

## Digest of Green Reports and Studies

<b>Title</b>	<i>Metro Orlando Cleantech: Assets, Capabilities, Presence, and Potential</i>
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<b>Summary</b>	By understanding how important “Clean Technology (Cleantech)” is to the environment and to the economy many state and local governments are taking a proactive role. In order to be proactive, strong partnerships need to be established between the government, academia, and businesses. Metro Orlando has this foundation already in place. With these established relationships, and the strength of its research institutions and industries, Metro Orlando is positioned in a way that it will be able to develop and strengthen their “cleantech” industry, attract “clean technology” companies, and give rise to new startup companies. The opportunities that Metro Orlando has will help to develop them into a “cleantech” leader, and at the same time have a positive impact on their economy. In order to develop into that leader the local policymakers will need to implement new policies and create an atmosphere that is favorable to “cleantech.” The knowledge gained from this experience could help other regions in establishing their own clean technology hub.
<b>Key Findings</b>	<ul style="list-style-type: none"> <li>• Policy is essential to “cleantech.”</li> <li>• There are many “cleantech” competitors which Metro Orlando can learn from.</li> <li>• Public and Private partnerships have been established by Metro Orlando.</li> <li>• Research institutions in Metro Orlando play a dominant role in clean technology research and innovation.</li> <li>• Technological research and innovation is supported by an extensive infrastructure in Metro Orlando.</li> <li>• Metro Orlando has a blend of startups and industry leaders in the “cleantech” area.</li> <li>• Cleantech companies are actively involved in a diversity of “cleantech” sectors in the Metro Orlando area.</li> <li>• The cleantech Industry has been hindered because the access to capital is not readily available in the Metro Orlando area.</li> <li>• Metro Orlando needs to continue to maintain its label as a high-tech hub and “cleantech” cluster.</li> <li>• In Florida from 1998 to 2007, the clean energy economy increased by 7.9% and according to the latest PEW research report, it was among the top ten for “cleantech” occupations.</li> </ul>
<b>Recommendations</b>	<ul style="list-style-type: none"> <li>• “Cleantech Leadership Council” needs to be established to help support cleantech growth.</li> <li>• Develop strategies to establish Metro Orlando as a cleantech hub.</li> <li>• Encourage new alliances between UCF and other academic/research institutions.</li> <li>• Green building codes and ordinances should be created.</li> <li>• Funds need to be available for clean technology.</li> <li>• Establish “Clean Energy Challenge Grants.”</li> <li>• “Renewable Energy Portfolio Standards” should be adopted.</li> <li>• Establish a “Florida Clean Energy Public Fund.”</li> <li>• Cultivate “Cluster-related strategies.”</li> <li>• Establish a “Cleantech Incubator” at UCF.</li> <li>• “Smart grid initiative” should be embarked upon.</li> <li>• “Feed-in tariff system” should be encouraged.</li> <li>• Establish a “Cleantech Center at UCF.”</li> <li>• Combine “UCF into Metro Orlando’s Economic Development Strategies and Programs.”</li> <li>• “Funding and support for UCF economic development programs.”</li> <li>• Develop a “Green Jobs Steering Committee.”</li> <li>• Support “Green Transportation Initiatives.”</li> </ul>
<b>Definition of “Green”</b>	According to the Cleantech Group, “cleantech is new technology and related business models offering competitive returns for investors and customers while providing solutions to global challenges. The concept embraces a diverse range of products, services, and processes across industry verticals that are inherently designed to provide superior performance at lower

	costs, greatly reduce or eliminate negative ecological impact, and improve the productive and responsible use of natural resources.”
<b>Methodology</b>	Interviews, surveys, symposiums, and literature and data research.
<b>Data Sources Cited</b>	<ul style="list-style-type: none"> <li>• The United Nations Environmental Programme (UNEP). <a href="http://www.unep.org">http://www.unep.org</a></li> <li>• Makower, Joel. 2009. Strategies for the Green Economy: Opportunities and Challenges in the new World of Business. McGraw-Hill. 2009</li> <li>• Ron Pernick and Clint Wilder. The Clean Tech Revolution: Discover the Top Trends, Technologies, and Companies to Watch. Harper Collins. New York. 2008.</li> <li>• Lewis, John. Orange County Office of Economic, Trade &amp; Tourism Development. Orange County First Cleantech Symposium. November 5, 2008.</li> <li>• The Cleantech Group. <a href="http://cleantech.com">http://cleantech.com</a></li> <li>• U.S. Department of Energy. <a href="http://www.eere.energy.gov">www.eere.energy.gov</a></li> <li>• U.S. Environmental Protection Agency. <a href="http://www.epa.gov/climatechange">www.epa.gov/climatechange</a></li> </ul> <p>Additional Data Sources can be viewed in the Original Document.</p>
<b>Report Geography</b>	Metro Orlando, Florida
<b>Green Occupations Cited</b>	<p>Refer to Original Document for a list of the following occupations:</p> <ul style="list-style-type: none"> <li>• Solar Occupations – Section 4 page 29.</li> <li>• Wind Power Occupations – Section page 38.</li> <li>• Biofuel Occupations – Section 4 page 46.</li> <li>• Green Building Occupations – Section 4 page 52.</li> <li>• Smart Grid Occupations – Section 4 page 65</li> <li>• Personal Transportation Occupations – Section 4 page 75.</li> <li>• Green Collar Occupations – Section 5 pages 79 to 81</li> </ul>
<b>Green Industries Cited</b>	<ul style="list-style-type: none"> <li>• Renewable Energy (solar, wind, biomass, geothermal and hydropower)</li> <li>• Energy Efficiency</li> <li>• Green Buildings</li> <li>• Transportation</li> </ul>
<b>Keywords</b>	Clean Technology, cleantech, wind, solar/photovoltaic, hydro/marine, biofuel, geothermal, fuel cells, advanced batteries, hybrid systems, LEED
<b>Legislation Cited</b>	Y
<b>Bibliography (Y/N)</b>	N
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