## **Digest of Green Reports and Studies**

| Title               | Building a Clean Energy Workforce – Preparing Californians for New Opportunities in the State's Green Economy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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| Author              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| Publication<br>Type | Report – Results from Case Study                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Publication<br>Date | Spring 2011                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| # of Pages          | 49 pp.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| URL                 | http://energycenter.org/index.php/incentive-programs/self-generation-incentive-program/sgip-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                     | documents/doc download/782-building-a-clean-energy-workforce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Summary             | Building a Clean Energy Workforce outlines the various factors involved in building a clean energy economy and green labor force within the state of California. California has made strides to implement government policies and standards to address issues of environmental concern, such as air pollution and fossil fuel dependence, and these policies have thus created job opportunities for skilled workers who can fulfill the state's environmental goals.                                                                                                                                                                                                                                                                                                          |
|                     | The report discusses the wide availability of green job training programs offered by various institutions, from community colleges to universities, with community college programs focusing primarily on energy efficiency, green building standards, and renewable energy. Case studies in the report cite the role of such programs in equipping the labor force with new skills for a greener economy. Specific job training is vital to reaching California's state energy policies. For instance, 33 percent of the electricity consumed must come from a renewable source; this goal cannot be met without training and hiring workers for these positions. The report estimates that 75,000 workers will be trained for energy efficiency jobs alone by the year 2020. |
|                     | Lastly, the report evaluates the need for California to ensure the continued development of a clean energy economy. Remaining committed to existing government policies, and expanding upon progress that is made, will allow for continued job creation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Key Findings        | "Identified at least 298 training programs offered by 130 institutions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                     | In the 111 training programs identified in this research, there are between 12,600 to 15,100     attribute a profiled eventual area.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                     | <ul> <li>students enrolled every year.</li> <li>The institutions who responded to the query, 19 offer college credit or some sort of certificate verifying completion of a program, 10 offer at least an associate's degrees, and 32 institutions offer programs that either result directly in an industry recognized certification or qualify students to sit for a certification exam."</li> <li>Additional key findings may be found in the report.</li> </ul>                                                                                                                                                                                                                                                                                                             |
| Recommend           | "Continue to create demand for green technologies by ensuring that the requirements outlined in                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| ations              | clean energy legislation and regulations are enforced.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                     | <ul> <li>Support policies that will lead to the creation of a self-sufficient market for small-scale clean<br/>energy technologies.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                     | Require that all new government buildings at the municipal and state levels install solar                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                     | <ul> <li>technologies and other energy efficiency measures.</li> <li>Support efforts to improve the quality and expand the reach of green job training programs."</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Definition of       | California's vision for a clean energy future includes efforts to make millions of homes, commercial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| "Green"             | buildings, and vehicles more efficient, along with efforts to provide a rapidly increasing share of that energy from clean, renewable sources.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Methodology         | Literature Research and Survey: Identified both private and public green training programs in academic and non-academic settings. Contacted each training program through email questionnaires to find how many students were enrolled.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Data Sources        | California Energy Commission, California's Energy Efficiency Standards for Residential and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Cited               | Non-Residential Buildings.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                     | Californian Economic Development Department, "State Survey Identifies Over 300,000 Jobs in California With Major Emphasis on Green Practices."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                     | Institute for Research on Labor and Employment, Donald Vial Center on Employment in the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

|                               | Green Economy, University of California, Berkeley, Workforce Strategies, Energy Efficiency, and Green Jobs: A summit to discuss needs, challenges, and opportunities in California.                                  |
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| Report<br>Geography           | California                                                                                                                                                                                                           |
| Green<br>Occupations<br>Cited | <ul> <li>Solar Photovoltaic Installers</li> <li>Construction Laborers Automotive Service Technicians and Mechanics</li> <li>Energy Auditors</li> </ul>                                                               |
| Green<br>Industries<br>Cited  | <ul> <li>Energy Consulting Services</li> <li>General Automotive Repair</li> <li>Plumbing, Heating, and Air-Conditioning Contractors</li> <li>Residential Remodelers</li> </ul>                                       |
| Keywords                      | Batteries, Clean Energy, Clean Energy Economy, Energy Efficiency, Energy Infrastructure, Energy Policy, Fuel Cells, Geothermal, Green Technology, Green Jobs, Hybrid Systems, Hydropower, Solar Energy, Wind Energy. |
| Legislation<br>Cited          | Assembly Bill (AB) 32 - Global Warming Solutions Act                                                                                                                                                                 |
| Bibliography (Yes/No)         | Yes                                                                                                                                                                                                                  |
| Reviewer<br>Name/Org          | Vela, Michael, Graduate Student Assistant, Labor Market Information Division, Employment Development Department                                                                                                      |

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