THIS PRESENTATION CONTAINS FORWARD-LOOKING STATEMENTS PURSUANT TO THE SAFE HARBOR PROVISIONS OF THE SECURITIES EXCHANGE ACT OF 1934

These forward-looking statements do not constitute guarantees of future performance. Forward-looking statements include statements concerning our plans, objectives, goals, strategies, future events, future net sales or performance, capital expenditures, financing needs, plans or intentions relating to expansions, business trends and other information that is not historical information. All forward-looking statements are based upon information available to us on the date of this presentation and are subject to risks, uncertainties and other factors, many of which are outside of our control, that could cause actual results to differ materially from the results discussed in the forward-looking statements. Risks that could cause such results to differ include: our ability to maintain our customer relationships; the worldwide demand for electricity and the market for solar energy; the supply and price of components and raw materials for our products; and our customers’ ability to access the capital needed to finance the purchase of our products. The risk factors identified in the ECD filings with the Securities and Exchange Commission, including the company’s most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, could impact any forward-looking statements contained in this presentation.
ECD is Moving Forward

• Growing pipeline
• Improving revenue and cash flow
• Increasing production
• Reducing inventory
Project Pipeline of 200+ MW

World’s largest integrated roof-top project

25 MW ENEL installation sites in Nola, Italy. Equivalent to powering 13,000 households.
Expanding Commercial
Commercial Market Size (GW)

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAPV</td>
<td>1.4 GW</td>
<td>3.3 GW</td>
</tr>
<tr>
<td>Low Load</td>
<td>0.7</td>
<td>1.6</td>
</tr>
<tr>
<td>BIPV</td>
<td>0.7</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Source: 2010 Solarbuzz Market Report – Green World Scenario; EUPD; ECD Analysis

© 2010 Energy Conversion Devices
Residential Product Roadmap

EnerGen

Summer 2010

Shingle

2011

Tile

Future

Europe

North America
Entering Residential
Residential Market Size (GW)

5.6 kW residential installation in Germany

Source: 2010 Solarbuzz Market Report – Green World Scenario; EUPD; ECD Analysis

© 2010 Energy Conversion Devices
### The **UNI-SOLAR** Difference Today

<table>
<thead>
<tr>
<th>Competition Today</th>
<th><strong>UNI-SOLAR</strong> Today</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Energy Yield</strong> <em>(kwh/ kW)</em></td>
<td>1300 – 1500</td>
</tr>
<tr>
<td>*<em>Weight (lbs/sq. ft.)</em></td>
<td>2.4 – 4.0</td>
</tr>
<tr>
<td><strong>Conversion Efficiency (%)</strong></td>
<td>9 – 22</td>
</tr>
<tr>
<td><strong>System Price ($/Watt)</strong></td>
<td>$3.50 – $4.80</td>
</tr>
<tr>
<td><strong>LCOE ($/ kwh)</strong></td>
<td>$0.18 – $0.25</td>
</tr>
</tbody>
</table>

Assumes Southern California example, large project (500KW), 7.5% IRR with 50% levered, 0% ITC, 1.0% commercial retail electricity power price escalator (DOE). Includes installation, O&M costs.
Our Technology

Solar Spectrum

- Integrating Red Absorbing Cell
- Integrating Green Absorbing Cell
- Blue Absorbing Cell

Relative intensity vs. Wavelength in nm

© 2010 Energy Conversion Devices
From Lab to Production

Small area machine 2” by 2” substrate

Large area machine 15” by 14” substrate

Large-area machine (three 14” webs)

Roll-to-roll production machine
Roadmap to 20+% 

- Light Trapping
- High Rate Deposition
- HybridNano Technology

Conversion Efficiency

<table>
<thead>
<tr>
<th>Year</th>
<th>Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>8.2%</td>
</tr>
<tr>
<td>CY 2011</td>
<td>10%</td>
</tr>
<tr>
<td>CY 2012</td>
<td>12%</td>
</tr>
<tr>
<td>Potential</td>
<td>20+%</td>
</tr>
</tbody>
</table>
Improved Light Trapping: Back Reflector

Cross-section of a *uni-solar* solar cell

- Anti-reflective coating
- Blue light-absorbing cell
- Green light-absorbing cell
- Red light-absorbing cell
- Back reflector
- Stainless steel substrate

Improved Light Trapping
Proprietary cathode design: demonstrated on 42” wide production machine span

High Rate Deposition
Double throughput from same machines at higher conversion efficiencies

Proprietary cathode design: demonstrated on 42” wide production machine span

Current
• 8.2% efficiency in production

Demonstrated
• ~10% efficiency at 2x the deposition rate
• Reduced cost-per-watt and capex-per-watt
HybridNano Technology
Results in greater stability and higher conversion efficiency

Cross-section of a Uni-Solar solar cell

- Anti-reflective coating
- Blue light-absorbing cell
- Green light-absorbing cell
- Red light-absorbing cell
- Back reflector
- Stainless steel substrate

HybridNano Technology replaces green and red light-absorbing layers

- Compatible with a-Si alloy deposition
- Ideal for middle and bottom cells of multi-junction structure
- Improved light absorption and no light-induced degradation of nano layers has resulted in conversion efficiency of 11%, target of ~12%
Advanced Photon Harvesting
Improving cell quality to achieve 25% cell efficiency goal

Solar Spectrum

Advanced photon harvesting and innovative deposition process
Roadmap to Sustainability

Total installed price

Reducing uni-Solar’s Total Installed Price

<table>
<thead>
<tr>
<th>Component</th>
<th>Today’s Technology</th>
<th>Manufacturing</th>
<th>Conversion Efficiency (12%)</th>
<th>Balance of System</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance of systems and other</td>
<td>$2.00</td>
<td>$0.20</td>
<td>$0.35</td>
<td>$0.45</td>
<td>$2.50</td>
</tr>
<tr>
<td>Laminate cost</td>
<td>$1.50</td>
<td>$0.95</td>
<td></td>
<td></td>
<td>$1.55</td>
</tr>
</tbody>
</table>

Figures based on full utilization

© 2010 Energy Conversion Devices
**The UNI-SOLAR Difference**

*Differentiated product with superior energy yield, competitive system price and conversion efficiency*

![UNI-SOLAR Product Image]

<table>
<thead>
<tr>
<th><strong>UNI-SOLAR Target</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Yield (kWh/ kW)</td>
<td>1600+</td>
</tr>
<tr>
<td>Weight (lbs/ft²)</td>
<td>0.7</td>
</tr>
<tr>
<td>Conversion Efficiency (%)</td>
<td>12</td>
</tr>
<tr>
<td>System Price ($/Watt)</td>
<td>$2.50</td>
</tr>
<tr>
<td>LCOE unsubsidized ($/kWh)</td>
<td>$0.12</td>
</tr>
</tbody>
</table>

Assumes Southern California example, large project (500KW), 7.5% IRR with 50% levered, 0% ITC, 1.0% commercial retail electricity power price escalator (DOE). Includes installation, O&M costs.
Assumes Southern California example, large project (500KW), 7.5% IRR with 50% levered, 0% ITC, 1.0% commercial retail electricity power price escalator (DOE). Includes installation, O&M costs.
Questions?