

California Industrial Resource Fact Sheet

Introduction

California's economy is ranked first in the nation in terms of 2008 GDP, with a robust industrial manufacturing sector that provided the state with 397,348 jobs and produced \$205,535 million worth of goods in 2006. Its industrial sector is, however, also highly energy-intensive. California's industrial sector ranked third in the nation in terms of energy expended, accounting for 1,955.7 trillion Btu or 23 percent of statewide energy consumption in 2007. Further, the industrial sector accounted for approximately 76.88 million metric tons of carbon dioxide emissions in 2005.

California has long been a national leader in promoting measures that reduce the energy usage and fossil fuel dependence of the state's industrial operations. The state government has been progressive in adopting policies which lead to an increase in energy efficiency. For example, California passed Rulemaking 04-09-060 which created an Energy Efficiency Resource Standard for utilities. The goals of this rule called for programs operating over the 2004 – 2013 period to reduce electricity use by 23 billion kWh and peak demand by 4.9 million kW by 2013. This initiative worked so well that from 2006 to 2008, California's investor-owned utilities saved over 10 billion kWh and 1.8 million kW, exceeding their respective goals to date of 6.8 billion kWh and 1.4 MW. The Global Warming Solutions Act of 2006 or AB 32 is another important piece of state legislation which set reduction goals of greenhouse gas emissions to 1990 levels by 2020. Both the Energy Commission and the Public Utilities Commission stated that in order to meet the ambitious goals outlined in AB 32, more aggressive energy efficiency goals are necessary as it is one of their most powerful strategies for addressing greenhouse gas emissions and various sectors have seen notable results from improving their energy efficiency.

Resources available for the industrial sector in California are listed below.



Government Resources

State Government: The state of California places a high priority on improving energy efficiency and offers numerous incentive programs to industrial customers. Programs include loans and tax incentives for energy efficiency projects, training opportunities, and energy analysis tools.

County Government: Sonoma County provides financial incentives for instituting energy efficiency upgrades and renewable energy installations.

City/Town Government: Many city governments across the state of California have taken it upon themselves to encourage energy efficiency efforts. For instance, the City of Santa Monica offers cash rebates for businesses that install renewable energy systems. The city also provides non-residential operations with financial and permitting incentives for building energy-efficient buildings. Similarly, San Jose and Costa Mesa also offer industrial operations incentives for constructing energy-efficient buildings. As another example, Palm Desert provides loans to businesses seeking to identify and implement energy-efficient measures. Other cities that supply energy efficiency resources to industrial operations include Colton, which provides grants for renewable generation systems and energy-efficient upgrades; and Irvine, which has made an energy analysis tool available to industrial operations. The City of San Francisco, through the Department of Environments, also provides manufacturers with no-cost energy audits.

Utility Resources

Investor-Owned Utilities: California has some of the largest investor-owned utilities (IOUs) in the nation. The California state legislature has been active in pushing utilities to pursue energy efficiency efforts. As a result, all of the state's IOUs provide non-residential customers with a host of programs designed to reduce energy usage. The following table offers a breakdown of these programs by type.

INDUSTRIAL TECHNOLOGIES PROGRAM

NAME OF IOU	ANALYSIS TOOLS	ENERGY AUDITS	LOAD MANAGEMENT	LOANS/ GRANTS	CLEAN ENERGY INCENTIVES	REBATES
San Diego Gas & Electric	X	X	X		X	X
Pacific Power			X			X
Pacific Gas & Electric Power	X	X	X		X	X
Southern California Edison	X	X	X		X	X
Southwest Gas Corporation		X				
Southern California Gas Company	X	X	X	X	X	X

Public Power Utilities: In the state of California, there are numerous public power utilities (PPUs) which provide industrial customers with varied energy-saving programs. The following is a breakdown of the programs offered by municipal utilities according to type.

NAME OF PPU	ANALYSIS TOOLS	ENERGY AUDITS	LOAD MANAGEMENT	LOANS/ GRANTS	CLEAN ENERGY INCENTIVES	REBATES
Alameda Municipal Utilities	X	X		X	X	X
Anaheim Public Utilities	X	X	X	X	X	X
Azusa Light & Water					X	X
Banning Electric Department					X	X
Burbank Water & Power			X		X	X
City of Palo Alto Utilities						X
Colton Public Utilities						
Corona Department Water & Power					X	
Glendale Water & Power	X	X	X		X	X
Gridley Municipal Utilities						X
Healdsburg Electrical Utility Department		X			X	X
Hercules Municipal Utility						X
Imperial Irrigation District	X	X			X	X
Lassen Municipal Utility District				X	X	X
Lodi Electric Utility	X	X			X	X
Lompoc City Electric					X	X
Los Angeles Department Water & Power	X	X	X	X	X	X
Marin County	X					
Merced Irrigation District					X	X

INDUSTRIAL TECHNOLOGIES PROGRAM

NAME OF PPU	ANALYSIS TOOLS	ENERGY AUDITS	LOAD MANAGEMENT	LOANS/ GRANTS	CLEAN ENERGY INCENTIVES	REBATES
Modesto Irrigation District	X	X			X	X
Moreno Valley Electric Utility	X	X			X	
Pasadena Water & Power	X				X	X
Redding Electric Utility		X				X
Riverside Public Utilities	X	X	X		X	X
Roseville Public Utilities	X		X		X	X
Sacramento Municipal Utility District				X	X	X
Silicon Valley Power		X	X	X	X	X
Truckee Donner Public Utilities District		X			X	X
Turlock Irrigation District					X	X
Ukiah Utilities					X	X

Regional Resources

Electric Cooperatives: Although not many, some electric cooperatives in California do offer incentive programs to help industrial customers boost their energy efficiency. For instance, Plumas-Sierra Rural Electric Cooperative provides industrial customers with a number of energy efficiency programs including cash rebates on electronic equipment, energy-efficient lighting, and geothermal heat pumps. Another cooperative that promotes energy efficiency is Island Energy which provides energy analysis tools to industrial customers.

Local Resources

Non-Profit Organizations: Non-profit organizations that offer energy-saving resources to industrial manufacturers include the California Association of Building Energy Consultants, which provides training opportunities and the California Center for Sustainable Energy, which offers renewable energy incentives.

Industrial Assessment Center: San Diego State University and San Francisco State University both host federally sponsored Industrial Assessment Centers which provide small- to mid-size manufacturers with no-cost energy assessments.

Clean Energy Application Center: Pacific CHP Application Center works to reduce the perceived risk of combined heat and power (CHP) to users, fosters CHP as a viable technical and economic option for the participating region, and capitalizes on existing regional CHP resources. They offer a variety of services such as site feasibility studies for CHP, online tools, and CHP reports.

Manufacturing Extension Partnership (MEP): California Manufacturing Technology Consulting (CMTC) provides a unique program to reduce energy costs for manufacturers and distributors. As part of the program, CMTC has developed several energy-saving tools and techniques including consumption audits, current and future state manufacturing process maps, and data collection templates and savings verification reports to identify, maximize, and document energy savings. Another MEP, Corporation for Manufacturing Excellence or Manex provides an array of proven advisory and implementation solutions exclusively to manufacturers, distributors, and their supply chains. They deliver high-impact solutions in four key areas – strategy, people, process, and performance – to help businesses quickly achieve cost efficiencies and increased profits.

For More Information

DOE Industrial Technologies Program (<http://www1.eere.energy.gov/industry/index.html>)

ITP Save Energy Now (<http://www1.eere.energy.gov/industry/saveenergynow/>)

INDUSTRIAL TECHNOLOGIES PROGRAM

ITP State Activities Web site - California (http://www1.eere.energy.gov/industry/states/state_activities/map_new.asp?stid=CO)

ITP State Incentives and Resources Database (http://www1.eere.energy.gov/industry/about/state_activities/incentive_search.asp)

Energy Efficient Upgrades (<http://www.business.gov/expand/green-business/energy-efficiency/upgrades/office-equipment.html>)

California Energy Commission (<http://www.consumerenergycenter.org/erprebate/index.html>)

California Franchise Tax Board (<http://www.leginfo.ca.gov/cgi-bin/displaycode?section=rtc&group=17001-18000&file=17201-17299.9>)

California Public Utilities Commission (<http://www.cpuc.ca.gov/PUC/energy/>)

California State Board of Equalization (<http://www.leginfo.ca.gov/cgi-bin/displaycode?section=rtc&group=00001-01000&file=70-74.7>)

Enhanced Automation Initiative Loan Program (<http://www.eainitiative.com/EAINitiative/DesktopDefault.aspx>)

State Assistance Fund for Enterprise Business and Industrial Development Corporation (SAFE BIDCO) (<http://www.safe-bidco.com/content.asp?contentid=557>)

Berkeley Planning and Development Department (<http://www.ci.berkeley.ca.us/ContentDisplay.aspx?id=1124>)

City of Colton (<http://www.ci.colton.ca.us/CDBG.html>)

City of Costa Mesa (<http://www.ci.costa-mesa.ca.us/departments/green-building/related-articles.htm#incentive>)

City of Irvine (<http://www.ci.irvine.ca.us/mm/whatyoushouldknow/whatyoushouldknow.htm>)

City of Palm Desert (<http://www.cityofpalmdesert.org/Index.aspx?page=484>)

City of San Jose (<http://www.sanjoseca.gov/esd/natural-energy-resources/gb-ed-outreach.htm>)

City of Santa Monica (<http://www.solarsantamonica.com/>)

San Francisco Department of the Environments (<http://www.sfenergywatch.org/>)

Sonoma County (<http://www.sonomacountyenergy.org/energy-improvements.php>)

Pacific Power (<http://www.pacificpower.net/Navigation/Navigation80921.html>)

Pacific Gas and Electric Power (<http://www.pge.com/pec/>)

San Diego Gas & Electric (<http://www.sdge.com/business/esc/large/largeaudit.shtml>)

Southern California Edison (<http://www.sce.com/summerdiscount>)

Southern California Gas Company (<http://www.socalgas.com/business/efficiency/industrialEndUser.html>)

Southwest Gas Corporation (<http://www.swgas.com/commind/indust/index.php>)

Alameda Municipal Power (http://www.alamedamp.com/electricity/solar/solar_overview.html)

Anaheim Public Utilities (<http://www.anaheim.net/section.asp?id=144>)

Azusa Light and Water (<http://www.ci.azusa.ca.us/index.asp?nid=565>)

Banning Electric Department (<http://www.ci.banning.ca.us/DocumentView.asp?DID=222>)

Burbank Water & Power (<http://www.burbankwaterandpower.com/businessrebate.html>)

City of Palo Alto Utilities (<http://www.cityofpaloalto.org/depts/utl/temp/business/default.asp>)

Colton Public Utilities (<http://www.coltononline.com/bpro.html>)

Corona Department Water & Power (<http://www.discovercorona.com/>)

Glendale Water & Power (http://www.glendalewaterandpower.com/save_money/small_business/ac_tuneup.aspx)

Gridley Municipal Utility (<http://www.gridley.ca.us/departments/electric.php>)

Healdsburg Electrical Utility Department (<http://www.ci.healdsburg.ca.us/index.aspx?page=367>)

Hercules Municipal Utility (<http://www.ci.hercules.ca.us/index.aspx?page=160>)

Imperial Irrigation District (<http://www.iid.com/Energy/CommercialService>)

Lodi Electric Utility (<http://www.lodielectric.com/rebates/>)

Lassen Municipal Utility District (<http://www.lmud.org/publicbenefitprogram.html>)

Lompoc City Electric (<http://www.cityoflompoc.com/utilities/conservation/>)

Los Angeles Department of Water and Power (<http://www.ladwp.com/ladwp/cms/ladwp001108.jsp>)

Marin County (<http://www.co.marin.ca.us/>)

Merced Irrigation District (<http://www.mercedid.org/energyefficientrebates>)

Modesto Irrigation District (<http://www.mid.org/rebates/business/lighting.htm>)

Moreno Valley Electric Utility (http://www.moreno-valley.ca.us/resident_services/utilities/solar.shtml)

Pasadena Water & Power (<http://www.ci.pasadena.ca.us/waterandpower/solar/default.asp>)

Redding Electric Utility (<http://www.reupower.com/energysvc/energy-rebates.asp>)

Riverside Public Utilities (<http://www.riversideca.gov/utilities/busi-solar.asp>)

Roseville Electric (<http://www.roseville.ca.us/electric/business/bea.asp>)

Sacramento Municipal Utility District (<http://www.smud.org/en/community-environment/solar/pages/compv.aspx>)

Silicon Valley Power (<http://www.siliconvalleypower.com/res/?sub=rebatesolar>)

Truckee Donnor Public Utility District (<http://www.tdpud.org/index.php?cld=34>)

Turlock Irrigation District (<http://www.tid.org/MyBusiness/index.htm>)

Ukiah Utilities (http://www.cityofukiah.com/pageserver/?page=utilities_photovoltaic)

Island Energy (<http://www.islandenergy.com/energyrebates.html>)

Plumas-Sierra Rural Electric Cooperative (http://www.psrec.coop/energy_rebates.php?sec=enersol&pag=enerreb)

California Association of Building Energy Consultants (<http://www.cabec.org/calendarofevents.php>)

California Center for Sustainable Energy (<http://energycenter.org/index.php/incentive-programs/solar-water-heating-pilot-program>)

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San Francisco State University

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Manufacturing Extension Partnership in California

California Manufacturing Technology Consulting

Director: David Braunstein

Phone: (310) 263-3060

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Email: braunste@cmtec.com

Web Site: <http://www.cmtec.com/>

Source: <http://blue.nist.gov/centers/CA>

Corporation for Manufacturing Excellence (Manex)

Director: Brent Meyers

Phone: (925) 807-5100

Fax: (925) 807-5120

Email: info@manexconsulting.com

Web Site: <http://www.manexconsulting.com>

Source: <http://blue.nist.gov/centers/CA>

Clean Energy Application Centers for Region

Pacific CHP Applications Center

Director: Patti Case

Phone: (510) 642-4501

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Web Site: <http://www.chpcenterpr.org/>

Source: http://www.eere.energy.gov/de/chp/chp_applications/chp_application_centers.html

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