

CALIFORNIA

Key Statistics:

Clean Economy GDP (2010)	\$26.0 billion
Clean Economy Jobs (Direct Production)	308,792 (Brookings, 2011)
Investment in Clean Technology (2008-2010)	\$8,612.0 million (Clean Edge, 2011)
VC Disbursement per Capita (2010)	\$273

Top 9 Clean Economy Job Segments:

Segment	# of Jobs
Waste Management & Treatment	52,225
Conservation	44,443
Organic Food & Farming	34,468
Public Mass Transit	32,487
Professional Environmental Services	19,259
Recycling & Reuse	15,692
Energy-saving Building Materials	11,860
Professional Energy Services	9,495
Green Building Materials	8,878

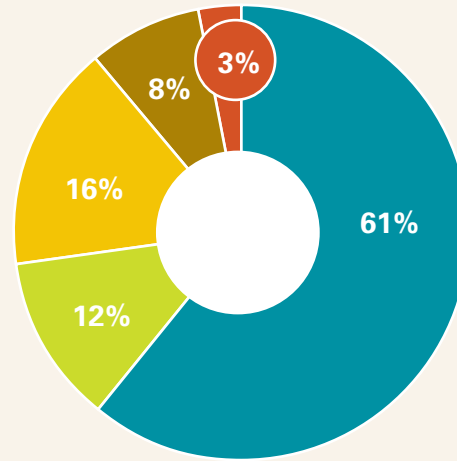


Figure: Direct production jobs in California's Clean economy sector in 2010.

Strengths & Attributes:

- Global hub for renewable energy R&D
- Long-standing public policy leadership and commitment to clean energy, transportation, and environmental resource management
- Enormous network of universities and US DOE laboratories to support R&D for the clean economy
- Pioneer for clean vehicle standards
- Large resource potential for renewable energy, including: solar, wind, geothermal, biomass, and waste (MSW and biosolids) biomass
- Leads US in clean economy jobs, investment, and clean technology patents
- Large number of existing clean technology and high-tech establishments
- Highly educated and skilled workforce
- Public understanding and support of sustainability
- High concentration of existing clean technology and high-tech establishments

California - Summary of Key Policy, Program & Investment Initiatives:

Sector	Description
Clean Energy Supply	<p>Renewables Portfolio Standard requires all utilities providers to procure at least 20% of their electricity from eligible renewable energy by 2010 and 33% by 2020.</p> <p>Renewable Energy Transmission Initiative aims to identify transmission projects and is designed to support California's aggressive renewable energy target of 33% by 2020.</p> <p>Self-Generation Incentive Program is a ten-year program, now extended for five more years, at \$83 million/year to offer incentives up to 3 MW per site for clean, performance-based, self-generation systems.</p> <p>Renewable Auction Mechanism is a competitive procurement program that operates via reverse auction and outside RPS, for wholesale power purchases from smaller systems up to 20 MW capacity, with an initial program capacity of 1000 MW.</p> <p>California Solar Initiative commits over \$3.2 billion between 2007-2016 to install more than 3,000 MW of new solar generation capacity.</p> <p>Feed-in Tariff program requires Investor-Owned Utilities (IOU) to provide payment for small renewable energy generation up to 1.5 MWs, soon to be extended to 3 MWs of capacity.</p> <p>Public Benefit Fund is dedicated to renewable energy (\$540 million), energy efficiency (\$872 million), and research, development & demonstration (RD&D) (\$62.5 million).</p>
Energy Efficiency & Green Building	<p>Energy Action Plan is a strategic plan to address California's growing energy demand sustainably through effective demand and supply side management.</p> <p>CalGreen green building standards require mandatory reduction of indoor potable water use by 20%, and divert 50% construction waste from landfills.</p> <p>PACE Financing offers between \$5,000 and \$75,000 in loan financing anchored to the property tax bill for energy efficiency and renewable energy home projects in participating communities. In addition, the cities of Los Angeles and San Francisco are pioneering the use of PACE loans to obtain comprehensive levels of efficiency in commercial buildings, where the loan obligation is tied to the property, to be borne by successive owners.</p> <p>Title 24 Energy Efficiency Building Code has led the nation for over thirty years in performance-based efficiency levels for both new construction and major renovations of existing buildings. Supporting analysis is provided and paid in part through utility efficiency programs.</p>
Clean Transportation	<p>Clean Vehicle Standard requiring all new vehicles to achieve, on average, an emissions reduction of 30% by 2016 (carbon dioxide, methane, nitrous oxide, and hydro-fluorocarbon).</p> <p>Low carbon Fuel Standard aims to achieve a reduction of 10% (up to 16 million metric tons) in the carbon intensity of California transportation fuels by 2020.</p> <p>Alternative & Renewable Fuel & Vehicle Technology Program authorizes the Energy Commission to develop and deploy alternative and renewable fuels and advanced transportation technologies to help attain the state's climate change policies with an annual program budget of approximately \$100 million.</p>
Environmental Protection & Resource Management	<p>CalRecycle provides integrated waste management through discrete early actions for landfill methane control, pursuing diverting organics from landfills.</p> <p>Assembly Bill (AB) 32 introduces mandatory GHG reporting and 25% reduction by 2020 with mandatory caps for major emission sources by 2012.</p> <p>California Water Plan is an integrated water management and sustainability initiative bringing together members from government, institutions and the public to develop recommendations and informed decision on California's water future.</p>
Knowledge & Support	<p>CleanTech Institute is the first approved and eligible training provider by the state to offer Electric Vehicle Technician, Photovoltaic Systems Specialist and nanotechnology/clean technology professional certification.</p>