTEEN SEGMENTS OF THE CORE GREEN ECONOMY

GREEN SEGMENT	DESCRIPTION	
<b>Energy Generation</b>	<ul style="list-style-type: none"> <li>• Renewable energy generation (all forms of solar, wind, geothermal, biomass, hydro, marine &amp; tidal, hydrogen, co-generation)</li> <li>• Associated equipment, controls, and other management software and services</li> </ul>	<ul style="list-style-type: none"> <li>• Renewable energy consulting services</li> <li>• Research &amp; testing in renewable energy</li> </ul>
<b>Energy Efficiency</b>	<ul style="list-style-type: none"> <li>• Energy conservation consulting and engineering services</li> <li>• Building efficiency products and services</li> <li>• Alternative energy appliances (solar heating, lighting, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Energy efficiency research</li> <li>• Energy efficiency meters &amp; measuring devices</li> </ul>
<b>Transportation</b>	<ul style="list-style-type: none"> <li>• Alternative fuels (biodiesel, hydrogen, algae and biowaste-based ethanol and feedstock-neutral infrastructure)</li> </ul>	<ul style="list-style-type: none"> <li>• Motor vehicles &amp; equipment (electric, hybrid, and natural gas vehicles, diesel technology)</li> </ul>
<b>Energy Storage</b>	<ul style="list-style-type: none"> <li>• Advanced batteries (Li-Ion, NiMH)</li> <li>• Battery components &amp; accessories</li> </ul>	<ul style="list-style-type: none"> <li>• Fuel cells</li> </ul>
<b>Air &amp; Environment</b>	<ul style="list-style-type: none"> <li>• Emissions monitoring &amp; control</li> <li>• Environmental consulting (environmental engineering, sustainable business consulting)</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental remediation</li> </ul>
<b>Recycling &amp; Waste</b>	<ul style="list-style-type: none"> <li>• Consulting services</li> <li>• Recycling (paper, metal, plastics, rubber, bottles, automotive, electronic waste and scrap)</li> </ul>	<ul style="list-style-type: none"> <li>• Recycling machinery manufacturing</li> <li>• Waste treatment</li> </ul>



<b>Water &amp; Wastewater</b>	<ul style="list-style-type: none"> <li>• Water conservation (control systems, meters &amp; measuring devices)</li> <li>• Development and manufacturing of pump technology</li> </ul>	<ul style="list-style-type: none"> <li>• Research and testing</li> <li>• Consulting services</li> <li>• Water treatment and purification products and services</li> </ul>
<b>Agriculture</b>	<ul style="list-style-type: none"> <li>• Sustainable land management and business consulting services</li> <li>• Sustainable supplies and materials</li> </ul>	<ul style="list-style-type: none"> <li>• Sustainable aquaculture</li> </ul>
<b>Research &amp; Advocacy</b>	<ul style="list-style-type: none"> <li>• Organizations and research institutes focused on advancing science and public education in the areas of: renewable energy and alternative fuels and transportation.</li> </ul>	
<b>Business Services</b>	<ul style="list-style-type: none"> <li>• Environmental law legal services</li> <li>• Green business portals</li> </ul>	<ul style="list-style-type: none"> <li>• Green staffing services</li> <li>• Green marketing and public relations</li> </ul>
<b>Finance &amp; Investment</b>	<ul style="list-style-type: none"> <li>• Emission trading and offsets</li> <li>• Venture capital and private equity investment</li> </ul>	<ul style="list-style-type: none"> <li>• Project financing (e.g. solar installations, biomass facilities, etc.)</li> </ul>
<b>Advanced Materials</b>	<ul style="list-style-type: none"> <li>• Bioplastics and others</li> </ul>	<ul style="list-style-type: none"> <li>• New materials for improving energy efficiency</li> </ul>
<b>Green Building</b>	<ul style="list-style-type: none"> <li>• Design &amp; construction</li> <li>• Building materials</li> </ul>	<ul style="list-style-type: none"> <li>• Site management</li> <li>• Green real estate &amp; development</li> </ul>
<b>Manufacturing &amp; Industrial</b>	<ul style="list-style-type: none"> <li>• Advanced packaging</li> <li>• Process management</li> </ul>	<ul style="list-style-type: none"> <li>• Industrial surface cleaning</li> </ul>
<b>Energy Infrastructure</b>	<ul style="list-style-type: none"> <li>• Consulting and management services</li> </ul>	<ul style="list-style-type: none"> <li>• Cable &amp; equipment</li> </ul>

From Collaborative Economics' "Many Shades of Green" report (2009).  
Source Doc: <http://www.coecon.com/manyshades.html>

# GREEN AS A SKILL SET

- **Efficiency in established industries**
  - HVAC specialist considering efficiency
  - architect designing high-performance buildings with solar panel space
  - server bank operator using racks and curtains to improve airflow, cooling to reduce AC use
  - utility company installing AMI
  - co-worker charged with green training (recycling education, turning off monitors, etc.)
  - government employee researching energy sector jobs

# GREEN AS A SKILL SET

- **Services, Support Related to Green, CleanTech**

- Patent, Environmental Law
- Policy - local, state, federal, international
- Health disparity, environmental public health
- Grant subject matter expert

- mobile apps programming to show performance or calculations
- market research analyst
- eco-journalist
- “to-market” support positions
- VC funding
- grant writer

# GREEN AS A SKILL SET

- solar panel cleaning, maintenance
- system installers (Geek Squad)
- non-potable water fragrance tabs (lavender sales person)
- green trainer, educator
- website services
- sales people
- recycling artist
- event, conference planner
- automobile maintenance (EV knowledge)
- ancillary manufacturing
  - inverters
  - EV components (Tesla badge)
- in-house efficiency auditor
- shipper, delivery

# TRENDS

- EV's are heading mainstream
  - 1.5 chargers per EV sold
  - solutions needed for renters
  - better, more efficient charging and storage solution
  - leading EV manufacturers are making components for other EV players
- SmartGrid deployment meets federal mandate
- Solar industry is shifting to copper, sulfur
- SilverSpring vs WiMax is the new VHS vs BetaMax
- Technology without Application
- He who solves storage rules the world

# TREND RESOURCES

- [earth2tech.com](http://earth2tech.com)
- [greentechmedia.com](http://greentechmedia.com)
- [theenergycollective.com](http://theenergycollective.com)
- [pikeresearch.com](http://pikeresearch.com)
- [cleantechopen.com](http://cleantechopen.com)
- [connectivityweek.com](http://connectivityweek.com)
- [wired.com](http://wired.com)
- The Green Wombat
- [twitter.com](http://twitter.com)
- [linkedin.com](http://linkedin.com) groups

# BREAKING LMI

- 237 Emerging Green Employer Firms in Silicon Valley that received VC funding over the past 7 years (1<sup>st</sup> glance)
  - Energy Generation 94 firms, 40%
  - Energy Efficiency 54 firms, 11%
  - Energy Storage 20 firms, 8.4%
  - Materials 15 firms, 6.3%
  - Transportation 13 firms, 5.5%
  - Energy Infrastructure, 12 firms, 5%
  - Air, Environment, 11 firms, 4.6%



*Wired Readers Show BP How to Use Photoshop*

# INDUSTRY PERSPECTIVE





*'Let's land before the eye turns this way'*

QUESTIONS?